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# ‘Bodies Built for Care:’
# From Indigenous Technologies in South Africa to Social Robotics

By

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Doctor of Philosophy

Women’s, Gender, and Sexuality Studies

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An abstract of a dissertation submitted to the
Faculty of the James T. Laney School of Graduate Studies of Emory University
in partial fulfillment of the requirements for the degree of Doctor of Philosophy in
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# Abstract

## ‘Bodies Built for Care:’
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*‘Bodies Built for Care:’ From Indigenous Technologies in South Africa to Social Robotics* explores the imbrication of globalization, political economy, gender, race, and global HIV/AIDS interventions during South Africa’s democratic transition. The locus of my research is the highly feminized domain of unpaid, community-based HIV/AIDS care work in the informal settlements of South Africa. My research posits different questions about care though the interdisciplinary, transnational, and social justice perspectives of feminist and decolonial Science and Technology Studies (STS). ‘Asking different questions’ is a key methodology of feminist STS and appropriate for a scholar interested in re-visiting over a decade’s experience as a public health researcher and activist in South Africa’s grassroots AIDS movement. This dissertation demonstrates the co-constitution of South Africa’s transitional democracy and the world’s largest AIDS epidemic *through* global health interventions in order to argue that sites of care work emerge as a hinge between certain raced and gendered populations and biopolitical governance. By examining under-theorized indigenous practices of care, my project decenters how we think about the ‘care crisis’ as well as ‘ethics’ in relation to care. In turn, I operationalize this analysis to interrogate how colonial legacies inform the social construction – via building, designing, coding, and programming – of ‘care’ in robotic form to address the following social justice concerns: the environmental, political, and social impacts of mining coltan and vanadium for health and medical technologies (these are cited as major drivers of the ongoing conflict in the Congo); the tension between indigenous epistemologies and access to commodified health technologies in the global South; and, how local communities resist, reconfigure, or adapt technoscientific interventions to better suit their local needs. In sum, I show that care – that inevitable necessity of the human condition increasing exponentially during times of radical uncertainty, epidemic, civil unrest, mass migration, and climate change – evinces the paradoxically deadly valence of Western health interventions in developing countries while positing novel sites for transformative health interventions.

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# INTRODUCTION

## AIDS is Everything

### CONTEXT-BUILDING: THE SPECIFICITY OF AIDS IN SOUTH AFRICA

It was 2005, and I attended my first national Treatment Action Campaign (TAC) leadership meeting. Sitting on the floor of the crowded conference room at the Braamfontein Hotel in Johannesburg, I heard Siphokazi Mthathi – then General Secretary of the HIV/AIDS social movement and my boss, and now my mentor and friend – call the meeting to order:

> AIDS is everything. It is political. It is social. It is economic. It is not only a health crisis. Fighting AIDS in South Africa means addressing the political dynamics engendered around the epidemic; it means addressing social norms such as patriarchy, gender, inequality, woman and child abuse, and gender-based violence. It means addressing economic realities such as massive poverty, unemployment, disempowerment, lack of education, lack of services, housing, sanitation, health care; it means addressing the inherited anomalies of apartheid and the marginalized and vulnerable communities it engendered as well as the inadequate infrastructure it left us. It means addressing governance to deliver social services and to provide the leadership and resources this crisis demands.[1]

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[1] Siphokazi Mthathi. General Secretary. Treatment Action Campaign. Annual Report 2005/2006. p. 3.

AIDS is, indeed, everything. As part of TAC, the Nobel-prize nominated social movement responsible for reversing the South African government's anti-AIDS stance and securing antiretrovirals in the public health care system, I realized that tackling AIDS meant tackling the social fragmentation achieved so definitively by the apartheid regime. The intimacy of its transmission further complicated AIDS interventions. How to speak about safe sex in a country where conservatism and religion was a bolster for nationalistic and segregationist rule? How to speak about safe sex practices which were simultaneously taboo and reality in the schemata of social engineering which wrenched families apart to populate gold mines with male laborers and supply white families with live-in domestic workers? How to convince people to use condoms when children are your only wealth, never more critically than in a country where a burgeoning African population offered one of few mechanisms to overthrow minority white rule, in a country where Black lives were cheap, expendable, disposable? How to 'Abstain, Be faithful, and Condomize' as the PEPFAR (US President Emergency Plan for AIDS Relief) slogan proclaimed, when women of all races witnessed how state-sanctioned dehumanization crept into their homes, how violent homosociality played out at their dinner tables, in their beds, on their bodies? How to be faithful when you are sequestered to the squalid dormitories above the mines where you work for months at a time, when your family lives hundreds of miles away, and your movements are restricted by law? How to condomize when your husband takes it as an accusation, when it is your responsibility to bear him children, or to provide him comfort after months, or years, at the mine? How to get people to test when they will be kicked out of their homes, abandoned, beaten, killed, if they bring home the three-letter-plague?

Democracy did not bring much relief to this scene. Loading structural adjustment strictures onto a country rendered so deeply unequal by the dual blows of colonialism *and* apartheid made the tasks of securing health equity and social development for all South Africans so much more challenging. Globalization and economic liberalization brought further challenges. And as the epidemic mushroomed, much needed loans came with strings attached; strings which tied the government's hands in responding to the epidemic. For one, South Africa was not able to import affordable, generic anti-AIDS drugs as this would have violated intellectual property rights of Big Pharma, specifically protected under some of the loan stipulations which South Africa entered into during democratic transition. And while foreign aid poured in, funded interventions were not always informed by the local, multi-cultural, decolonial, and post-apartheid context. Interventions seemed (and often were) deeply racist, demanding stringent monitoring and auditing processes which were untenable in crisis situations, but necessary to instill accountable financial practices among local (read African) entities. Local practices rarely informed early interventions during this novel opportunity to continue the colonial project. A striking example of this is the ongoing endeavors by foreign aid workers, mostly from Europe and North America, to implement programs to 'build capacity' among local communities. Capacity-building workshops were, and remain, ubiquitous for any organization receiving foreign aid. It remains an irritation to me that the local expertise of community members, care workers, health practitioners, and activists are not only ignored, but not even considered to exist. Capacity building is essentially about surveillance. And interventions, like 'Abstain, Be faithful, Condomize,' are tone deaf to cultural practices and diverse associations between sexual acts, belief-systems, gender roles, kinship affiliations, and identities (as complicated by colonialism and apartheid as gestured to above).

These early interventions shaped the epidemic in various ways. For one, preventing the nascent democracy from importing affordable antiretroviral drugs resulted in the world's largest epidemic, simultaneously crippling the public health sector and amplifying the country's care crisis. The increasing reliance on foreign funding streams during this social, political, and economic crisis of transition further impacted the character of the AIDS epidemic in South Africa. The enormous death toll occurred at the overlap of productive and reproductive aged South Africans, and by a vast majority: women. Women are also the majority of our health workers. In addition to diminishing the care capital available in our country, the death toll among reproductive and productive aged women spurred a generation of 'orphans and vulnerable children.' Some were taken in by elderly kin, stretching already scant retirement benefits further than the state had budgeted for, while others became the wards of various non-profit and community organizations. At this time, raising funds for the 'innocent victims' of the epidemic was a much more profitable endeavor than raising funds to support and sustain their mothers.

The latter part of my career in South Africa focused on precisely that: developing interventions that could keep mothers alive. Local advocates and researchers had identified that mental illness was a major vector in maintaining and exacerbating the multiple crises stemming from the AIDS epidemic. It was also imminently treatable. Addressing the crisis of mental illness among poor women during pregnancy has proven to be an integrated intervention that could contribute to addressing the gendered nexus of early childhood development problems, the long-term impacts of gender-based violence, and failing HIV prevention methods all while delaying seroconversion and promoting better ARV adherence and outcomes, preventing economic instability and food insecurity, while promoting the uptake of health, social, and economic interventions already in play. However, the following comment by a potential donor located in a well-known global health organization sums up the challenge of developing and implementing proven, locally-driven interventions. I wrote down his advice verbatim:

> You've got to give the donor something. Either you show how we're helping poor children directly, you know, pictures of smiling children in our annual reports and so on. Or you sell us a drug, something we can invest in, or something that we can track. Take pill, get better. Direct cause and effect. Clear monitoring and evaluation statistics. Mental health is not a trackable intervention. How does your donor know his money did anything? You want to show the donor that you can think like a business. That you can generate your own income. Your idea [which involved providing between 4 and 6 sessions of counselling to pregnant women – integrated into their maternity care – living in poverty who experience the co-morbid effects of HIV and mental illness, in contexts of high rates of gender-based violence, gang violence, non-existent services, and so on] takes too long, it's too complicated, it sucks resources rather than generates them. And I'm telling you, no-one wants to see pictures of suffering, HIV-positive pregnant women. Show us the smiling children! Give us something we can feel good about.[2]

This remains one of the most disillusioning meetings of my career. Not only was this global health organization driven by economic motives – which raises questions about its central and

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[2] Research notes. 2012.

global role in issuing health policy recommendations directly to government institutions – but our intervention was too complex, because the *problem* was too complex. Despite designing a cost-effective, locally-informed, evidence-based and integrated 'one-stop' health intervention for women most affected by gender inequity, poverty, and AIDS *while* strengthening the capacity of public health workers to handle the complex crises in our country, the problem was too complex and the solution not profitable. Of course, this individual does not speak for the organization as a whole, but he was a key figure in policy-making and funding decisions. In trying to develop an empirically proven intervention that addressed the myriad intersections of South Africa's crises in the post-apartheid transition, efficient interventions that could be easily adopted and rolled out by the state health department (the hope of any such non-profit is to make itself redundant) it was also necessary to make it economically profitable, and palatable. "Show us the smiling children!" – children without mothers, in a country missing the majority of its productive-aged population. What is less obvious, perhaps, is that the missing are the care takers, usually taken for granted, usually invisible. They are also the nurses, teachers, and domestic workers. The crisis of care, as Nancy Fraser calls it, was particularly marked in the South African context. While this is a theme throughout my work, I will briefly sketch the contours of this proposition here.

First, neoliberal economic policies put pressure on South Africa's already strained social resources. Second, and as will be explained in much greater detail, capitalist societies are inherently unable to shoulder the cost of adequate care and thus requires un/underpaid care labor. Third, under apartheid, this labor had to be expropriated for 'free' by way of racist, segregationist policies which limited what black South Africans could do and be. Fourth, even with the end of formal segregation, economic and class segregation was so meticulously engineered that it will be many generations until these disparities are overcome. Already located in proximity to impecuniosity, the populations discriminated against under apartheid were less able to shoulder the burdens of economic austerity, never mind the AIDS epidemic. This dissertation explores the contours of these problems through feminist theories of care and decolonial and feminist Science and Technology Studies (STS). It does so by tracing the social reproduction of unpaid care workers in South Africa in conversation with emergent technologies of care.

## A CARE-FUL JOURNEY

I will describe this instantiation of care work in detail, but first, I would like to contextualize my interest in this kind of care.

I started working for the TAC, known colloquially as TAC, in 2005, a year after the social movement was nominated for a Nobel Peace Prize. ***Started by former anti-apartheid activists, the organization set out to tackle what would come to cast a long shadow over the country's triumph over apartheid.*** TAC has been celebrated for reversing the South African government's anti-AIDS stance and securing anti-AIDS drugs in the public health care system. However, this battle was long fought, and due to the delay in tackling AIDS, it remains one of the key social and economic challenges faced by this new democracy.

During my time at TAC, I learned about the myriad modes of care undergirding community responses to AIDS. The care for activists, the care for a social movement, the care for abandoned strangers. Another striking realization: those who cared in so many ways seemed the least able. The veterans of the anti-apartheid movement now led the AIDS movement. African women were the most affected, yet led the charge, being called upon to labor even more in their homes, communities, and organizations. TAC was a membership-based social movement, comprised of over 80% women, and African women at that. It was also a non-profit, with leadership bases and administration offices in 7 of South Africa's 9 nine provinces, reflecting the same demographic. Women were at the forefront of this movement. And, even when 16-hour days became my norm, I still felt guilty when I left the office, leaving behind colleagues who often worked through the night. "People are dying. We can't rest."

Care workers also never rested. What had started out as door-to-door campaigns in South Africa's poorest and most marginalized communities to raise consciousness about HIV/AIDS treatment and mobilize people to demand said treatment from their nascent democracy, now resembled a search and rescue mission. During the decade of AIDS denialism, an over-burdened and under-resourced health system with no treatment to offer simply sent people home to die. Some activists joined the ranks of carers working at the periphery of the health and social service sectors. Let me pause here to introduce you to Mandisa:

> We step into the shack, onto a dirt floor. An emaciated man lies on a makeshift mattress propped up against a rusty, corrugated steel wall. Mandisa sets down her bags and pulls out an old, plastic paint bucket from under a wobbly table, the only furniture in the shack. She leaves to get water from a communal tap, about a half mile up the road. She is gone for 20 minutes. There is nowhere to sit. There is a strong smell of urine in the shack. Curled up on a rug, Mandisa's patient sleeps. Short, shallow breaths catch in his throat. Mandisa returns, carefully steadying the paint bucket on her head to avoid spilling; she needs every drop and there is a long line at the tap, she tells me. She removes

> the bucket of water from her head. She pulls a thin, plastic bag over her right hand, the type of bag one finds in a supermarket's produce section, securing it around her wrist with an elastic band. She repeats the process on her left hand. She holds up both hands to show me, wiggling her fingers. She sets to work bathing the man with cold water and scraps of fabric she's brought from home. She turns the man on his side to clean the fouled sheets under him as best she can. He coughs weakly. "He also has TB," she says. She cleans his bed sores. She takes off his stained pants and sets those aside to soak. Gently guiding his skeletal arms, she pulls a faded t-shirt over his head, "for dignity" she whispers, then hand-washes his only item of clothing. We haven't had gloves for months. We need gloves, and masks too. We need disinfectant for their open wounds. But we don't have any equipment. I bring what I can from home. Even clean sheets and clothes, sometimes. Sometimes food meant for me and my kids so they can take their medications. Our patients think the government pays us. We don't get any money you know. No gloves. No nothing. It's hard to care properly (Mandisa, 2010).[3]

This is what the AIDS epidemic looks like in South Africa. Mandisa lives and works in Gugulethu, a shanty town on the outskirts of Cape Town. According to the South African government – unpaid care workers like Mandisa are the 'backbone' of the country's response to the AIDS epidemic – the largest in the world. She is also the inspiration for this project.

Specifically, I focus on the experiences of unpaid, voluntary community-based HIV/AIDS care workers in the low-income, informal settlements of South Africa. The care work I

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[3] All vignettes are taken from my fieldwork notes, during the period 2008-2012, for research contributing to my Master of Social Science thesis titled: *Caring from the Margins: Community-based HIV/AIDS Care Work as Social Reproduction in the Era of AIDS.* University of Cape Town. 2012.

focus on is by an unpaid community member not connected in any familial way to individuals with HIV/AIDS. Carers walk from shack to shack, identifying people with end stage or near-end stage AIDS, who have been turned away from over-burdened community health facilities and abandoned by their families due to impecuniosity or stigma. Bathing, domestic chores, standing in long lines to collect social assistance, or, where they exist, anti-AIDS drugs, improvised physical therapy, cooking, feeding, changing bed linen, or "just spending some time with them because they are alone" – nothing is not on their ad hoc job description.

Despite these circumstances, unpaid care workers are described by South African health policies as "indispensable" to HIV/AIDS care, and are increasingly included in other health strategies, from maternal and child health to mental health policies. The deprivational nature of care work in the face of exponentially increasing demand, raises concerns about sustainability as well as social justice. It is also a space that demonstrated Siphokazi's claim that AIDS is everything.  Notwithstanding the dire circumstances witnessed so intimately by carers like Mandisa, there is no room for pity, or charity, or rescue narratives here. There is only awe, and the question: what is wrong with this picture?

This awe has sustained me to this moment, 14 years later. Prior to commencing my doctoral studies, I spent 8 years working in public health in South Africa. I was active in the HIV/AIDS movement for access to treatment (as Assistant to the General Secretary of Treatment Action Campaign) as well as AIDS-related maternal and mental healthcare (as Chief Scientific Officer of the Perinatal Mental Health Project at the University of Cape Town). During this time, I participated in grassroots organizing, community-based research projects, health service design and implementation, and national public health policy development and negotiations in HIV/

AIDS, maternal health and mental health. I have collaborated with partner organizations across Africa and in other developing countries such as India and Nepal, and am well-versed on global public health frameworks, organizations, and funding related to my work.

My dissertation builds on all these experiences and insights, as well as my Master's research which focused specifically on the experiences of unpaid care workers.[4] My research includes 3 years (2009-2012) of field work comprising 12 in-depth, iterative interviews repeated over the course of the study, participant observation at community-based care organizations in 4 informal settlements outside of Cape Town (Nyanga, Gugulethu, Tafelsig, and Khayelitsha) and 10 focus groups which provided iterative feedback on interview data. The focus groups were word-of-mouth 'invitations' in the communities where I conducted my research, which, cumulatively, drew over 300 care workers[5]. Alongside my own research and through my professional work I engaged with the international donor community, the South African government, community health services, and thousands of care workers. I organized alongside care workers to participate in policy development and to lobby government representatives to formalize their work, provide protections, remuneration, and material support. And, I watched those endeavors fail.

I attempted to use my previous research and participatory professional experiences to articulate what was wrong with this picture. I studied care theory, gender-responsive policy

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[4] Master of Social Science thesis: Caring from the Margins: Community-based HIV/AIDS Care Work as Social Reproduction in the Era of AIDS (2012). University of Cape Town.

[5] My research was conducted in isiXhosa, English, and Afrikaans. I am deeply indebted to Weziwe Buti who provided real- time translations at all interviews and events and assisted with everything from ensuring that consent was truly informed, to reviewing our interview transcripts for accuracy. More importantly, as a mother, teacher, and a well-respected member of the community, I would not have gained entrée into the communities where I worked, or such candid responses, without Wezi's cultural capital and generous guidance.

development, gender-budgeting, health economics, the politics of democratization, and so on. But I did not find Mandisa there. I could not adequately answer the question “what is wrong with this picture” without limiting Mandisa’s existence to one of oppression and suffering. Notwithstanding her quite dire circumstances, knowing Mandisa is knowing that these multiple oppressions described thus far are not the sole defining characteristics of her life (Cavalieri, 2011). She endures. A story about Mandisa must be a story about her endurance, compassion, pride, enthusiasm and even sentiments of joy for her work; her choice to care. As much as I believe in the ethics at stake in understanding the conundrum of care, there is also an ethics at stake in doing a disservice to Mandisa. ***Mandisa is not an African woman in need of rescuing. Mandisa needs justice.***

After my first attempt to tell the story about Mandisa, three entangled thoughts remained. First, the extant care theory speaks of the “problem of care” yet notably, after 50 years of rigorous attention, the problem persists. Second, my experience of care in this postcolonial, post-apartheid context was not particularly visible in the canon on care. And third, what if my experience of care – in the context of the world’s largest AIDS epidemic, emergent during South Africa’s democratic transition – could leverage new thinking around the persistent problem of care? Perhaps this experience allows me to ask why such crucial work gains no traction in politics or economics, to disastrous effect?

And so, we arrive at my present task. My dissertation focuses on the highly feminized example of unpaid, voluntary, community-based HIV/AIDS care work in the low-income, informal settlements of South Africa during democratic transition. The care workers I write about here are neither paid professionals nor connected in any familial way to their patients. They are lay volunteers working in shanty towns, providing care to those with HIV/AIDS – those literally sent home to die because there was nothing else do be done. Some are rendered immobile and confined to their home, others are abandoned because of stigma or impecuniosity. Carers walk from shack to shack, caring for their existing patients and identifying new ones. In the words of Vuyo, a care worker from Gugulethu: “we do whatever it takes.” From providing palliative care to collecting and boiling water for bathing, cooking and cleaning, tending to the sanitation and hygiene needs of the bed-ridden; physical therapy, standing in long lines to secure drugs from under-stocked and over-subscribed clinics, facilitating access to psychosocial support services where they exist, monitoring treatment adherence, to “just spending some time with them because they are alone” (Interview transcripts, 2012). Nothing is not on their ad hoc job description.

This Ph.D. dissertation draws on my research, activist and professional experiences in the South Africa AIDS movement to ask new questions about care, to think beyond my initial findings and enduring frustrations, to consider my own engagement in the care policy landscape and health access activism, and to draw on interdisciplinary scholarship and transnational perspectives to think with Mandisa more adequately, and hopefully, more judiciously.

I suggest that thinking about care in a post-apartheid polity undergoing rapid reconfiguration through globalization and the commensurate pressures of contemporary neoliberalism contributes something new to understanding the problem of care. In addition, the post-apartheid context crystalizes colonial legacies making the extremes of gender, race, and class division more conspicuous, and, entangled in the care needs accompanying the world’s largest AIDS epidemic, this context magnifies the discrimination and marginalization inherent in contemporary economies of care for closer examination.

Put simply: my project explores what new understandings this context can bring to the crisis of care. This exploration has started in feminist theory and required working across the fields of public health (vis. HIV/AIDS), politics (vis. democratic transition), and political economy (vis. Big Pharma, intellectual property rights, care economies). This has, in turn, led me to new critical theoretical interstices such as critical public health, decolonial and feminist science and technology studies (STS). In the next section, I describe how I came to this project, and explain how decolonial feminist STS is a valuable toolkit for a project at the nexus of HIV science, public health policy, and care work during South Africa's democratic transition. I propose that this context is an analytically rich site for thinking differently about the highly feminized and seemingly intractable *problem of care* (Tronto, 2013).

## A FEMINIST/DECOLONIAL APPROACH

The more I have tried to untangle the problem of care, the AIDS epidemic, and the dynamic South African context, the more entangled I become. Any question one asks - why are women more affected? Why did the epidemic flourish so in South Africa? Why do prevention policies fail? What are the obstacles to adequate care? Why are these obstacles so intractable? Every answer requires unravelling the compounding impacts of colonialism and apartheid in producing inordinately vulnerable populations, while understanding how contemporary global public health policies aimed at addressing these legacies of subjugation are entangled in political economies which are not, in fact, "post" colonial. Issues of governance surface because a democratizing state in the non-Western world is not a sovereign entity: “aid” and “development partners” and “public private partnerships” and the “recommendations” of global health and financial institutions have their own material consequences. Engaging in care work in South Africa demands engaging all these actants. While some care theorists critique overly economic analyses of the problem of care, others focus on the feminization of care, while emerging scholarship foregrounds the analytical currency that care affords - in a world-making, theory-from-below historical materialist perspective. I want to say “yes, and” to all such analyses of care undertaken thus far. While I propose a new contextual perspective, my project says “yes, and” what about the need for care in the first place? That is, more than focusing only on who does care work, who pays for it - or not, how to recognize it, value it, and afford it - I interrogate why the need for care arises in the first place.

TAC is recognized as a “citizen science” (Irwin 1995; Rose and Novas, 2005) movement because it promoted a mode of “biological citizenship” by equipping activists to train local communities in the science of HIV/AIDS in terms of prevention, treatment and ultimately as a route to fostering citizen demand for a government response to the epidemic (Beck, 1992; Giddens, 1991; Epstein 1996; Petryna 2002; Robins, 2006). Thus, the science of HIV has been in the forefront of my own endeavors. As such, I found a gap in the research on care with respect to analyses of how health policies - global and local - and the science which informs them are entangled in the problem of care. ***I contend, therefore, that feminist STS (FSTS) affords a more capacious and fitting analysis of the problem of care. Three FSTS axioms are particularly apposite.*** First: science is a social enterprise. Second: science and society are co-constituted. Third: late capitalism has reconfigured relations between the sciences and the political economy, that is, the political economy is increasingly co-constituted with the capitalist interests of the life sciences (Cooper, 2008; Fisher, 2011). These axioms inform the methodological framework I detail in Chapter 1, and the analyses I present in Chapters 2 and 3.

In addition, I consider the decolonial context of my research. That is, ***decolonial FSTS demands taking context seriously as an actant in the material constitution of people's realities.*** The materiality of the HI-retrovirus is relevant not only at the molecular level - in the bodies which host it, but across the spectrum of life and its management. Predicated on the inequities remaining after colonialism and apartheid, the manner, mode and voraciousness of infection is of such a scale that it has affected political processes, economic systems, and global health policies, which in turn amplify the impacts of the epidemic beyond the realm of health. Considering care through its myriad techno-scientific genealogies not only provides a specific new mode of analysis (i.e. thinking about care *as* technology, see Chapter 4) but foregrounds the skewed transnational and imperial relationality (as constituted through neoliberal capitalist interests in the health sciences writ large) between South Africa and Western/Eurocentric interventions vis-à-vis the epidemic. To better describe the complexity and urgency of research into unpaid AIDS care work, I will briefly sketch the contours of the material context in which my analysis of care emerges.

## SOUTH AFRICA'S HISTORY: FERTILE FAULT-LINES

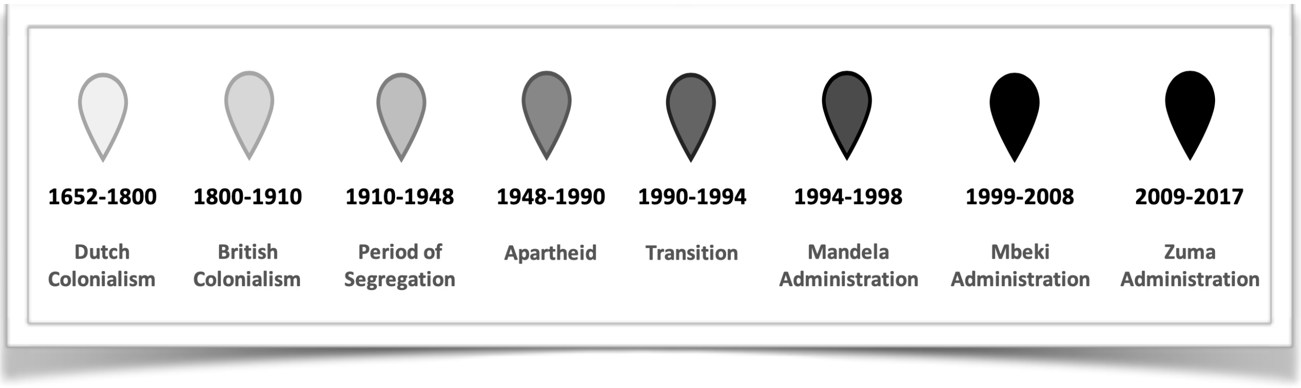
South Africa's history incubated the perfect conditions for an epidemic (Hunter, 2010). The emergence of care work in South Africa must be considered in the context alongside the historical dimensions of "colonial subjugation and apartheid dispossession" which informed how racial and gender inequality, poverty, violence, fragmented communal and kinship arrangements, as well as macroeconomic policies produced a highly fragmented and deeply unequal public health system (Coovadia *et al*., 2009: 817, 825). The crises of communicable and non-communicable diseases, and the complexities of poverty-related illness collide in a dysfunction health system – further complicated by post-apartheid and transitional challenges. This historical legacy remains visible in the post-apartheid geography: where health services are located, how people access such services, and the compromised health of vast populations are all produced through the political organization of social life geared toward generating affluence and privilege for the white minority (Coovadia *et al*., 2009). The cost of such skewed distribution created impoverished black communities; overcrowding, inadequate sanitation, malnutrition, and stress caused the ill-health and intergenerational deterioration of many communities, producing populations highly susceptible to the AIDS epidemic (Coovadia *et al*., 2009: 825).

Specifically, the need to separate people so completely resulted in the fragmentation of all public service provision. Health services were segregated along racial lines and at the end of apartheid, the South African health system comprised fourteen separate health departments, and, with a focus on the hospital sector, underdeveloped and under-resourced primary level services (Coovadia et al, 2009: 825). During apartheid, non-profit organizations and missionary-run hospitals proliferated in under-served areas, although these were ill-equipped to deal with the high burden of poverty-related diseases (Coovadia et al., 2009: 826). In response, community members took on the care of their family and neighbors, and thus, the care worker operating outside the formal health sector emerged.

Soon, everyone cared about AIDS, in one way or another. People cared whether other people had AIDS - to either exclude, or support. People cared about what the government was going to do about AIDS. People really started caring when evidence showed how AIDS was affecting the economy, the labor force, and tourism. Maybe people cared even more because we were the newly minted ‘rainbow nation’ by way of a rapid metamorphosis from political pariah to continental beacon of hope; a place where good triumphed over bad, where the oppressed gained liberation, where government was, now, truly, by the people and for the people; the birthplace of Mandela. But AIDS quickly tainted the novelty of being a ‘new' South African. The era of “AIDS denialism” claimed more lives than the apartheid regime, and many cared that another African state seemed on the brink of ruin: “If South Africa can’t rule itself, then...”

South Africa quickly became synonymous with AIDS. The first AIDS activists were anti-apartheid veterans and caring about our new democracy meant caring about AIDS. What could be a more legitimating context for Joan Tronto’s plea that democracy requires our care. In fact, while the TAC criticized the government for its failure on HIV/AIDS, the social movement has been credited with ‘building democracy’. Using the country’s newly crafted constitutional tools, the TAC sought to support the government in tackling the epidemic, taking on Big Pharma, training health workers, and undertaking massively successful citizen science campaigns to ready the population for antiretrovirals and aggressive prevention strategies. TAC had to care about democracy in order to care about AIDS. However, 25 years after democracy, South Africa remains the country with the largest and most high-profile HIV epidemic in the world, with an estimated 7.2 million people currently living with HIV (UNAIDS, 2019). While South Africa has instituted the world’s largest and most expensive antiretroviral treatment program in the world, with the rate of prevalence declining, total prevalence continues to rise and remains extraordinarily high at 18.9% among the general population (UNAIDS, 2019). A deeper interrogation of the fertile ground for the world's largest AIDS epidemic follows.

## From Colonialism to Apartheid



As the timeline above highlights, the nation state we call South Africa today has had a long and complex political history.[6] From the first permanent European settlement in 1652, the region's history is a story of ongoing and escalating segregation. After establishing a halfway station at the Cape, the Dutch soon realized the immense wealth and possibilities of the region. Dutch settlers established farms and populated their homesteads with indigenous servants, and their farms with indigenous slaves. Campaigns were conducted to forcibly dispossess indigenous people of their land, cattle, and other means of subsistence, either being driven off their land or forced to work on settler farms.

For 150 years, the Dutch were the predominant foreign influence in South Africa. However, in 1795, Britain gained control of the country, establishing a populous settlement. As the powers of the Dutch East India Company waned toward the end of the 18th century, the

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[6] This historical narrative is drawn from: Coovadia *et al.*, 2009; Hodes, 2018; Hunter, 2010; Kenyon *et al.,* 2013; Nattrass, 2014; Oliver and Oliver, 2017; Ross, 2008; Simelela *et al.,* 2015; Van der Vliet, 2004; Whiteside and Sunter, 2000).

British vied for the advantages of the Cape as a trade thoroughfare. By 1806, the Cape was established as a colony of Britain and nearly a century and a half of Dutch domination came to an end. Continuing the dispossession and segregation of the Dutch, the century of British rule saw native inhabitants forced into either tenant or wage-laborer relationships with settler communities, or forcibly removed into impoverished and bordered tracts of rural land 'reserves'. Across the South African region, continuous violence and warfare established dominance by the settler power and subdued the indigenous population, which was amplified by the British importation of slaves from west Africa, Mozambique, Madagascar, India, and Indonesia to serve escalating agricultural demands.

However, in the later 1810s, the British angered the Afrikaners by freeing their slaves. Coupled with increasing border wars with native peoples and the desire to claim more fertile farmland, many Afrikaners began to migrate northward and eastward into the interior of South Africa (circa 1820s). This journey became known as the "Great Trek." These Afrikaners, known as the "Voortrekkers," founded the independent republics of Transvaal and the Orange Free State in the interior. However, many indigenous groups resented the intrusion of the Afrikaners upon their land. After several wars, the Afrikaners conquered and held some of the land until diamonds and gold were discovered in their republics, Kimberley in 1867 and the Witwatersrand in 1886 respectively.

Agricultural enterprises gave way to mining as the cornerstone of the colonial economy. The British and the Afrikaners (what the Dutch dependents along with German and French settlers to the region now called themselves - Afrikaners means"Africans" in Dutch) continued to struggle for dominion over the mineral wealth and strategic location of the region. Foreign investment from Europe increased exponentially to tap the enormous potential for wealth generation through the mining industry. This in turn required more and more cheap labor and access to more and more land for prospecting. A combination of violence, coercive legislation, taxes, restrictions on access to land and the means of production, and the punishment of laborers who deserted their mining and farming duties, all served to re-enforce previous practices of forced removal of indigenous people from their land, while forcing the migration of indigenous male laborers to the mines. This system greatly undermined the rural black agricultural economy. Cheap African labor, including labor migrants from neighboring countries, became and remained the foundation of social, economic, and political developments in the region. The British victory after the Anglo-Boer Wars saw the two European settler powers unified under British supervision in 1910 as the Union of South Africa. Despite their reabsorption into the British colonial system, the Afrikaners retained their language and culture and eventually mobilized the social capital of their ethnic identity, and resentment of the British, to gain political power.

Under the Union, colonial social custom and an increasing body of local laws governed racial affairs and the allocation, in racial terms, of access to economic, social, and political status. Most white South Africans, regardless of their own differences, benefited from this status quo. However, the rapid economic development after World War II placed pressure on the region's social infrastructure. During this time, for example, Afrikaners were still reeling from the impacts of the Great Depression and resented losing their economic advantage to the large influx of underpaid black labor that compensated for the wartime shortage of white labor - all the while resenting the increasing political power and economic prosperity of white English speakers. Although the Afrikaners were the minority ethnic group in the country, the Afrikaner National

Party gained control of the government in 1948. Afrikaner nationalists campaigned on a platform that would close the gaps in the already highly segregated region through a systematic process of organizing racial privilege through parliamentary acts and administrative decrees that extended segregation to every aspect of life. The National Party codified the system of racial segregation, called ‘apartheid’ (literally “apartness” in Afrikaans), forming the highly prescriptive ideological and practical foundation for Afrikaner politics for the next quarter of a century.

The apartheid system was meticulous, separating not only South Africa’s white minority from its non-white majority, but also separating non-whites from each other in order to divide black South Africans and slave dependents from elsewhere and decrease their political power. Specific caws were enacted to govern inter-racial relations. This included banning marriage and prohibiting sexual relations between white South Africans and other races, setting aside more than 80 percent of the country’s land for the white minority (under 20% of the population) and restricting the movement of the non-white majority. Political organizing among non-whites was severely restricted, such as unionizing, or banned outright, such as political participation in national government. To further limit contact between the races, the government established separate public facilities for whites and non-whites. This separation was promoted by a policy of “separate development” (circa 1950s onward). The system required a system of racial classification from birth of all South Africans into European (white), Asian (Indian), Coloured, or Bantu (black), imposing a rigid racial hierarchy along these classifications. Race classifications determined where a person could live, work, and go to school, whom they could marry, whether they could vote, and the resources allocated to their education, health care, and pensions. Whites had access to vastly superior housing, education, employment, transportation, and medical care.

Blacks could not vote and had no representation in government. It should be stressed that key to separate development was the deliberate under-education of and under-provision for black people. This was further enabled by denying black people citizenship in South Africa and forcibly removing millions of non-white people to un-fertile and undeveloped areas of land previously serving as rural labor reserves, and at a remove from the country's developing economic centers. Apartheid and separate development, invigilated by draconian state control, consolidated the political exclusion, economic marginalization, social separation, and racial subjugation of the preceding 300 years.

## The End of Apartheid and the Transition to Democracy

By late 1989, amid increasing local and international pressure and the waning ability to maintain the apartheid state by force amid escalating violent opposition, a series of secret negotiations between the F.W. de Klerk administration and Nelson Mandela, as representative for the African National Congress (ANC), brought about a negotiated settlement to end apartheid. During a period of transition (1990-1994) a new constitution was drafted and most legislation which formed the basis of the apartheid state were repealed. In 1994, the country held its first democratic election with universal suffrage, and Nelson Mandela became the first democratically elected president.

### ***The Mandela Administration***

It is not surprising that most South Africans were unaware of the first AIDS diagnoses in 1982 (Weinel, 2005: 6). The emergence of HIV was overshadowed by escalating political violence and internal revolt. The volatile complexity of apartheid politics and democratic transition had effectively marginalized the issue, leaving the disease virtually unchecked for a decade (Grundlingh, 2001: 128). Between 1990 and 1994, HIV prevalence had soared from 0.7% to 7.6% (Van der Vliet, 2004: 56). Zwelinzima Vavi, the secretary-general of the Congress of South African Trade Unions and a prominent leader within the tri-partite government of national unity – constituted to guide South Africa through the initial phases of its transition to democracy – was one of the few leaders to publicly acknowledge the crisis at hand: "we are sitting on a time bomb ... it [HIV/AIDS] is a disaster unfolding before our eyes" (Naidu, 2004). Ablaze with the spirit of reconciliation, a multi-party effort quickly got underway to tackle the growing epidemic. The Mandela administration adopted a multi-sectoral national AIDS plan which, at first, was to be a 'presidential lead project' garnering  preferential funding as part of the Reconstruction and Development Plan (Van der Vliet, 2004: 54).

Mandela's administration was one of hope and optimism. The first AIDS Plan was drafted by AIDS policy makers and activists and soon to be government officials who did not yet have the full challenge of political transformation and economic redistribution in their sights. The Plan was not up to the task of implementation in this challenging, fragmented and transitional landscape. As the transitional government grappled with multiple challenges and external pressures, along with the inability to give an optimistic account of the epidemic at a time when the transitional government relied heavily on this for its legitimacy, the AIDS Plan was relegated to the Department of Health. AIDS is everything, and many commentators have lamented that relegating the country's AIDS strategy to the "health ghetto" (De Waal, 2003: 244) meant it remained "un-consulted, unimplemented and largely ignored" (Van der Vliet, 2004: 54).

Because the roots of a dysfunctional health system had been entrenched for nearly 300 years, this move had everything to do with how South Africans became the most affected population in the world. Racial segregation of urban areas, with reservation of land mostly for white people, and failure to provide proper housing for the migrant workers, led to the creation of overcrowded, unsanitary hostels and slums in the urban black areas. Beyond the economic centers, black South Africans were sequestered into the most impoverished areas, starved of resources and development, and denied the rights of citizenship, ownership and access to basic services. Specifically, by the end of the apartheid era, there were 14 separate health departments in South Africa, most of which were severely under-developed in keeping with apartheids separate development ideology. In addition, health services serving the black majority were primarily at the level of hospital care, with primary level services underdeveloped or non-existent (Coovadia et al., 2009).

Segregation thus executed became a major determinant of disease patterns, both in South Africa and in neighboring countries among economic migrant communities. Racial and gender discrimination, the migrant labour system, the destruction of family life, vast income inequalities, and extreme violence have all formed part of South Africa's troubled past, and all have inexorably affected health and health services. In 1994, when apartheid ended, the health system faced massive challenges, many of which still persist. Macroeconomic policies, fostering growth rather than redistribution, contributed to the persistence of economic disparities between races (Coovadia et al., 2009). For these reasons, President Mandela has come under attack for not doing enough in the early year's of South Africa's transition. But more vehement criticism has been directed at South Africa's second democratic president, Thabo Mbeki.

### ***The Mbeki Administration***

President Thabo Mbeki's much-maligned vision of an "African Renaissance" gave rise to an era of "AIDS denialism" which caused more deaths than the entire apartheid era (Chigwedere et al, 2008). AIDS denialism was a position adopted by the Mbeki administration to actively avoid financial responsibility for the epidemic. On the one hand, civil society, led by the Treatment Action Campaign, could make use of the country's new constitutional framework to hold the government accountable to the constitutional commitment to healthcare for all (Van der Vliet, 2004). On the other, mounting fiscal pressures resulted in the monetization of AIDS by the Mbeki administration. That is, Mbeki immediately took an oppositional stance to right to health claims arguing that the financial costs of treating HIV and AIDS were too much for the still-transitioning state to bear. To emphasize this argument, Mbeki undertook a concerted campaign to question the link between HIV and AIDS and challenged the scientific basis of HIV/AIDS in order to undermine civil society's rights-rights-based claims; by stating that AIDS was a result of poverty and thus beyond health, AIDS was not a right-to-health matter. In 2000, Mbeki gave the following statement in an interview for *Time Magazine:*

> Clearly there is such a thing as acquired immune deficiency. The question you have to ask is what produces this deficiency. A whole variety of things can cause the immune system to collapse. But the notion that immune deficiency is only acquired from a single virus cannot be sustained. Once you say immune deficiency is acquired from that virus your response will be antiviral drugs.

Denialism not only delayed access to treatment, but antiretroviral medications (ARVs) were described as poison manufactured by the West to kill Africans, causing many to abandon the few treatment regimens which were available. In addition, Mbeki promoted pseudo-science, allowing a plethora of opportunists (called “AIDS charlatans” or “AIDS quacks” by civil society) to market bogus products as treatments and cures for HIV/AIDS. Although South Africa has clear laws and regulations governing the development, production and sale of pharmaceutical products, the Department of Health and other statutory bodies failed to hold “charlatans” (such as Matthias Rath, Tine van der Maas and Zeblon Gwala) accountable for illegal experimentation on HIV-positive people and fraudulent marketing. In fact, the Minister of Health at the time, Manto Tshabalala-Msimang, publicly condoned these remedies as suitable alternatives to scientifically proven ARV treatment. Tshablalala-Msimang espoused her own “concoction” of lemon, garlic and African potatoes as South Africa’s answer to HIV/AIDS. Denialism operated at the highest level (Van der Vliet, 2004; Nattrass, 2014), and the government allowed HIV/AIDS treatment and care programs to fall into disarray, ignored an escalating human resources crisis in the health system, and became obstructionist in response to legal cases aimed at addressing the epidemic (Van der Vliet, 2004).

From 1998 to 2006, the opposition of high-ranking political leaders to the public provision of ART became the greatest controversy to have emerged in the first decade of South African democracy. Denialism became a moral issues on the local and global stage. The huge numbers of people dying made the denial of the growing epidemic unsustainable. At the peak of AIDS denialism, more than 1,000 people died of AIDS-related illnesses while 1,400 people were newly infected with HIV every day (Smetherham, 2003; Ijumba *et al.*, 2004: 320). Even massively under-reported AIDS mortality accounted for a third of South African deaths, while the 2006 UN Human Development Report showed life expectancy had fallen to 47 years.

By the close of 2006, after relentless social activism and mounting local and international pressure, the government turned a corner when the country's Deputy Health Minister, Nozizwe Madlala-Routledge acted as interim Health Minister when Tshabalala-Msimang fell ill. In less than a year, Madlala-Routledge made enormous strides in reversing Mbeki's denialist policies, partnering with civil society and the scientific community to draft the country's strongest AIDS plan to date. However, Mbeki fired Madlala-Routledge before she served a full year as Health Minister, presumably punishing her for her affiliation with the HIV/AIDS movement. He re-appointed Tshabalala-Msimang, but both were deposed when Mbeki was ousted by the African National Congress in 2008. Until a new election could be called, Kgalema Motlanthe succeeded Mbeki as President of South Africa. On the first day of his presidency, he appointed Barbara Hogan as Minister of Health who immediately committed to instituting prevention and treatment programs. After the official elections of 2009, Jacob Zuma was elected as President. Initially, civil society was heartened when Zuma declared AIDS as one of South Africa's most serious problems, saying that "all South Africans need to know their HIV status, and be informed of the treatment options available to them" (Lancet, 2009).

## ***The Zuma Administration***

The AIDS movement and its allies were, however, dismayed by Zuma's election. In 2005, Zuma had been charged with the rape of a family member. He was acquitted, but during the course of the trial Zuma's attitude toward HIV/AIDS belied his commitment to addressing the epidemic. For instance, he made a number of comments that fueled public confusion about HIV transmission. He had testified that while he knew the plaintiff was HIV-positive, he had chosen not to use a condom during sex, but had showered soon afterward. In addition, Zuma did not denounce the numerous acts of intimidation and violence by his supporters against the gender-rights activists that gathered in support of the plaintiff. His comments about reproductive rights as well as gay and lesbian people during the course of his trial cast additional doubts on Zuma's commitment to human rights and evidence-based sexual and reproductive health (Nattrass, 2007; Simelela *et al.,* 2014; Hodes, 2018).

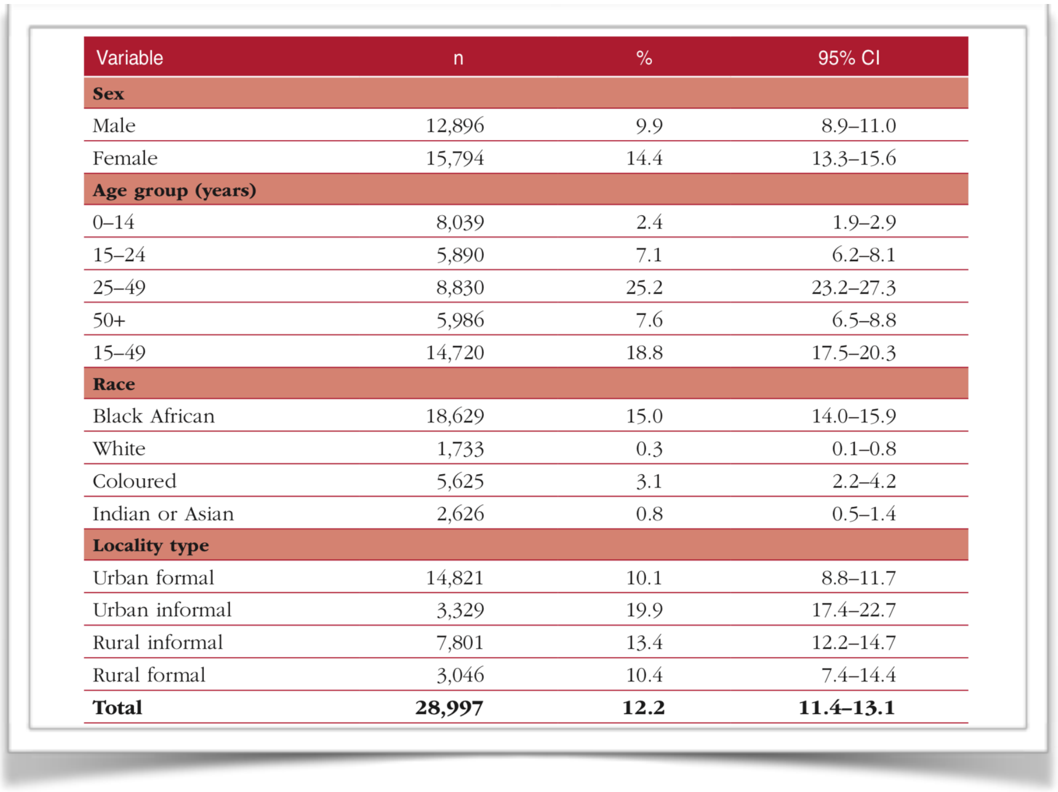
Civil society misgivings were, unfortunately, well-founded when Zuma's tenure, from 2009 to 2017, heralded a new era in the misappropriation of public resources and the abuse of political power for personal gain. Corruption and cronyism further devastated the delivery of public healthcare in South Africa (Hodes, 2018). While South Africa has increased access to antiretroviral treatment exponentially, it is not the sole marker of success against the epidemic. This is clearly seen in the continued increase in HIV prevalence. Furthermore, with the largest population of ARV users, a crippled health system  is struggling to retain treatment users in care, or provide the additional interventions required to support favorable health outcomes. Furthermore, now that South Africa has the world's largest cohort of patients on ARV treatment, the country faces additional challenges of resourcing this massive public-health intervention at a time when resources for health are declining and donor fatigue for funding HIV-treatment programs is increasing (Simelela *et al.,* 2014; Nattrass, Hodes and Cluver, 2016).

Thus, while popular sentiment has been that South Africa was better-equipped to deal with the epidemic than its regional counterparts, South Africa is still grappling with massive health inequities and a growing epidemic 25 years after democratic transition. To understand why, the country's dynamic and complex political context, predicated on 300 years of sequentially consolidated segregation, must be taken into account. As such, the raced and gendered aspects of the epidemic map precisely onto the privilege perfected under apartheid: white men and women continue to have very low prevalence rates, while the highest prevalence is found in the black population.

South Africa has conducted four nationally representative HIV serosurveys. Across all surveys, from 2001 to 2012, the most affected cohort are black South Africans in the productive and reproductive cohort, that is, 15-49 year olds. The most recent survey conducted in 2012 shows 22.7% prevalence in the black population and 0.6% in the white population (Shisana *et al.,* 2014, see image below). Within these cohorts, white males are the most protected, while white females experience increased vulnerability. Black females are the most likely to be HIV positive in South Africa, at a much higher rate than their male counterparts (Kenyon *et al.,* 2013).

The remaining architecture of segregation and under-development explains the racial differences in HIV prevalence: the serosurvey findings connect the fact that black Africans are most likely to live in urban informal areas, which are generally under-resourced and lack the basic necessities such as formal housing, water, sanitation, and access to preventive health services, with HIV infection. *Being black* remains the strongest factor associated with being HIV positive (Shisana e*t al.,* 2014).

Historical patterns of exclusion and subjugation which created impoverished black communities also affected the gender profile of the epidemic. Masculinity was refashioned to draw on resources that *were* available, which played out as increasing displays of strength, power, and violence upon objects that could be owned and control: women and children. Rape and gender-based violence is endemic in informal urban communities, and a major factor in black women's increased vulnerability to HIV infection because they cannot always determine the timing and circumstances of sex (Jewkes *et al*., 2011). Being black *and female* locates one in the most affected cohort in South Africa (Shisana *et al.,* 2014).



| Variable | n | % | 95% CI |
|---|---|---|---|
| **Sex** | | | |
| Male | 12,896 | 9.9 | 8.9–11.0 |
| Female | 15,794 | 14.4 | 13.3–15.6 |
| **Age group (years)** | | | |
| 0–14 | 8,039 | 2.4 | 1.9–2.9 |
| 15–24 | 5,890 | 7.1 | 6.2–8.1 |
| 25–49 | 8,830 | 25.2 | 23.2–27.3 |
| 50+ | 5,986 | 7.6 | 6.5–8.8 |
| 15–49 | 14,720 | 18.8 | 17.5–20.3 |
| **Race** | | | |
| Black African | 18,629 | 15.0 | 14.0–15.9 |
| White | 1,733 | 0.3 | 0.1–0.8 |
| Coloured | 5,625 | 3.1 | 2.2–4.2 |
| Indian or Asian | 2,626 | 0.8 | 0.5–1.4 |
| **Locality type** | | | |
| Urban formal | 14,821 | 10.1 | 8.8–11.7 |
| Urban informal | 3,329 | 19.9 | 17.4–22.7 |
| Rural informal | 7,801 | 13.4 | 12.2–14.7 |
| Rural formal | 3,046 | 10.4 | 7.4–14.4 |
| **Total** | **28,997** | **12.2** | **11.4–13.1** |

***Image:*** *Overall HIV-prevalence by sex, all age cohorts, race, and locality. South Africa, 2012.*
***From:*** *Shisana, et al. (2014) South African National HIV Prevalence, Incidence and Behaviour Survey, 2012. Cape Town, HSRC Press. p. xxv.*

The marked racial and gender differences in disease profiles and determinants of health demonstrate how, without concerted and targeted policies, the legacies of colonialism and apartheid remain a bodily and material inheritance for the indefinite future for many South Africans. And, because I came to care work *through* my experience of the AIDS epidemic as described thus far, context will be a key actant in my contribution to addressing the 'problem of care.'

## A NOTE ON METHODOLOGY

My project combines my experiences in the South African AIDS movement and my previous participatory research among health activists and care workers  in order to bring new voices and perspectives into the feminist canon on care. Revisiting and reimagining care theory via these perspectives is a purposeful method aimed ultimately at reframing how we think about care ethics, especially as social actors and policy makers. To undertake this revisiting/reframing/rethinking, I turned to DFSTS because, not only is care work world-making (a claim feminist scholarship supports) but care at the local level is co-constituted with the health sciences through global public health policies (Harding, 2009 and 2011; Fisher, 2011).

A retrovirus, colonialism, apartheid, segregationist policies, already compromised immune systems, the political economy of neoliberal investments in South Africa's democratic transition, fractured kinships structures, violent masculinity, women-headed households, failing service deliver, and a preponderance of dependence on vulnerable 'communities' are all constitutive actants in South Africa's nascent democracy and the world's largest AIDS epidemic. Decolonial FSTS then, is how I build the theoretical bricolage necessary to apprehend the dynamic, contextually-specific, and multivalent concept of care in which I am interested. DFSTS demands an interrogation of context – historical, political, economic, and social – in tandem with the non-human yet material forces operating beyond our usual anthropocentric point of view. DFSTS analyzes the materiality of transnational processes related to colonialism and imperialism operating through contemporary political economy. Related to this is attention to the gendered and raced capitalist practices of production, reproduction and commodification (Roy, 2018: 48-49). In sum, ***my decolonial FSTS approach to care foregrounds context, capital, and the concrete materiality of caring practices.***

A central aspect of my decolonial FSTS approach is "contextual accountability" (Roy, 2018: 45), which means reflecting on the situatedness and specificity of technologically and scientifically mediated events with respect to relations of capital, labor, and location. This is a move to reframe ontological frameworks of care through a diversity of experience and knowledge bases which have been epistemically excluded. Context produces material effects and thus thinking about context is important for addressing social justice. Relatedly, the epistemically excluded women I foreground in this project evince the repercussions of technoscientific interventions which "distribute their benefits primarily to already well-resourced groups and their costs to economically and politically vulnerable groups" (Roy, 2018: 45). I show that the contextual moment in post-apartheid South Africa distills "practices of inequality" (Harding, 2011) that are of particular interest to feminist care theorists. While the political, social and economic history of this contextual moment shows a different instantiation of care, it provides a unique analytical aperture onto hyper-reified practices of inequality in order to develop specific, material practices for reframing the problem of care as such (Foster, 2017).

Scholars such as Sandra Harding, Melinda Cooper, Kavita Philip, Michelle Murphy, Banu Subramaniam, Laura Foster, Anne Pollock, Deboleena Roy, Judy Wajcman, and Margrit Shildrick inform the mode of decolonial FSTS I adopt. The work of Rosi Braidotti inspires my transversal explorations, *via* decolonial and feminist science and technology studies (STS) *across* feminist theory, critical public health (vis. HIV/AIDS), politics (vis. democratic transition) and political economy (vis. Big Pharma, intellectual property rights, transnational economies of care) as well as the vagaries, returns, and re-interpretations of Marx's critiques of capitalism in the fields currently labeled 'new feminist materialism' and 'new social reproduction theory.

Braidotti's transversality actualizes an ethics based on the primacy of relation and inter-dependence, which *also* accounts for non-human life. This "posthuman politics" (Braidotti, 2016: 95) is not about leaving the human behind, but rather, meditates on transversal (that is, thinking with and through, not against or solely critical) becomings by being mindful of all the micro-political influences of such becomings. Transversality also calls for a genealogical approach to care: that is, pausing on a specific contextual moment vis-à-vis care, resisting a history of origins and telos, and focusing on accumulated assemblages of complex ideas and forces; to discover the rules and processes which return but, but differently, "made strange" over time in order to obfuscate the ways in which the "rules of the game" are repeated and redeployed, as Foucault states it (1971: 86). Genealogy interrogates the "sedimented meanings" and presuppositions which may make it difficult to resolve the problem of care. Genealogy is also about exploring and broadening assumptions and interpretations as much as possible. This broadening involves a return to a matter of concern, which has been made strange, or defamiliarized, by discontinuities, movements, contradictions, and time. The strangeness ruptures the coherence of the matter at hand. Distance in time has added density and thickness, bringing meanings and materialities together in larger assemblages, or the *bruit de fond* ('background noise,' Foucault, 2006: xxxi) through/from/against/with which care work emerges - that I could not 'see' at the time of my first foray into care (Foucault, 1971: 73). My "strange return" to care describes a "the process of subjecting old and new discourses to a reflective/

inventional pause" (Phillips, 2002: 339). As such, my exploration of care work is not to evince the emergence of a 'new form of care work' or the figure of a 'new carer,' but rather, to apprehend a particular moment in which to trace the processes, events, technologies, and mechanisms of becoming which produce the material need for care and carers in the first place.

Put another way, I am interested in a moment where care work emerges again, but strangely (vis. the care worker in South Africa *and* the care robot in Japan). I want to start with the caring body *in situ*, in the assemblages which materialize the caring body, rather than starting from the theories of care we have to date, in order to go *beyond* the current paradigm of care. I argue that the uniqueness of the postcolonial *and* post-apartheid context 'thickens' the problem of care for materially nuanced analysis.

The concept of 'a strange return' is also productive in describing my frustration with my earlier research on care work which could not adequately grasp or analyze what I intuited was something profound, if not resistant, about the care worker's caring practices. Thus, I adopt a strange return as a reflexive methodology - one that speaks to the matter being analyzed, the way in which it is analyzed, and the analyst. Just like the retrovirus, carers and I perform a strange return: a repetition that occurs, through time, with a difference,"to free thought from what it silently thinks, and so enable it to think differently" (Foucault, 1985: 9).

> After all, what would be the value of the passion for knowledge if it resulted only in a certain amount of knowledgeable-ness and not, in one way or another and to the extent possible, in the knower's straying afield of himself? [sic] There are times in life when the question of knowing if one can think differently than one thinks, and perceive differently than one sees, is absolutely necessary if one is to go on

> looking and reflecting at all … But, then, what is philosophy today—philosophical activity, I mean—if it is not the critical work that thought brings to bear on itself? In what does it consist, if not in the endeavor to know how and to what extent it might be possible to think differently, instead of legitimating what is already known? (1985: 8-9).

## CHAPTER OUTLINE

In Chapter 1 I develop the epistemological, theoretical and conceptual frameworks which allow me to ask different questions about the *problem of care.* In Chapter 2, I will develop my argument by analyzing Joan Tronto's democratic theory of care through the South African context. Through a close reading of Joan Tronto's text – a recent body of work attempting to think differently about care work – I argue, using a decolonial FSTS analysis, that Tronto's democratic theory of care does not fit the South African context. While my project considers one of the largest crises of care in a nascent democracy, Tronto's democratic theory of care seems to be a productive point of entry. However, by presenting a genealogy of HIV/AIDS care during South Africa's democratic transition, my case study demonstrates how a democratic theory of care does not adequately analyze or address the biopolitical and necropolitical valences of care work. While Tronto argues that care is a *problem FOR democracy to solve*, I demonstrate that care is, in fact, a *problem OF democracy.*

Building on this argument, in Chapter 3 I analyze global and local AIDS policies which interpolate the unpaid, community-based care worker. Thinking with Melinda Cooper's assessment that biopolitics is "crucially concerned with the emergent possibilities of the life sciences, public health, and biomedicine" as "new foundations" for economic growth, productivity, value, and speculative profits (2008: 11), I focus on a process called "task-shifting" to demonstrate how health policies aid the "global, systematizing momentum of capitalist dynamics" and the necropolitics inherent therein (2008: 21).

In Chapter 4, I consolidate my ***dual objectives of asking different questions about care and decolonizing theories of care by thinking with the care robot.*** I argue that the care robot defamiliarizes our conventional, heteronormative, and anthropocentric approach to care in order to understand why *the crisis of care remains irresolvable.* Employing Karl Marx's concept of the automaton demonstrates the tendencies of capital operating through care. Rather than an anti-human move, my turn to the care robot ironically rehumanizes the care worker by demonstrating the dehumanizing capitalist tendencies ***already*** embedded in care as such, which I argue has frustrated feminist attempts resolve the the problem of care.

# CHAPTER 1

## Everything Needs Care

*What is justice?*
*It is the constant care for the common good.*

Giambattista Vico, 1709.

*Irreducibly, behind all human activities are*
*care workers doing the barely regarded*
*but essential work of caring.*

Joan Tronto, 2013.

If I came to care work through the South African AIDS epidemic, then my work in care exemplified TAC General Secretary Mthathi's claim that "AIDS is everything." It goes without saying that everything needs care. Care is a universal human need (Lewis, 2006; Nussbaum, 2010; O'Hara, 2013). Care for infants, children, the elderly, the infirm, and people with disabilities present the most visible needs. However, the need for care spans our lifetime and is rooted in the inevitable dependencies of the human condition (Fineman, 2015). While this form of dependency may be episodic, it is

> universally experienced and could be thought of as the physical manifestation or realization of our shared vulnerability as human persons, which is constant throughout the life course (Fineman, 2015: 105).

Furthermore, that care is an inevitable and exponentially increasing necessity of the human condition is evinced by the growth in technological investments (such as care robots) in addressing the 'problem of care.' Care can denote self-care, health care, and therapeutic practices. Relationships need care. Animals need care, in terms of conservation, in scientific labs, and as our service animals and domestic companions. The things we use need care: homes, buildings, the environment, resources, and all the inanimate objects, devices, and tools we use to create and sustain our lives. Organizations and institutions need care, as do political and economic activities (O'Hara, 2013; Taylor, 1999; Tronto, 2013).

Care undergirds our social fabric, yet provision is not universally guaranteed. The political, social, and economic conditions which shape the allocation *and* provision of care, such that some people are unable to receive the care they need, and others are penalized for the care they provide, describes what theorists call the "problem of care" (Leahy, 2012; Meyers, 1988). More specifically, the hyper-feminization of care work, and the subsequent economic devaluation of care work, has contributed significantly to women's disadvantage. As such, the problem of care has been a longstanding feminist concern (O'Hara, 2013; Tronto, 2013; Waring, 2003; Hartsock, 2004; Folbre, 1996; Ungerson, 1987; Boserup, 1970; Friedan, 1963; Beauvoir, 1949).

The contours this problem were first sketched by Ester Boserup in the 1970s, and gained renewed attention during the economic crisis of 2007-2008 (see for example, Margunn Bjørnholt and Ailsa McKay, 2014). Marilyn Waring, Maria Mies, Hazel Henderson, Nancy Folbre, Diane Elison, Nilüfer Çağatay, Bina Agarwal, Lourdes Benería, Drucilla Barker, and Naila Kabeer have all engaged care as the "underlying fabric of economic activity" and focused on those who provide and sustain it (O'Hara, 2013: 37). Sabine O'Hara consolidates care's myriad denotations, noting that this 'underlying fabric' includes reproductive, care-taking, and supportive labor which more often than not operationalize gender, race, culture, and class (2013: 37). While my project apprehends care in this broad valence, as various forms of social reproduction which are neither easily defined nor ontologically stable across time and place, I focus on a specific and novel example of care work in order to understand the work that care does at a particular moment in contemporary political economy.

My dissertation focuses on unpaid, voluntary, community-based HIV/AIDS care work in the low-income, informal settlements of South Africa during democratic transition. I propose that this context is an analytically rich site for thinking differently about the highly feminized and seemingly intractable *problem of care* (Tronto, 2013). At the nexus of transitional democratic politics, neoliberal economics and public health crisis, the enormous need for HIV/AIDS care work evinces the tension in neoliberal economies between diminishing state resources and increasing dependence on the coping capacities of families and communities. I argue that insights from this context can update our understanding of care as the need for care, types of care, and provision of care are presently reconfigured through epidemic, civil unrest, mass migration, and climate change, as well as human-technological care interfaces emergent in this time of radical uncertainty and precarity.

I take care theorist Joan Tronto's question as my starting point: why, despite a voluminous body of elegant feminist scholarship, has "no mass movement to improve care … arisen" (Tronto, 2013: ix)? Within this larger question I locate the specific puzzle emerging from my own research on care work: why, despite the economic, physical, and emotionally devastating consequences of providing care, do HIV/AIDS care workers like Mandisa return, daily, on foot, armed with little more than hope? Considering South Africa is a country with the highest rate of gender-based violence in the world – simultaneously with the largest population of people living with HIV/AIDS, and considering that our country is still recovering from the apartheid's skewed distribution of wealth, resources, healthcare and service delivery in general, black South African women are the least likely to overcome poverty or poor health. Thus, the development context adds urgency to decoding the conundrum of care.

## FEMINIST THEORIES OF CARE

Care work, as a form of social reproduction, has been variously interrogated by feminist scholars, most often via development or economic perspectives (Tronto, 2013). Tronto suggests that this is an inherent problem with feminist apprehensions of care work. She claims that theorists have "misunderstood politics as if it were part of the world of economics" (2013: xi). She asks: "Why has the language of economics seemingly come to replace all other forms of political language?" (2013: xi). She suggests that while feminist economists have been concerned about the privatization of care, or the re-figurations of care under neoliberalism, "using the metaphors and language of the market leaves an account of care incomplete" and may veer too much toward economic determinism (2013: 7).

For example, feminist economists have long focused on articulating the injustices inhering in the gendered nature of care work as operationalized through seemingly intractable public/private and production/reproduction binaries. The "problem" of care work becomes entrenched within the gender normative household in which women have primary responsibility for domestic work, while the “solution” is to create more equal sharing of tasks between women and men. Tronto argues that feminist economic theorizations frame care work “in the most heteronormative of terms” (2013: 93) and thus perpetuate and reify the very structures they attempt to dismantle.

A review of the literature suggests that these “most heteronormative of terms” are hard to escape considering the most unifying aspect of the “problem of care” is that it is disproportionately “women’s work” (Esplen, 2009: 5). Women’s naturalized role to care for the home, the sick, the spouse, the children, the family and the elderly has been associated with the “moral virtues such as altruistic concern,” an innate “responsiveness to the needs of others” (Held, 2006), or “a willingness to sacrifice one’s own interests for those of others” (Nussbaum, 2001: 242). Yet, society as a whole benefits from this ‘work’ more than women themselves (McFadden, 2000). Patriarchal interests have ‘mediated’ this acquiescence by the ideological claim that the interests of everyone are more important than the individual rights of the one performing the care work (McFadden, 2000). African feminist Pumla Gqola argues similarly when she says tradition and culture positions ‘caring’ as ‘feminine’ and argues that “the expectations of women as nurturers” means that their own illnesses and general well-being are “not taken seriously” (2008: 44).

## The Feminization of Care Work

Joan Tronto defines care work as an inherent human need, or:

> a species activity that includes everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as

> possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (Tronto, 2013: 19)

But, how did this "species activity" come to be feminized? Notions of motherhood have contributed significantly to this state of affairs, which are further naturalized through claims on biology, essence, tradition, necessity, or norm. Specifically, ethical gender essentialism pertaining to notions of motherhood (Hamington, 2004: 24-26) contributes to the widely-held belief that care falls on the side of feminine virtues. Hamington writes that the "issue of the gender connection to care can be seen as a background-foreground concern;" care has been "in the background of male-dominated approaches to ethics, but it has been in the foreground of women's moral identity" (2004: 19). Care as a natural feminine attribute and tendency has come to justify non-remuneration, while care as a feminine moral virtue renders a monetary value anathema (Beauvoir, 2011 [1949]; Waring, 2003; Hamington, 2004; Razavi, 2012). If care work is "woman's destiny" it does not require reciprocity (Waring, 2003). Thus, whether rendered such through morality, tradition, culture or religion, if the "propensity to care" exists by nature, it can thus be assigned free of charge *because* it derives from nature (Beauvoir, 2011 [1949]; Nussbaum, 2000). Put another way, care is "woman's destiny", and what is destiny requires no return in kind (Nussbaum, 2000: 264). Thus, care work is embedded in a socially constructed paradigm where it is 'natural' not to attribute monetary (or other) values to the work which women do "anyway" (Nussbaum, 2000: 264-270, Budlender, 2002: 7).

Historical materialist feminists argue that the factors noted above coupled with the emergence of private-property inflected capitalism generated patriarchal and capitalist systems of production which, predicated on the sexual division of labor, continue to contribute significantly to women's subordinate social role (Beauvoir, 2011 [1949]; Friedan, 1963; McFadden, 2000). Care-giving is a circularly argued destiny and has taken on performative power. That is, women's experiences of repeated performances of care work (no matter how coerced) come to render them as "built for care" (Hamington, 2004).

Whether in economically privileged societies or developing contexts, the feminization of care work has been a central feminist concern for decades. Betty Friedan is noted for her criticism of the construction of an "unrewarding feminine ideal" rooted in notions of care work (Friedan, 1963: 425; see also Freedman, 2007: 269). Writing in post-World War II America, Friedan's critique was embedded in a context of post-war affluence and addressed 1960s white, middle-class, educated women. Despite the specificity of her location, Friedan's deconstruction of the "role of women," told through women's personal narratives, remain relevant, not only in the West, but in settings where the expectation of an oppressive "feminine ideal" persists (Friedan, 1963: 425). Friedan's writing addresses the homogenizing notion of women as caregivers, particularly in the home (Friedan, 1963; Freedman, 2007). The burdens of this particular oppression – the oppression of "women's work," the gender role binary and the expectations incumbent therein – have material repercussions for women's well-being (Freedman, 2007: 276-278).

Of course, a great deal of scholarship attends to the material repercussions of the erroneous assumptions undergirding practices of care. Feminist scholars such as Carol Gilligan (1982 [1993]), Nel Noddings (1984), Sara Ruddick (1989; 2004) and Diemut Bubeck (1995) demonstrate that care is, in fact, grounded in women's *experiences* rather than in their *biology*;

experiences of care which occur within their socially mediated role predicated on a range of *assumptions borne of biology*, rather than because of an *essential biological nature* (Hamington, 2004: 18). These insights are of course indebted to the work of Simone de Beauvoir (2011 [1949]), who examines sex roles as social hierarchies built on naturalizing “myths” (2011 [1949]: 14), and explains and describes how the consequent “social discrimination” has “moral and intellectual repercussions...so deep in woman that they appear to spring from an original nature” (2011 [1949]: 14). What is left out of the moral argument, however, is that caring practices or “habits” may be the result of specific decisions which involve “sacrifice, pain, and great effort of will” (Hamington, 2004: 31-35). Thus, the “naturalistic fallacy” of care as passive, instinctual, and befitting of the constructed “nurturing character” of the female sex poses ethical concerns in and of itself (Hamington, 2004: 35). More nihilistically perhaps, Martha Nussbaum finds that care work is “forced repression in some directions, unnatural stimulation in others” (Nussbaum, 2000: 265). In the former sense, persistent gender norms reinforce the role of women as carers in the home, done as an extension of their domestic duties. In the latter sense, women may “choose” care work due to “the social norms and traditions that form women's preferences, and that influence their aspirations and their effective choices” (Nussbaum, 2000; 265; Robeyns, 2010).

Part of the work of care theorists, then, is to loosen the category ‘woman’ from a biological substrate which has been apprehended through a range of epistemic traditions as deterministic, that is, “biology is destiny” (Beauvoir, 2011 [1949]: 17; 73). And while care is increasingly apprehended as *practice* (Nussbaum, 2000; Engster, 2005; Hamington, 2004), *practices of care* become “habits of the body” in such a way that render women as ***“bodies built***

***for care”*** (Hamington, 2004: 31). ***Performance has become biology.*** As such, care remains entangled in the practice/performance/biology/destiny debate.

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## “Slaves, servants and women”

Chandra Mohanty focuses on how the feminization of care labor naturalizes race and class (2003: 141). Beyond practice, Mohanty interrogates the context of care and foregrounds “the ideological construction of jobs and tasks in terms of notions of appropriate femininity, domesticity, (hetero)sexuality, and racial and cultural stereotypes” (2003: 142). Thus, it is important when theorizing care work to locate the analysis in how “women’s work is constitutively defined” through the “naturalization of capitalist processes, ideologies, and values” (2003: 142). The fact of *being women,* with particular racial, political, social, economic, ethnic, cultural, sexual, and geographical histories, has everything to do with the material practices, definitions, and identities of workers (2003: 142). Simone de Beauvoir (*The Second Sex,* 2011 [1949]) also emphasized that the feminization of care work is raced and classed. Through her historical materialist approach, she argued that the diminution of domestic labor produces the “servant-wife” (2011 [1949]): 89-94). Other development and postcolonial feminists have shown how care work comprises complex patterns of behavior influenced by “different axes of domination,” such as class, ethnicity, race, politics, histories, able-bodiedness, and sexuality, which mutually construct one another and sustain inequalities and “deprivilege women relative to men in society” (Bredström, 2006: 232, 237; see also Kuumba, 2002: 505).

Postcolonial feminists and development economists argue that neoliberalism exploits the sexed, gendered, raced, and classed nature of care even further in the development context

(McFadden, 2000; Benería, 2003; Mohanty, 2003; Razavi and Hassim, 2006). Communities in developing countries increasingly experience the pressures of structural adjustment and stabilization policies. These policies have irrevocably changed the role of the state in care provision due to the demand for profit-maximization and efficient economies (Gibson-Graham, 2006; Razavi and Hassim, 2006). As such, social safety nets are left to market forces and communities are forced to fend for themselves (Razavi, 2007; Razavi and Hassim, 2006; Popke 2006). One manifestation of "fending for themselves" in this regard is the emergence of unpaid care work as "the bedrock of social protection and provisioning" (Razavi, 2007: 378). Here, the care gap is ever-expanding, which women subsidize with their own time, energy, and resources (Ogden et al, 2006: 334; Harcourt, 2009: 73).

In the formal economy, care work is among the lowest-paid work in most societies, but as informal labor, care workers are likely to be the least well protected and organized, receiving the fewest benefits (Duffy, 2011). Women continue to provide a larger amount of care than men across *all* societies, especially in respect of unpaid care (Esplen, 2009: 5). State withdrawal, at the time of increased social need, assumes the unlimited coping capacities of families and communities, an assumption which re-entrenches gender inequalities (Gibson-Graham, 2006: 24-25; Razavi and Hassim, 2006). Care work thus increases the risk of women's impoverishment, especially for those already marginalized by social or historical factors related to race, culture, or class (Kang'ethe, 2009; Esplen, 2009; Esim & Grown, 2006; Ogden et al, 2006; Bakare-Yusuf, 2003; McFadden, 2000). Vulnerability is exacerbated by the "invisible" nature of care work which takes place inside private homes (Esplen, 2009: 25) and does not enjoy labor protections. The fact that care work is often accompanied by dangerous, inadequate or unsatisfactory working conditions, argues Esplen, are the result of “gender ideologies which portray care work as something requiring few skills that all women and girls are able to do” (2009: 25). Citing Tronto, Carrie Menkel-Meadow emphasizes the injustice of grounding a moral philosophy, such as an ethics of care, within such deeply deprivational practices. Specifically, she writes:

> Like Tronto, I am most interested in trying to understand the relative inattention paid to the philosophical importance and political necessity of care, given its importance in our lives. Care has been cabined by its association with the private, the emotional, the family, in short with women. Tronto wishes to elevate care to a human duty, a project which I value, but in tracing its raced, classed and gendered natures throughout human history, she cannot ignore that it is gendered, as well as raced and classed. In human history ***care has been the work of slaves, servants, and women***. In many cultures, care has been the work of people who are subordinated by race, conquest, class, or ethnicity and has been disproportionately received by the well-off. Thus, one explanation for its limited place within philosophical inquiry is that it was, and perhaps remains, insufficiently problematical for those who write moral philosophy. Care is assumed and received, as delivered, usually, though not always, by a female or subordinated servant (1996: 280, emphasis added).

## CRITICAL PUBLIC HEALTH

Exacerbating the disproportionate burden of care on women are compromised and/or failing health systems in the present neoliberal milieu. As such an analysis of global public health interventions is required. Health surveillance scholars, such as Martin French and Gavin Smith

(2013) call for a *critical public health approach* which does not see health analyses as straightforwardly unproblematic undertakings but acknowledge the transnational, political, and economic surveillance that increasingly undergirds global public health. Of course, health interventions can serve progressive objectives and promote positive social change. However, in spite of being undertaken in the name of health, interventions, especially on the global scale, might be "bound up with processes that discriminate, marginalize and ultimately militate against social justice" (French and Smith, 2013: 383). Global public health requires greater critical attention to its means and sometimes divergent ends. Furthermore, emergent ways of organizing health practices and new health technologies require new conceptual approaches and methodological tools (French and Mykhalovskiy, 2013).

A key concern of critical public health is the amplification of health-related surveillance with regard to the performance, purpose, and meaning of data collection and the emergent role of non-human actants in data-collection (French and Mykhalovskiy, 2013; French and Smith, 2013; Last 2001). This branch of thinking places centrally Michel Foucault's contention that biopower has come to operate particularly efficiently through the health sciences, which increasingly exceeds disease management and comes to function as governance. Thus, critical public health frameworks are useful in locating care work within Foucault's genealogy of the parallel development and mutual constitution of the modern life sciences and classical political economy in the late 18th and early 19th century, and thus, as a most productive site for the operation of biopower (Booth, 2010; Cooper, 2008; Foucault, 1973; Montgomery, 2012; Waldby, 2003; Weir, Lorna, and Mykhalovskiy, 2010).

Specifically, apropos Foucault, we know that the “entry of life into history” (1980: 145) inaugurated a new relation to bodies. For the first time in history, the body became the center of numerous detailed procedures and strategies designed to improve its performance in a variety of institutional contexts. At the same time, the qualities of the life of the population as a whole came to be seen as a concern for government: public health, sanitary conditions in cities, the rate of population increase, the need for a productive workforce, and so on. This is the era of biopolitics, as Foucault names it, where “the administration of bodies and the calculated management of life” becomes the priority in the organization of social life (Foucault, 1980: 145-146). Through public health, the governance of society can declaim moral grounds and vest in a system based on medical notions of the norm (rather than on legal notions of conformity to codes), a system that coopts the seemingly objective and allegedly neutral operations of the health sciences. Thus, Foucault finds public health more dangerous than the ‘law’ as a mode of governance, and, more effective (Foucault, 1975).[7] In *Birth of the Clinic* (1973) Foucault elaborates on this point. He argues that the whole notion of public health and indeed, of the social as a knowable object, was largely based on the collection of health statistics gathered from clinics. These data, when rendered into fact, sought to enhance public health and to reform society through population policies and regulations rooted in “infinitesimal surveillances, permanent controls, extremely meticulous orderings of space, indeterminate medical or psychological examinations, to an entire micropower of the body” (1973: 195). In this way, interventions can grasp “the entire social body” or “groups taken as a whole” (1973: 195), that is:

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[7] See *On the Genealogy of Ethics: An Overview of Work in Progress:* “My point is not that everything is bad, but that everything is dangerous, which is not exactly the same as bad. If everything is dangerous, then we always have something to do. So my position leads not to apathy but to a hyper- and pessimistic activism. I think that the ethico-political choice we have to make every day is to determine which is the main danger” (1997 [1985])1985: 286.

populations. Put another way, public health is presently a most effective mode of biopower able to entrench societal administrative controls in the details of everyday life.

An important part of a critical public health perspective is the transnational, decolonial, and raced imbrications of biopolitics, or in a word, necropolitics. The term coined by Achille Mbembé extends Foucault's concept of biopower to attend to the impetus to not only *make live* but also to *make live to the point of death*, or "to define who matters and who does not, who is disposable and who is not, who may live and who must die" (Mbembé, 2003: 12, 27; Soyinka-Airewele, 2015). The new strategies produced through neoliberalism, the health sciences, and public health 'care' allow for "the generalized instrumentalization of human existence and the material destruction of some human bodies and populations" who dwell in "death worlds" to the benefit of privileged other populations (Mbembé, 2003: 14). Put another way, Mbembé describes these as "new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of living dead" (2003: 39-40). Mbembé suggests that "the plantation" and "the colony" are examples of death-worlds; so are the shanty towns where the vast majority of people living with and dying of AIDS – and their carers – can be found.

The field of critical public health studies allows me to think the reproduction of life – in all its facets: social, biological, and otherwise – in its ever-increasing proximity to capital, thus invoking "the traditional concepts of political economy: production, value, growth, crisis, resistance, and revolution" (Cooper, 2008: 1). Furthermore, critical public health articulates the 'posthumanist turn' by recognizing and analyzing the multiplicity and complexities of human existences as interdependent with non-human entities, including processes, events, animals, spaces, and technologies (French and Smith, 2013; Last, 2001). As such, this field brings the social sciences, humanities, and public health science communities into a joint conversation, acknowledging that the goals of public health (to reduce the amount of disease, premature death, and disease-produced discomfort in a population) are not immune to changing political ideology, social values, emergent technologies, local practices, and political economy (Last, 2001; Rock, Degeling and Blue, 2014). A final point worth noting is that critical public health is also a decolonial practice interested in interrogating notions of *population* and *community* in "discourses of liberation" which unwittingly fix identities in ways that promote rather than ameliorate disadvantage and inequality through the obfuscated implications of health's regulatory effects (Petersen and Lupton, 2014: 147). In sum, critical public health fosters a mode of analysis which can traverse scale, that is, it takes as a matter of course ***the impact of public health interventions on all aspects of everyday life alongside the market-driven neoliberal influences on individual behavior*** (Lupton 1993; Petersen & Winkler 1992).

## POLITICAL ECONOMY & NEOLIBERALISM

Feminist critiques and critical public health invoke notions of political economy and neoliberalism, and thus it is important to clarify how I deploy these terms in my project. Political economy most commonly refers to interdisciplinary studies drawing upon economics, sociology, and political science in explaining how political institutions, the political environment, and the economic system influence each other. Political economy considers: (1) the role of government and class relationships in resource allocation; (2) the economic impacts of international relations; and (3) political or exploitative class processes inherent in economic models (Petersen and Lupton, 2000).

With respect to matters of political economy and public health, the following points should be noted. First, the chief mechanism of neoliberalism is to create and sustain a ‘market.’ Secondly, a neoliberal position critiques welfarism vis-à-vis healthcare as economically, politically, and socially unsustainable, encourages individualism and entrepreneurialism in matters of health and welfare, which in turn promotes the devolution of responsibility for healthcare and other social services to “communities” (Petersen and Lupton, 2014: 147). Third, neoliberalism reinstates liberal principles, including the notion that individuals are atomistic, rational agents whose existence and interests are *prior to* society and that the shortcomings and capacities of political authorities to govern are respectively ameliorated and enhanced by opening up the arena of governance to market-logics as much as possible.

Fourth, under the guise of liberating the individual, neoliberal governance operates not through imposing constraints upon citizens but rather through *producing* citizens capable of “exercising regulated freedom” (Petersen and Lupton, 2000: 147). As Foucault argues, inculcating self-regulation is more efficient than the constant surveillance of juridical or sovereign power; neoliberalism id undergirded by the philosophy that “power operates most effectively when subjects actively participate in the process of their own governance” (Petersen and Lupton, 2000: 148) As such, neoliberal governance seeks out and depends on technologies for “governing at a distance” (Rose & Miller, 1992: 173).

As Foucault explains, the power-knowledge system can be seen in effect in public health as it gains increasing power to define ever gradated groups for more efficient management, that is, public health is a most efficient mechanism “to define and hence govern subjects” (Petersen and Lupton, 2000: 148). By providing “scientific” or “medical” norms, rather than moral or legal ones, by which individuals are monitored and classified, and against which individuals may be measured, neoliberalism operationalizes public health in ways that persuades people to conform voluntarily to the goals of the state and other agencies. The most convincing aspect of neoliberalism is that it enhances personal freedoms:

> the recognition that in modern societies the state is positioned as not domineering, repressive or authoritarian, but rather as part of a set of institutions and agencies that are directed at enhancing personal freedoms and individual development (Petersen and Lupton, 2000: 149).

In using the term *neoliberal,* I specifically reference the economic system in which government expenditures are limited, the market is viewed as the preferred method of allocating all social resources, the protection of private property is taken as a central principle of government, and social programs are limited to "safety nets" (Tronto, 2013: 36-37). This economic system is supported by a political form of limited liberal democracy and an ideology of limited government involvement (Tronto, 2013: 37).

## SOCIAL REPRODUCTION THEORY

Social reproduction refers to maintaining existing life on a daily basis and reproducing the next generation (Laslett and Brenner, 1989): this includes procreation, how sustenance in the form of food, clothing, and shelter are made available for immediate consumption, the nurturing and socialization of children, and the care of the infirm and elderly (Laslett and Brenner, 1989: 382-385). The term includes the "mental, manual, and emotional" work involved in providing “historically and socially, as well as biologically defined care to maintain existing life” (1989: 383).

As a concept, social reproduction is attributed to Althusser (1971) and informed by Marxist analyses. It is the process through which “fundamental structures and relations of society continually recreate the existing mode of production" (Gibson-Graham, 2006: 24). As such, social reproduction comes to us as imbricated in economic critique. While Marx’s concept of historical materialism has been critiqued for its gender-blindness, Marx’s insistence on the importance of social reproduction (1998 [1845]) to his concept of historical materialism – where he writes that the “first premise of all human history is, of course, the existence of living human individuals” and “producing their means of subsistence” which “produc[es] their actual material life" (1998 [1845]: 7). I am confident that this formulation clearly acknowledges the gendered nature of social reproduction (how else would humans ‘exist’?). Furthermore, Marx’s analysis takes social reproduction as coterminous with productive labor: thus, this “first premise” of human history is gendered and putatively economic.

Contemporary analyses  of social reproduction describes it as “the infrastructure of jobs involved in running and implementing the global economic system” (Harcourt, 2009: 79) while simultaneously meeting the needs of individuals and families within a given society (Folbre, 1996: 186). Social reproduction theory works at the artifice of separation between social and productive labor and is concerned specifically with aspects that might conventionally be referred to as *social labor* and *reproductive labor.* In so doing, social reproduction theory places human labor “at the heart of creating or reproducing society as a whole” (Bhattacharya, 2017).

Founded as the "first premise of all human history," that is, historical materialism, social reproduction theory sets out to make a specific and quite obvious point: the labor that produces commodities and the *labor that produces labor* to produce commodities are but nodes on the same assembly line. However, the "trick" of capitalism is to obfuscate the latter, to make invisible everything that sets the production process in motion (Bhattacharya, 2017). Social reproduction theory is thus concerned with the contradictions and points of determination of a capitalist system shot through with this "commodity" that is not produced in the manner of other commodities; "contradictions and tensions that must necessarily be constitutive of the system yet must be overcome within it" (Bhattacharya, 2017: 11).

Nancy Fraser (2017) theorizes these constitutive "contradictions and tensions" the capitalist system. While the neoliberal moment is marked by a crisis of social provisioning, Fraser challenges the notion that this is simply a "crisis of care" or a crisis of

> the capacities available for birthing and raising children, caring for friends and family members, maintaining households and broader communities, and sustaining connections more generally (2017: 21-23).

Instead Fraser offers a much darker thesis: this is a generalized crisis of the capitalist system's inability to reproduce itself, brought on by the depletion and decimation of social reproductive functions *by the capitalist system*. The crisis of care, then, is "not accidental but has deep systemic roots in the structure of our social order" (Fraser, 2017: 12). "On the one hand" writes Fraser, " social reproduction is a condition of possibility for sustained capital accumulation, on the other, capitalism's orientation to unlimited accumulation tends to destabilize the very processes of social reproduction on which it relies" (2017: 22). In other words, the problem, or crisis of care has been generated and accelerated by "unlimited accumulation" that "tends to destabilize the very processes of social reproduction on which it relies" (Fraser, 2017: 22).

Care work is of particular interest to social reproduction theorists in an age where care is "increasingly becoming commodified and sold on the market for a price" (Fraser, 2017: 21). Furthermore, social reproduction theory acknowledges that care work is, by and large, the province of "working-class women of color and migrant workers," a fact that rightly locates "race and citizenship status" as central determinants of both societal and social reproduction (Fraser, 2017: 21). This analysis also surfaces "racialization process" within the historical context of "unpaid labor of enslaved African American women during US slavery" and the "paid domestic labor that many African American women performed in the post-slavery period" thus ensuring that the "recognized social reproduction canon" comes into an intentional and "productive dialogue with Black feminist writing" (Bhattacharya, 2017: 13). Most significantly, social reproduction theory is primarily concerned with understanding how categories of oppression (such as gender, race, and able-bodiedness) are co-produced in simultaneity with the production of surplus value. Social reproduction theory contributes a nuanced account of categories of social difference, and is thus a way to analyze our present materiality. It purposively addresses the at times reductionist or deterministic representations of Marxist critique, while "creatively exposing the organic totality of capitalism as a system" (Bhattacharya, 2017: 14). This point is worth repeating in full:

> The understanding of totality as an organic whole rather than an aggregate of parts is important precisely because it has real material

> implications for how we must choose to act upon that world ... SRT is especially useful in this regard because it reveals the essence-category of capitalism, its animating force, to be human labor and not commodities. In doing so, it exposes to critical scrutiny the superficiality of what we commonly understand to be "economic" processes and restores to the economic process its messy, sensuous, gendered, raced, and unruly component: living human beings, capable of following orders as well as of flouting them ... Marxism ought to be paradigmatic rather than prescriptive, where we see Marxism as a framework or tool to understand social relations and thereby change them ... a method of analysis that applies itself to concrete historical situations. As the global neoliberal economy continues to foreclose real living alternatives for the vast majority and centers of resistance start developing from within its matrix, SRT will continue to develop Marxism as a real tool for understanding our world in order to change it (Bhattacharya, 2017: 19).

## DECOLONIAL FEMINIST SCIENCE AND TECHNOLOGY STUDIES

It seems that feminist care theorists have been most interested in delineating how care, as a practice, makes meaning of sex differences (building on Butler's theory of performativity, see 1990: xv-xvi). I argue that attention should be paid to the *doing* of care. I suggest it is not only the metaleptic "repetition and ritual" of care we should focus on, but by taking a new feminist materialist approach we should ask "what does care *do*?" Feminist scholarship has shown that care makes care workers out of (mostly) women. But what else does care do?

Since my project focuses specifically on informal, unpaid, community-based HIV/AIDS care work in South Africa, a decolonial and feminist Science and Technology Studies (DFSTS) approach is a fitting mode of analysis in its attentiveness to “the residual material conditions” of colonial and imperial relations (Harding, 2009: 405-406; Schnabel, 2014). And, because my research project is born of my activism, I am drawn to the epistemic modes of resistance necessary for social transformation inherent in DFSTS: I consider it a mode of epistemic activism to think differently about given assumptions and rigid paradigms related to care. Thinking differently is about epistemological creativity to “imagine the social world as radically other than it is” (Jackson, 2001: 291); in the words of Isabelle Stengers: “to think, that is, to create, that is, to resist” (2001: 235).

The approach I take to care in this dissertation is informed by context first. DFSTS provides the toolkit to think anew about the problem of care, through the novel context of the worlds largest AIDS epidemic in a still-democratizing state. ***Decolonial and feminist STS allows me to ask different questions about care.*** I have found that current feminist frameworks reify women as victims and limit rather than enhance political possibilities. I pose the question that, what if feminism’s commitment to addressing the under-valuing of women’s work actually reifies the problem of care? Is there a different way to think about care work? The purpose of my research is to explore, investigate, and imagine care work “differently, instead of legitimating what is already known” (Dave, 2012; Foucault, 1985). But why? As a public health practitioner, activist, and a scholar well-versed in the scholarship on care, I am perplexed that the problem of care remains unresolved. In addition, the experiences and practices of care I study in this postcolonial, post-apartheid context are not visible in the canon on care. Perhaps these obfuscated experiences can, in fact, leverage new thinking around the persistent problem of care.

Following Harding (2011), this project takes gender and colonial relations as co-constitutive. This draws our attention to who of the "ex-colonized" bear the brunt of neo-colonialism and neo-imperialism (Harding, 2009: 401): women and their dependents. Harding describes how

> women's conditions have tended to regress at precisely the moments marked in conventional histories as highpoints of 'human progress.' Even worse, it was precisely because of the features identified as progressive that women's lives regressed (2009: 406).

This point is particularly relevant to the issue of care workers in South Africa, drawing attention to carers' own conditions while shedding light on those who constitute their 'dependents.' For instance, care work emerges in South Africa as a highly feminized domain of labor. The "social engineering" of "colonial subjugation and apartheid dispossession" (Coovadia et al, 2009: 817, 825) resulted in fragmented traditional kinship structures and a division along gender lines as men were coerced into urban centers to provide cheap labor – first for the colonies, and then for white minority rule – on mines and in other industries. Women thus became over-determined as vestiges of tradition, culture, and home, exacerbated by them becoming solely responsible for the care of children, the elderly, and the infirm who remained in the rural, traditional homesteads and the reserves created by colonizers and the apartheid regime. Therefore, as the HIV/AIDS epidemic exploded, the skewed distribution of resources created by segregation policies meant that rural and impoverished peri-urban communities were the most susceptible. Overcrowding, inadequate sanitation, malnutrition, and stress caused the ill-health and intergenerational deterioration of many communities, rendering them highly susceptible to the AIDS epidemic -

and least able to cope (Coovadia et al, 2009: 825). The over-determined feminization of social reproduction, concentrated in the most immiserated communities, was exacerbated when HIV/AIDS policies in the transitional era abrogated care to these communities where “women [were] doing this work anyway” (Lund and Budlender, 2009). Following Harding, we become aware of the specificity of care work in this setting, which differs in many ways from the instantiations of care work under analysis in Western scholarship.[8]

Furthermore, we can see how the legacy of colonial and apartheid-era policies shape and complicate contemporary gender roles. We also become aware of how “progress” under transitional regimes and democratizing processes (Soyinka-Airewele, 2015; (Decoteau, 2008) meant State abdication of its responsibilities towards the poor and sick through discourses of “self-reliance” and “individual responsibility” (Decoteau, 2008:221). This abdication produces discarded, redundant populations (see Melinda Cooper, 2008 and Achille Mbembé, 2003, for example). Furthermore, Harding argues that “colonialism, imperialism, and male supremacy have persistently represented gender in racial or colonial terms and racial and colonial relations in gender terms” (Harding, 2009: 401). As such, the legacies and residues of colonialism must be considered in our DFSTS endeavors: “Gender and racial/colonial categories *still* co-constitute each other today” (Harding, 2009: 401, emphasis added). HIV/AIDS care work in South Africa is gendered, raced and economic, and not divorced from colonial and imperial legacies.

Relatedly, Harding reminds us that

> sciences and technologies and their societies co-constitute each other…each provides resources for the development of the other...and

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[8] For example: Joan Tronto, Mignon Duffy, Clare Hammonds, Nancy Fraser, Arlie R. Hochschild, Paula England and Nel Noddings.

> this can occur whether such development is politically and intellectually progressive or regressive (2011: 21).

This is a relevant axiom in that it draws my critique beyond the socio-economic impacts of care work to thinking about the techno-scientific policies that produce the conditions around HIV/AIDS, if not the epidemic itself. Furthermore, this approach extends the scale of the 'social' across transnational networks or relations, facilitating an analysis of how Western and developing societies are relationally co-constituted *through* the bio-techno-scientific milieu of HIV/AIDS. This allows me to interrogate the Western/imperialist investments undergirding the experience of the HIV/AIDS epidemic in South Africa.

By way of example, I think of the construction of Africa as the West's failed "Other" (Mbembé, 2003) through the "persistent tropes of a powerful Euro-American fantasy about 'Africa' and blackness" (Booth, 2010: 364). Such tropes legitimize a range of remedial aid initiatives aimed at 'supporting' non-Western countries in their development. However, the need for aid arises as a *pre-condition* for African countries' democratization. That is, often unable to compete on the global market, post-independence states, like South Africa, require debt which ties them to new modes of imperialism through debt-servitude to the West generally and the US specifically (Soyinka-Airewele, 2015; Cooper, 2008; Mbembé, 2003). South Africa is not unshackled from colonial relations as such. And health, and especially health *crises*, become useful sites for deploying neoliberal governance techniques as imperial, industrialized nations reconfigure and re-establish their relationships with the developing world – relations that once again benefit the former at the expense of the latter (Soyinka-Airewele, 2015; Montgomery, 2012; Decoteau, 2008; Cooper, 2008).

DFSTS scholars (Harding, 2011; Cooper, 2008) show how science generally, and health sciences specifically, are particularly important sites of analysis because neoliberal governance ideology is increasingly and successfully smuggled in under the "autonomy of science rhetoric" (Harding, 2011: 2). In fact, it has come to be seen as "the duty of Western societies to increase their scientific and technical research and to disseminate the results to poor societies" (Harding, 2011: 2) – a continuation of colonial science in many ways under the guise of "development," "democratization" and "progress" (Harding, 2011: 2-5). Thus, Harding suggests that, together, decolonial and feminist STS studies can better apprehend the difficult conditions set by global political and economic policies and circumstances

> primarily through the carrots and sticks provided by First World financial and development policies and practices [and the commensurate] difficulty of escaping the ingrained habits, practices, and residual material conditions of those colonial and imperial relations (Harding, 2009: 405-406).

Thus, we can read HIV/AIDS technoscience as producing policies and discourse which construct the US as "good" and African as "bad", "desperate" and "failing," thus making it an "absolute priority" to save African lives through a slew of interventions (Booth, 2010). Further, the African woman is constructed as victim in order to legitimize, and capitalize on, the business of rescuing her from the general plight that is all things "African." The African-woman-as-victim is important in constructing the US relationship with Africa, and through the analysis offered by decolonial FSTS, evinces health interventions as exceeding disease management and increasingly functioning as governance, the most productive site for the operation of biopower

(Montgomery, 2012; Booth, 2010; Weir, Lorna, and Mykhalovskiy, 2010; Waldby, 2003; Foucault, 1977).

# CHAPTER 2

## Care Theory:
## A Decolonial Feminist STS Response to Joan Tronto's Democratic Theory of Care

*Democracy remains the system of oppression*
*under which we are currently living.*

Marianne Maeckelbergh, 2016.

Women's care work has been a major focus of feminist epistemology (Alcoff and Potter, 1998: 1). Women's ability to care has been naturalized through notions of motherhood entangled in private-property inflected capitalism which, together, have generated systems of production founded on the sexual division of labor (Beauvoir, 2011 [1949]; Butler, 1990; Mohanty, 2003). Over time, care-giving has become women's circularly argued destiny (Beauvoir, 2011 [1949]; Razavi, 2012; Waring, 2003), taking on performative power (Gilligan, 1982 [1993]; Hamington, 2004; Noddings, 1984; Ruddick, 1989). Women's experiences of repeated performances of care work, that is, their "habits of the body" (no matter how coerced) have rendered them as "bodies built for care" (Hamington, 2004: 31). Thus, care is one of the arenas which evinces how the sex/gender system materializes social arrangements which disadvantage women by linking their sex to cultural gender attributes. Care provides ideological grounding for biologically-based narratives of the 'natural' (Rubin, 1975). From the view of materialist feminism, this also means that, while contributing significantly to women's historically subordinate and deprivileged social position (Bakare-Yusuf, 2003; McFadden, 2000; Rubin, 1975), women's experiences of care place them in a privileged epistemological relationship with care (Delphy, 1984; Ferguson and Folbre, 2000; Hartsock, 1983; Hennessy, 1993; Mohanty, 1997). In this chapter, I focus on the experiences of ***women who have been epistemologically excluded from the well-established feminist canon on care theory*** in order to shift dominant paradigms of care.

## THE 'PROBLEM OF CARE'

Since working alongside care workers in South Africa's AIDS crisis, I have been thinking about care for over a decade. The problem of care, which remains a topic of concern in feminist scholarship, is the feminization of care, that is, the unequal distribution of care work (Tronto, 2013; Ungerson, 1987). Feminist theory has more than adequately argued that care work is not a feminist trait, but due to myriad factors, has a "female cast" (Menkel-Meadow, 1996: 298). This signifies the "problem of care" - the frequency with which care is tied to a 'woman's destiny' and naturalized as a 'feminine' quality (Sevenhuijsen, 1998; Waring, 2003; Razavi, 2012; Beauvoir, 2011 [1949]). From this position, it is easy to argue that care work does not need to be remunerated since carers are naturally predisposed to provide care, and as such receive non-monetary rewards because they enjoy providing care, or because "caring matters so much to them" (Tronto, 2013: 8). Put another way, if women's "propensity to care" exists by nature, it can thus be freely assigned *because* it derives from nature (Nussbaum, 2000: 253). ***Nature becomes tradition becomes norm:*** caring is "an innate endowment or tendency"; women have *always* been carers; it is right and proper that women are the carers and this is the way things should be (Nussbaum, 2000: 254). If care is 'natural' it is also natural not to attribute monetary (or other) values to work which women do 'anyway' (Nussbaum, 2000: 264-270, Budlender, 2002: 7).

Historically, those considered "naturally good" at caring have been described as "natural slaves" and "tools to help others" (in Aristotle, *Politics I* and *II*). Through processes of naturalization, care becomes a site of "durable inequality" (Tilly, 1998: 9) whereby social systems and practices constellate around care to reinforce the particular differences that render women "built for care" (Hamington, 2004: 31), simultaneously placing them beyond the possibility of change (Tronto, 2013). Furthermore, the "durable inequalities of care" as Tronto calls them (Tronto, 1993; 2013) vest in the naturalization of care as the charge of "slaves, servants and women … subordinated by race, conquest, class, or ethnicity" (Menkel-Meadow, 1996: 280). Joan Tronto argues that the problem of care should be located centrally within democratic life. As such, Tronto's democratic theory of care is a productive entry point for thinking about one of the largest crises of care in a nascent democracy.

## 'A PROBLEM FOR DEMOCRACY'

Joan Tronto's work at the intersection of care ethics, feminist theory, and political science makes her a valuable interlocutor for my own theorizations. Not only is her recent project one of the most comprehensive additions to the scholarship, but it provides specific sites of analyses befitting my case study: that is, care work during South Africa's transition to democracy, at a time where care needs were heightened by one of the world's worst HIV/AIDS epidemics.

In her most recent book, *Caring Democracies: Markets, Equality and Justice* (2013), Joan Tronto revisits her earlier question:

> the world would look very different if we put care at the center of our political lives. In the intervening years, no mass movement to improve care has arisen, despite repeated attempts on the part of scholars and activists to make such a thing happen (Tronto, 2013: ix).

Building on her predecessors, such as Annette Baier, Virginia Held, Carol Gilligan, Eva Feder Kittay and Sara Ruddick, Tronto develops a specifically political theory of care in order to address questions of social justice inhering in the 'problem of care.'

In her earlier book, *Moral Boundaries: A Political Argument for an Ethic of Care* (1993), Tronto called for a re-theorization of 'care' as one of the central activities of human life. In *Caring Democracies*, Tronto argues that this 'central activity of human life' is always shaped through the political context in which it is performed. Thus, her most recent intervention focuses specifically on the political context of democracy. She proceeds to theorize democracy and care *together*, stating that "what it means to be a citizen in a democracy is to care for citizens and to care for democracy itself" (2013: x). Therefore, "care needs a home in democratic political theory, and democratic political theory remains incomplete without a way to explain where and how care gets done in a democratic society" (Tronto, 2013: 37). Her overarching claim is that in a democracy, politics requires citizens' care, and citizens should expect from the state support for caring practices. Tronto writes:

> [i]n arguing that democratic politics are themselves increasingly about institutions and practices that entail caring, I make half the case for

> connecting care with democracy. But the other half of this argument is equally important: democracy itself, as a form of governing in which citizens participate, requires care. A democratic state in which citizens do not care about justice, about their role in controlling rulers, in the rule of law itself, will not long remain a democracy (2013: xiv).

A democratic theory of care takes care and democracy as entangled at a fundamental level. Tronto's overarching claim is that in a democracy, politics requires citizens' care, and citizens should expect from the state support for caring practices. Tronto is optimistic about "the political possibilities" of attending to care work, and, concomitantly, the possibility of theorizing care work more centrally as democratic theory, in order to achieve "more caring and more just societies" (2013: ix). Because Tronto frames  "political life is ultimately about the allocation of caring responsibilities", her proposition is that the problem of care can be tackled if all of those engaged in care are part of "ongoing political discourse" (2013: xiii) and democratic process for assigning care responsibilities.

Tronto's argument contributes to rethinking the "private/public" dualism inherent in analyses of care and the overly deterministic consequences of feminist economic theories.  She challenges the work of her predecessors, such as Carole Pateman and Susan Moller Okin, who insisted that thinking about "equality and justice" must extend to the home, the private realm, the labor that occurs there, and those who do it. Tronto suggests that these theorizations – though important and illuminating projects in the genealogy of feminist political theory – may obfuscate the more fundamental and basic questions about the nature and purposes of care (2013: 10). Arguments that call for political theory to be extended to the "private" or "domestic" realms reify the public/private artifice. Rather, care should be apprehended as a political concern in and of itself. Making care into a political concern, argues Tronto, will "improve not only the quality of care, but also the quality of democratic life" (2013: 10). Thus, she develops Eva Kittay's (1999, citing Rawls) principle of justice to insist that the comprehensive consideration of care constitutes a basic principle of democracy (2013: 11). As such, Tronto locates the crisis of care as exemplary of a crisis of democracy, or rather, "as two sides of the same coin, the crisis of care is also related to the crisis of democracy (2013: 11, 37). In doing so, she renders care as a crucial site of political theorization because democracy is failing at one of its central tasks: caring for its citizens (2013: x).

Tronto wants to emphasize politics of care to resist what she describes as the overly deterministic economic analyses of care (2013: 9-10). One of the reasons care work has been the primary province of economic analysis is the well-argued tension between addressing the capitalist artifice that renders the home as a site beyond or outside of politics, and calling for forms of reproductive labor to be elevated from domestic status to professional activity, which remuneration manifests (Beneria, 2007; Duffy, 2011; Federici, 1975; Folbre, 2002; Fraser, 1989; Hochschild, 1983; Kittay, 1999). In this paradigm, addressing the problem of care means elevating its status by allocating economic value, supposedly to bring this usually "invisible," "domestic" or "private" labor (Tronto: 2013: 8; Waring, 2003) into the public sphere of value ascription, that is, the productive economy. As Marilyn Waring famously noted, if one is "invisible" as a worker, one is invisible in the allocation of economic benefits and protections (2003: 35-37).

While Tronto does not dispute these claims, she cautions against “misunderstanding politics as if it were part of the world of economics” (Tronto, 2013: xi). While materialist feminism interprets ‘the economic’ broadly, Tronto resists the overly-deterministic reduction of the *res publica* to a logic of economics because, she argues, this obfuscates the need for a “democratic thinking of care” (2013: 7). An argument which focuses solely on remuneration fails to locate the problem more squarely as a political one. It also reifies the private/public dichotomy of social reproduction, as if social reproduction was somehow originally distinct. Although this is not the intention of feminist calls for remuneration, Tronto suggests that this approach amounts to entrenching the notion that value resides only in the economic; that is, this approach narrows the understanding of ‘citizen’ to ‘worker’ and perpetuates the idea that all private, non-productive, or non-economic life is not *a priori* political. Counter-intuitively, feminist economics thus runs the risk of naturalizing the separation between *polis* (public, the state) and *oikos* (household). In addition, while feminist economists have been concerned about the privatization of care, or the re-figurations of care under neoliberalism, “using the metaphors and language of the market leaves an account of care incomplete” (Tronto, 2013: 7). For Tronto, as economic concerns are increasingly foregrounded by the state, we have seen the simultaneous creation of both a care deficit and a democracy deficit; what falls out of democratic thinking when political life is reduced to a grammar of economics *is care*. She asks how we might differently understand democracy and care in order to create more caring and more just societies, because

> despite the voluminous discussions about the nature of democratic theory, politics, and life, nothing will get better until societies figure

> out how to put responsibilities for caring at the center of their democratic political agendas (Tronto, 2013: ix).

Tronto also argues that feminist economic theories of care perpetuate and reify the very structures they attempt to dismantle. For example, feminist economists maintain the public/private and production/reproduction binaries whereby the problem of care becomes entrenched within the gender normative household in which women have primary responsibility for domestic work. Thus, argues Tronto, feminist economic theorizations frame care work "in the most heteronormative of terms" (2013: 93), which, in turn, reproduces essentialist framings which obscure "the discursive construction of caring labor and its differential valuations based on race, class, nationality, and other markers" (Bergeron, 2009: 56; Tronto, 2013). By locating care work in democratic theory, as integral to our subject formations as "citizen" – all citizens – Tronto moves us beyond feminist economic models which restrict care to "the private realm of the heteronormative household" (Bergeron, 2009: 61-62) and may in effect be at odds with our feminist intentions (Tronto, 2013: 24). Rather than focusing on carer as *worker*, Tronto wants to start the inquiry from carer as *citizen*; the citizen fully realized requires and undertakes all manner of caring activities; *oikos* and *polis* are co-constitutive (Tronto, 2013: 1-2).

Tronto's democratic theory of care posits that part of ensuring justice and equity for all citizens requires that a democratic society locates care as an *ipso facto* political concern (2013: 10; 27). The political cachet of this approach is that if we attend to the problem of care, we are also improving the quality of democratic life. In sum, her nuanced critique insists that understanding care requires a democratic theory that extends our economic analyses rather than being reduced to synonymy. For Tronto, equalizing the gendered distribution of care labor, or securing fair remuneration is not possible, or may even miss the point, without a thoroughgoing democratic theory of care.

The most convincing reason why economic theorizations of care need democratic theory is because providing for economic production has also become central to democratic life. This produces inequality in societies simultaneously charged with recognizing everyone as equal participants (Tronto, 2013: xi-xii). As such, every form of capitalist society harbors a deep-seated "care crisis" or, as Nancy Fraser describes it, a "contradiction of capital and care" (Tronto, 2013; Fraser, 2016). And so, if the crisis of democracy and the crisis of care are two sides of the same coin, then neoliberalism has minted the coin of the realm (Tronto, 2013: 37). Due to the depth of the problems for care created by the contemporary global economy, Tronto urges us to ***"think care and democracy together"*** in ways that "transcend individual nations" (Tronto, 2013: xv; 45). That is exactly what I attempt to do in the next section.

## A PROBLEM OF DEMOCRACY

Joan Tronto's democratic theory of care presupposes democratic aspirations unimaginable in the current South African political economy. Just as an economic analysis leaves the performative aspects of such care interventions un-interrogated, as Tronto argues, I argue that ***a democratic theory of care leaves the meaning of democracy in the post-colonial context un-interrogated.***

Like Tronto, I am interested in trying to understand the relative inattention paid to the philosophical importance and political necessity of care, given its importance in our lives (2013: 24). Tronto wishes to elevate care to a *human* necessity, responsibility, and inevitability (2013: xv; 29; 141), a project which I value. I also agree that the world of politics and economics are not synonymous. However, analyzing the phenomenon of care work in a postcolonial political economy such as South Africa requires holding the mutually constitutive, messy, complex, and dynamic entanglements of political economy, neoliberalism, democracy, governance, public health policy, and health sciences simultaneously. It requires a more capacious assessment which resists an erroneous dichotomization of epistemologies. In her book *Life as Surplus: Biotechnology and Capitalism in the Neoliberal Era,* Melinda Cooper (2008) conducts just such a mode of analysis by traversing the fields of science and technology studies and political economy, drawing on insights from feminist theory, bioethics, and decolonial feminism (2008: 10; 136).

If Tronto wants a democratic theory of care to avoid the overuse of neoliberal market logics in understanding public life, Cooper demonstrates that public life, or life itself, is increasingly economized (2008: 1; 136). How this occurs in the case of care work is linked to the economization of the life sciences, operationalized through global health policy, mostly in service of (but not solely so) “America's strategies of economic and imperialist self-reinvention” since the 1980s (2008: 1). This “neoliberal revolution” (2008: 1) not only transformed the political, social, and economic spheres, but constituted their “ever tighter alliance” (2008: 1). Cooper suggests that the “project of U.S. neoliberalism…is crucially concerned with the emergent possibilities of the life sciences, public health and biomedicine” (2008: 1) as new foundations for economic growth, productivity, value, and speculative futures.

Cooper suggests that, “as the realms of biological (re)production and capital accumulation move closer together, it is becoming difficult to think about the life sciences without invoking the traditional concepts of political economy” (2008: 1). As such, “the expansion of commercial processes into the sphere of *life itself* requires us to reframe how we understand the political economy *in dialogue* with the life sciences" (2008: 1). In this way, Cooper's contributes to the project of thinking "care and democracy together" (Tronto, 2013: xv), but differently, through a transitional, biopolitical, and decolonial lens.

Cooper's argument takes inspiration from Michel Foucault's genealogy (1973) of the parallel development and mutual constitution of the modern life sciences and classical political economy in the late 18th and early 19th century. She argues that capital and value production is no longer the sole province of labor; labor and biological life work in tandem to produce capital and value, which has contributed to the reconfiguration of productive and reproductive life (Cooper, 2008: 9-10). This 'bio-economy' has transformed the global political economy towards US-centric neoliberalism, and Cooper explicitly traces this influence on South Africa's democratic transition (Cooper, 2008; Tyfield; 2009). She demonstrates how the need for financial regenerativity finds a foothold in the self-regenerative nature of biological life, which has seen the life sciences increasingly opened up to the logics of commodification, financialization, and speculative profit (Cooper, 2008: 30, 144; Tyfield, 2009: 498). Biological life, rather than labor power, becomes the source of surplus value in the neoliberal milieu (Vatter, 2009; Cooper, 2008) which seeks to emulate and capitalize on the self-regenerative qualities of biological life. If there are more workers than there are jobs, it suggests that a global neoliberal economy does not need workers, it needs new sources of capital (Tronto, 2013).

Key in understanding the mode of care work I am interested in, is understanding that the neoliberal economy has been transformed by speculative profit and value. If value was a function of trade, exchange, and circulation, value is now a function of relocating the source of profit in time and in "the human being who spends, wears out and wastes her life" (Cooper, 2008: 6). Rather than production, wealth, profit and economic growth now vest in the "creative forces of human biological life" from life's "organic structure" to the level of "population" (Cooper, 2008: 5).

Put another way, profit no longer lies in the productive toil of the living, it resides in life itself, irrespective of lives lived, inert lives, or lives lived to the point of death (the latter is a reference to the necropolitical valence of biopolitics as delineated by Achille Mbembé discussed in Chapter 3) (Cooper, 2008: 6-7). The political economy is better understood, then, as "an economy of life" (Cooper, 2008: 8). Social reproduction is one mode of operationalizing and reworking the "value of life" (2008: 9) required for the survival of the neoliberal state. Cooper's analysis makes clear "the value of life" resides not only in the putatively whole and living human being, but in its degradation, human surplus, catastrophism, redundancy, debility and "the imperative of violence" (Cooper, 2008: 10-12). I argue that care work, as social reproduction, is implicated in this bio-political economy (Cooper, 2008: 8-10). My case study evinces that care is an "economy of life" which reconfigures entire populations - *as worn out, wasted, debilitated, and redundant lives* - as sources of value. The next section develops this argument by tracing these influences in the co-constitution of South Africa's transition to democracy with the AIDS epidemic.

## Neoliberal Political Economy & South Africa's Democratic Transition

After the economic and political isolation of the apartheid era, South Africa had to re-enter the global political economy. Part of being a viable democracy meant syncing up with extensive economic liberalization policies imposed by the World Bank, the International Monetary Fund (IMF), the World Trade Organization (WTO) and the US Treasury. Such policies stipulate privatization, fiscal austerity, deregulation, free trade, and reductions in government spending (Decoteau, 2008; Peet, 2002). As a country with strategic economic and political significance to the region and myriad global scene, these policies, often framed as aid or loans, were key mechanisms in the United State's neo-imperial project (Cooper, 2008) and succeeded in reorienting South Africa's principles of socialist democracy (cultivated during the political struggle against apartheid) toward neoliberal ideals (Peet, 2002).

Cooper explains how, from Reaganomics onwards, the US "transformed itself into the focal point of an effective debt imperialism" (2008: 30). She describes how the U.S. was able to "reconfigure its imperial power on the basis of a perpetually renewed debt [which] at the same time brought impossible debt burdens to many countries of the developing world" (2008: 53). Debt comes to seem inevitable and necessary for any emerging democracy (Soyinka-Airewele, 2015; Decoteau, 2008; Nwauwa, 2003). Africa's mounting debt, and subsequent continued economic crises, maintains wealth *through* debt for the US and the Western "debt cartel" (Bond, 2003: 275). Furthermore, failed African democracies are in large part constituted as such *through* policies "pressed on them by Western governments and lenders" (Ferguson, 2006: 84). Cooper goes on to explain how the dynamics of debt imperialism, imposed by the U.S., is a necropolitical re-configuration of the relationship between debt and life: debt in Africa, life in the US (2008: 10-12).

Under these circumstances, African and postcolonial scholars argue that "there is no democracy in the developed world" or, at the very least, "democracy means something else" (Ferguson, 2006: 171; see also Soyinka-Airewele, 2015; Nwauwa, 2003; Peet, 2002). Development scholar James Ferguson describes the situation thus:

> What friends of democracy need to bear in mind in all of this is that however democratic an African government may be in formal terms, its scope for making policy is radically constrained by the nondemocratic international financial institutions themselves. No matter what party is elected [in an African state] it will have to come to terms with the IMF, and the voice of the … electorate will have precious little say over those terms. Effective IMF rule over huge areas of economic and social policy is thus papered over with an appearance of popular sovereignty. The current ideological frothing over "democracy in Africa" in this way ends up serving a profoundly antidemocratic end – that is, the simulation of popular legitimation for policies that in fact are made in the most undemocratic way imaginable (Ferguson, 2006: 84).

Looking at structural adjustment policies alone, we see how a developing state is "radically constrained" by non-democratic international entities (Ferguson, 2006: 84). This delimits local sovereignty as the electorate has little recourse to shifting externally and diffusely imposed policy (Ferguson, 2006). Post-colonial debt is constitutive of emergent democracies, a mechanism which imposes "a new wave of imperialism" on developing countries by their industrialized counterparts, to the benefit of the latter (Soyinka-Airewele, 2015: n.p.). Neoliberal economic forces undermine the sovereignty of African governments and in doing so, "make democracy irrelevant" (Nwauwa, 2003). Thus, there exists the paradox of Africa's integration into the world economy as part of the democratization process that simultaneously subordinates

African states' sovereignty to those of the West (Maeckelberg, 2016: 192; Nwauwa, 2003). How might a democratic theory of care be relevant in a context where a democratic state's sovereignty is constrained by diffuse modes of governance in service of Western imperial interests? In other words, is a democratic theory of care helpful in the era of biopolitical governance?

There is no arguing with Tronto's claim that, "from the standpoint of an ethic of care, neoliberalism is a disastrous worldview" (Tronto, 2013: 38), yet, as the above discussion shows, emerging democracies are inextricably co-constituted through neoliberal logics (Cooper, 2008). This requires an interrogation into what neoliberalism *does* to democratic processes and subsequently, the problem of care.

In South Africa, HIV/AIDS exacerbated the need for care arising simultaneously from neoliberal processes (Popke, 2006: 504). Development scholars Shahri Razavi and Shereen Hassim (2006) argue that state withdrawal at the time of increased social need during the AIDS crisis shows the limits of the neoliberal paradigm: it assumes unlimited coping capacities among families and communities as the responsibility of care is pushed "downward and outward onto un-resourced communities" (Lund and Budlender, 2009: 24) – an assumption which in turn re-entrenches gender inequalities. Diminished social expenditure produces an ever-expanding care gap which women subsidize with their own time, energy, and resources (Ogden et al, 2006: 334; Harcourt, 2009: 73).

While the logic of neoliberalism demands economic efficiency by limiting government expenditure on health, public services, and so on, "giving and receiving adequate care is necessarily labor-intensive, requiring at least some increased public expenditure" (Robinson, 2014: 713; Razavi, 2007). Thus care is in tension with this contemporary economic order (Tronto, 2013: 38). In addition, the neoliberal rhetoric of personal responsibility, hyper-individualism, self-sufficiency, and personal responsibility is promoted while state expenditure on social provisions decreases. And so, communities are left to fend for themselves.

Paying attention to what neoliberalism does to the democratic process I expand Tronto's approach of thinking care and democracy together. This analysis brings to the fore the relational nature of democracy and the modes of imperialist governance instilled through the *notion* of democracy in a non-Western state such as South Africa (Booth, 2012). Thus, while Tronto argues that a revolution of care is necessary to sustain democracy, the South African example suggests that democracy, as it is instantiated and experienced in non-Western settings, might be part of the problem. From a non-Western perspective, and specifically from my perspective of working with care workers in South Africa, ***I see care not as a problem for democracy, but rather, a problem of democracy.*** A closer look at the emergence of HIV/AIDS and care work during South Africa's democratic transition makes this case.

## AIDS & South Africa's Democratic Transition

At first, the post liberation ruling party, the African National Congress, espoused a "development discourse traditionally founded on principles of socialist democracy cultivated during the epic political struggle against apartheid" (Peet, 2002: 55). This was, however,"drastically reoriented" from growth through redistribution to redistribution through growth. This was the process of neoliberal democratization, argues Richard Peet, an economist and human geographer, and a process of “neo-colonization through external discursive, political, material and financial pressures emerging from the West” (Peet, 2002: 55).

> Global capital’s interests in this country with strategic economic and political significance were directly represented by the IMF [International Monetary Fund], which made several loans to South Africa under well-defined stabilization conditionalities, and the World Bank, which used antipoverty and job-creation programs to leverage structural adjustment. By the middle 1980s, both institutions had fastened onto a standard set of neoliberal means of achieving rapid economic growth in countries like South Africa ... This discourse proposed joining the global capitalist system through trading connections freed of restrictions, with a domestic environment made internationally competitive through de-regulation, privatization, wage restraint, and prudence in government spending. As the end of apartheid drew near, the ANC came under heavy diplomatic and institutional pressure to adopt policies in accordance with these positions. More significantly, neoliberalism became the picture of economic progress that flooded the speculative imaginary on stock exchanges and currency markets, locally and around the world. Even the whisper that deviation might taint this idealized vision brought instant retribution – most obviously in the form of runs on the Rand [the South African currency] – from the bears of the world’s financial markets (Peet, 2002: 79).

In the 2000s, deviations from these expectations sparked immediate concerns about ‘another African state on the precipice of failure’ which was, of course, quickly disciplined by Western markets’ run on the country’s currency, the Rand.

With specific reference to South Africa’s AIDS epidemic, Melinda Cooper’s biopolitical analysis demonstrates how “the macropolitics of debt servitude” (2008: 53). reconfigured the “everyday micropolitics of bodies, creating new geographies of labor, sex, and contagion, and reworking the very epidemiology of disease” (2008: 53). This had devastating effects on the life chances of whole populations (Cooper, 2008: 54). Locating this in the postcolonial context, Achille Mbembé’s necropolitical analysis describes this as the ability of the U.S. “to define who matters and who does not, who is disposable and who is not” (Mbembé, 2003: 27). This produced, in the words of Cooper, “redundant populations” (2008: 54) which are not only “unnecessary for economic growth, but a drain on the state’s economic resources”(Decoteau, 2008: 15).

In addition to loan regimes, South Africa also had to subscribe to global economic and trade policies, such as the TRIPS agreement (Trade-Related Aspects of Intellectual Property Rights). For example, the Mandela administration attempted to secure access to affordable drugs to mitigate the burgeoning AIDS crisis. This conflicted with the TRIPS agreement, which protected Western pharmaceutical interests. South Africa had to subscribe to copyright laws with respect to HIV/AIDS drugs, prohibiting Mandela from declaring a state of emergency which would have facilitated the import of affordable, generic AIDS drugs. Should he have done so, the US, through the World Trade Organization, threatened to sue the Mandela administration. The new neoliberal economy could not bear the cost of AIDS drugs, and it was prohibited from importing generic drugs. This meant that treatment was unavailable during the early years of the democratic transition. Cooper describes this crisis in detail:

> In 1998, the Mandela regime attempted to over-ride the World Trade Organization (WTO) rules on the importing of low-cost generic AIDS drugs. Despite being the country with the largest absolute number of people infected with HIV/AIDS in the world, the U.S. prevented South Africa from designating the AIDS epidemic as a state of emergency, which would have allowed the country to access affordable antiretroviral drugs through parallel importing and other mechanisms (Cooper, 2008: 52-55). Yet, as explains Cooper, "it was with the full support of the United States and several European governments that in 1998 forty-one pharmaceutical companies brought the South African government to trial, naming Nelson Mandela as defendant. In bringing the case, the drug companies were taking issue with the South African Medicines Act of 1997, which granted the health minister discretion to access affordable medicines through parallel-importing or compulsory licensing. The Act, it was claimed, was a transgression of the WTO accords on patent law. Not only did it deprive the pharmaceutical market of an emerging potential market; it threatened, through example, to spread the virus of patent violation to all the promising new markets of the developing world. Most alarmingly, perhaps, the South African government's intervention on behalf of public health threatened to call into question the exorbitant prices imposed by the pharmaceutical industry in its most lucrative of markets—the United States. Acting on behalf of its most profitable industry, the U.S. government threw its full weight behind the court case, warning of trade sanctions if the Act was not repealed (Cooper, 2008: 52-53).

Twinned with the US and WTO's prohibition on South Africa to acquire the necessary drugs to stem the epidemic, and given the imperative to reduce social spending, those affected by

HIV/AIDS, rendered already vulnerable by colonial and apartheid legacies, became “too heavy a burden for the newly trimmed neoliberal state to bear” (Decoteau, 2013: 15). This, in part, explains why the Mbeki administration adopted a policy of “AIDS denialism.” While it allowed the govenrment to actively avoid financial responsibility for the epidemic, it also fostered a concerted campaign misinformation. Antiretroviral medication (ARVs) was likened to poison manufactured by the West to kill Africans, causing many to abandon the few treatment regimens which were available. This exacerbated the care needs exponentially (Lund and Budlender, 2009: 26).

A closer analysis of Mbeki’s denialist strategy, however, reveals a complex picture. Mbeki, who holds economics degrees from the University of Sussex, England, crafted a strategy that allowed the South African government to publicly challenge and destabilize “the global hegemony of biomedical science and avoid financing the public provision of antiretroviral medication” (Decoteau, 2008: 52), while toeing the neoliberal line vis-à-vis the country’s fiscal policies (Decoteau, 2008: 166). Mbeki’s critique of biomedical science shows his ideological investment in the promotion of an anti-imperialist and Africanist agenda, using the failed attempt by Mandela to secure generic drug imports as an example of the West’s calculated profiteering off the world’s poorest countries with the highest need. However, to bolster this campaign the denialist rhetoric began to questioned the very science of HIV/AID and posited ARVs as eugenics. Denouncing antiretrovirals as toxic and endorsing dissident theories – including notions that HIV is a myth and that increased morbidity and mortality in Africa attributed to AIDS were actually the logical outcome of poverty, malnutrition and poor socio-economic conditions (Nattrass, 2004; Van der Vliet, 2004) – AIDS could be redefined as a syndrome rather than a disease (Jones, 2005). If people die not of AIDS but of poverty, AIDS becomes an untreatable syndrome (Nattrass, 2004). If there is no virus, there is no need for antiretrovirals (Weinel, 2005) and thus the government could avoid fiscal responsibility for treating AIDS (Nattrass, 2004). On the one hand, Mbeki could, through HIV/AIDS, posit the postcolonial state as standing against Western neoliberal hegemony and neocolonialism operating via biomedical interventions, while buttressing the country's economic viability (by limiting expenditure on health) through the very hegemony he publicly vilified. Mbeki's support for volunteerism through his 2002 "Year of the Volunteer" campaign was another example "of the way in which the South African post-apartheid state eagerly deployed not only neoliberal economic restructuring, but the ideologies that buttress and sustain it" (Decateou, 2008: 220).

These were also face-saving strategies, as some theorists remind us that Mbeki was destined to be a very different president (Decateou, 2008; 2013; Peet, 2002). Mbeki spent 40 years in exile, where he was groomed as "heir apparent" of the South African Communist Party and seemed to be betraying the promise of a socialist democracy envisioned during the anti-apartheid struggle. Decoteau's analysis of Mbeki's impact on the care crisis is worth noting in full:

> These ideologies are absolutely essential for the continued legitimacy of a regime which gained power by espousing social democratic ideals and whose economic policies make addressing rampant racial and economic inequality impossible. In its discourse, the state has begun to use terms like "self-reliance" and "individual responsibility" in order to abdicate its responsibilities towards the poor, and privatize and commodify life itself. Because the HIV/AIDS pandemic poses perhaps

> the most striking threat to the legitimacy of the post-apartheid state, health care is one of the primary sites for the deployment of neoliberal ideology. Recently, the Department of Health has launched a new media campaign asking citizens to 'take responsibility for their own health care' in an effort to outsource its responsibility for the provision of resources to civil society. The state's home-based care strategy, which provides extremely minimal resources to women who essentially 'volunteer' to provide basic palliative care to victims of the HIV pandemic, is a perfect example of the neoliberal approach to health care. The government sees this as an "investment in social cohesion". Through home-based care, the government insists, "disease may become normalized within society, expensive institutionalized care is avoided, and social networks are maintained and even strengthened" (Decateou, 2008: 220-221).

By 2003 – not quite a decade after South Africa's first democratic elections, and half-way through Mbeki's reign, an estimated 1,000 people were dying of AIDS every day (Smetherham, 2003). AIDS was the leading cause of death in South Africa and the country had the fastest rate of new HIV infections in the world with prevalence rising from 0.7% in 1990 to 29.5% in 2005 (Quinn, 2005; Van der Vliet, 2004; Ijumba et al., 2004). Voluntary care became the only buffer between the hundreds of thousands of South Africans and the epidemic. In what follows I outline a trajectory of care in South Africa.

## A "fuzzy domain": HIV/AIDS Care Work in South Africa

The first official cases of AIDS in South African were diagnosed in 1982 (Weinel, 2005: 6) but the volatile complexity of apartheid politics and democratic transition effectively marginalized the issue, leaving the disease virtually unchecked for a decade (Grundlingh, 2001; Van der Vliet, 2004). Sociologist Claire Decoteau (2008; 2013) describes the contradictory demands of postcolonial nation-building, satisfying the requirements of neoliberal global capital, and meeting the needs of its most impoverished population thus:

> In the 1990s, [South Africa] was faced with a legacy of immense inequality, international pressure to abandon social democratic ideals in exchange for market competitiveness, and a disease that would become an epidemic of unparalleled proportions. This particular juncture of events – the transition from apartheid to democracy, the adoption of neoliberalism, and the AIDS epidemic – propelled the new developmental state immediately into a "state of emergency" at its very moment of inception (Decoteau, 2008: 136).

While former president Nelson Mandela was criticized for not doing enough in the early years of South Africa's transition. But more vehement criticism was directed at South Africa's second democratic president, Thabo Mbeki. His much-maligned vision of an "African Renaissance" gave rise to an era of "AIDS denialism" which resulted in half a million deaths a year (Chigwedere et al, 2008). AIDS became the leading cause of death in South Africa, and by 2003, not quite a decade after South Africa's first democratic elections, an estimated 1,500 people were dying of AIDS every day (Smetherham, 2003). Voluntary care work became the only buffer between the hundreds of thousands of South Africans affected by HIV/AIDS and the State's anti-AIDS stance.

The notion of care work denotes, especially in the Western context, a person employed to look after the interests of vulnerable, infirm, or disadvantaged people or those under the care of the state. Interestingly, as a term, ‘care worker’ was only added to the Oxford English Dictionary in 2001, as was caregiving - a noun referencing “attention to the needs of others, especially those unable to look after themselves adequately,” someone “professionally involved in the provision of health or social care,” and a person who attends “to the needs of a child, elderly person, invalid, and so on.” The OED references a slightly different definition in use in the United States,: the more familiar term caregiver, is defined as “a person, typically either a professional or close relative, who looks after a disabled or elderly person, invalid, and so on” or “a parent, foster-parent, or social services professional, who provides care for an infant or child.” Care work covers the life-span, from birth to palliative care.[9] More recently, care theorists, such as Joan Tronto, have defined care work as a form of social reproduction which

> includes everything that we do to maintain, continue, and repair our ‘world’ so that we can live in it as well as possible. That world includes our bodies, our selves, and our environment, all of which we seek to interweave in a complex, life-sustaining web (2013: 19).

As these definitions suggest, this activity is usually rendered by paid professionals, household members or extended kin. In the South African context of community-based HIV/AIDS care work, it is something quite different. The type of care work under consideration here is performed by a community member not connected in any familial way to the care receiver. She provides care to people with HIV/AIDS, most often those rendered immobile or confined to their home. This is due to the widespread practice of turning people with end stage or near-end stage AIDS away from over-burdened health facilities, “delegating responsibility for death and dying”

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[9] Research on care work, rather than palliative care specifically, approximates more closely the nature and theorizations of care work under consideration in this project.

to those least able to manage this difficult and stressful process (Schneider and Lehmann, 2010: 63).

The community care worker under analysis here is “clearly distinguishable from the household caregiver, the resident family member who cares for a sick person in that household” (Lund and Budlender, 2009: 5); she provides care to people with HIV or AIDS in the patient’s own home (Schneider and Lehmann, 2010). The voluntary carer is not a formally trained aide, assistant or paraprofessional (WHO, 2007: 2). What had started out as door-to-door campaigns by activists in South Africa’s poorest and most marginalized communities to raise consciousness about HIV/AIDS treatment and mobilize people to demand said treatment from their nascent democracy, now resembled a search and rescue mission. This was exacerbated during the decade of AIDS denialism, when an over-burdened and under-resourced health system with no treatment to offer simply sent people home to die. Carers walk from shack to shack to provide care. The carers in my study walked anything from 30 minutes to an hour between each visit. This does not include the time it takes to collect water from a central, communal water source in the under-developed shanty town. Or the time to collect water, hand-wash soiled clothes and sheets, or locate fuel sources to boil water to bathe and cook food for their patients. It also does not include the time it might take a care worker to walk to a clinic and stand in line to get their patient’s medication. She does “whatever is necessary”  even “just being there because they are alone” (Lund and Budlender, 2009; Lehmann and Schneider, 2010; Interview with Nothemba, research notes, 2012). The experiences of Lumka demonstrate some of the aspects noted here.

I first experienced this with my own husband. He was sick for 3 years and I took care of him. Until he died. And he died in my arms. Then I saw other people doing this work, and I thought, let me also do it, because I've been in this situation. Let me go out and help other people. I know how. I am also HIV positive. So you must put yourself in that person's shoes, because that could be me one day. So its like that. Many people are alone, they have no relatives here. Or they have been abandoned. There is so much stigma. So I feel the pain of that person.

I had a small job before, making those beaded badges with the HIV ribbon.  For an NGO. They would sell those beads overseas. But that was very little money. And the person left, and left us with no job. So there is no work for me anyway, and I know how important this work is...You know, I found out I was positive when I was pregnant with my son. I had no information then. I didn't know how to make a man use a condom. Because of HIV, my child was born with lungs that were not formed right. And his bladder. He didn't have one. We went on a transplant list. For 2 years I visited him at the hospital. They found him lungs, and then a bladder. He had so many operations. He is 9 now. The bladder has lasted, but it doesn't always work. He has to wear a nappy [diaper] to school. And every winter, his lungs get infected. So that's a challenge. I tried to get a disability grant for him. We are entitled to that. But the doctor told me the government has spent enough money on my child. He has lungs and a bladder. So, do you want money, or do you want his life? That's what the doctor at the children's hospital said when I asked him to sign my disability application.

> But my son needs operations every year, because that bladder gets blocked. Every year. And I can't always afford to get him to that hospital. And if I can get him there, I can't visit him, or buy him food. They don't get fed there you know. So that's why I need the disability grant. But no doctor will sign it for me.
>
> That's why I just take life as it comes now. I feel that if I can talk about my life, others can learn from it. And sharing, like with you today, makes me feel better too. I talk to other care workers and we share our stories. Maybe someone was in my shoes before, and they can try and help me with what I'm dealing with. Or, you hear about people with more difficulties than you. Then you know you can carry on (Lumka, 2009; Research notes, 2012).

In South Africa, care workers have come to constitute a "heterogeneous cluster of care providers that is variously referred to as the 'community,' 'voluntary,' 'non-market' or 'non-profit' sector (Razavi, 2007: 20-21), operating at the periphery of the formal health and social welfare systems (Schneider and Lehmann, 2010; Lund and Budlender, 2009; Razavi, 2007). In some cases, the state has outsourced AIDS care to community-based structures, providing funding for a minimal stipend for care workers, but most receive no compensation. These processes have little consistency, may lose budgetary provision without notice, and have been plagued by corruption and mismanagement (Lund and Budlender, 2009; research notes, 2012).

Furthermore, in caring for their community, care workers do not enjoy the cumulative benefits which may accrue from social reproduction in one's own home. Carers are from the same communities as those they care for – impoverished informal and peri-urban areas – and thus experience the same socio-economic challenges of the post-apartheid state as their patients. My interview with Ntombi evinces this reality.

> I've been doing this for more than 10 years. I had an older sister. Her name was Tantaswa. She had HIV. But she never told us. She said it was TB. But by the time she told us she was already lying in bed, couldn't move. And then, since I was the eldest child at home, I had to do the cooking for her when I got home from school. Every time I looked at her, she was becoming weaker and weaker. She never said anything about HIV. Because of stigma, she was keeping that inside. That is when I involved myself in the organization, to get training. HIV was a new thing to me. So I involved myself. I learned about HIV. And I wanted to do something about it.
>
> At first, I volunteered without a stipend. But then the organization got a grant from the government. So I had a stipend for little while. But, it was a family run organization. And the Director stopped paying me. He said there was no more money. No explanation. Then he told me about a pilot project being run by the Department of Social Development. I could coordinate that project. So I said of course. But after a few months, he said the money was finished for that project too. So I was still doing the care work, and running a pilot project on poverty alleviation, for no money. I found someone at another organization who was also funded by the Department of Social Development and asked her advice. She was shocked. She said of course I should be paid and I should receive back pay. She arranged for someone to come and talk to my Director. He was not happy about that. He said I was doing 2 jobs at the same time, so I didn't need to get another stipend. One stipend was enough. He said I was cheating

by asking for two stipends. I said: but I'm doing the work! He said no. I got so angry. Especially because I was not getting any money at all. Not even one stipend. I showed the government official my signed contracts for both jobs, and they told the Director he had to pay me. But when the government person left, there was no pay. The Director just ignored them. I knew then he was keeping the money for himself. There was nothing I could do.

During that time, 2008, when my stipend was raised, I was so happy. I started with R1000 per month, and then R2000 per month with the second job. When I started getting R2000, I started to buy myself a bed. My first bed. I was putting the money down every month, layaway. I have this thin sponge at home that I sleep on. We all sleep on it. Myself, my twin brother, my sister's 2 children - from the sister who passed away, and 3 of my brother's children. So when I started earning R2000, I thought I could finally afford a real bed. So I started making installments. After 5 installments, the money just stopped. My contracts were for 2 years. I was supposed to get R2000 a month for 2 years. So I lost all that money I put on the bed. No bed. No food. No nothing. It was really bad.

I got even angrier when I learned that the men in that organization got paid more than us women. And, they were getting paid when my stipend stopped. When I asked the Director about it, he said of course men get paid more. He said it is difficult for men to do this work, and men are so scarce in this work. He told me that women are strong, and they can bear the pain of doing this. Men can't bear the pain of doing this work. They can't handle it. So they must be compensated more for doing it (Interview with Ntombi, 2010; research notes 2012).

It was the 1978 Alma Ata Declaration on Primary Health Care spurred the promotion of "community health workers" in developing countries as a way of increasing access to health care (Schneider and Lehmann, 2010: 61). During apartheid, non-profit organizations and missionary-run hospitals proliferated in under-served areas, although these were ill-equipped to deal with the high burden of poverty-related diseases (Coovadia et al., 2009: 826). In response, community members took on the care of their family and neighbors, and the care worker operating outside the formal health sector emerged. While community health worker programs quickly fell out of favor due to unrealistic expectations and lack of adequate planning, management, and reliable funding (Schneider and Lehmann, 2010: 61), civil society revived the notion of community care in the form of "home-based care" projects to address the immediate crisis of providing palliative care to the mushrooming populations AIDS affected people – including children orphaned by the epidemic (Schneider and Lehmann, 2010: 62). At first, lay carers were recruited to response to the TB crisis (such as the community TB DOTS supporters - Directly Observed Treatment Short-Course), but these positions evolved into AIDS Training, Information and Counseling Centers (ATTICs) as peer educators. This was an initial response to the emerging epidemic, and foundational for a new generation of lay health workers in South Africa (Lehmann and Schneider, 2010).

At the time of democratic transition, South Africa's Human Sciences Research Council identified a "human resource crisis" within the country's health system, characterized by drastic funding cuts in health care, high rates of emigration of professional health workers due to political turmoil and uncertainty, the challenge of integrating the highly dysfunctional, fragmented apartheid health system, and the exploding HIV epidemic. To address this crisis, the

World Health Organization (WHO) proposed the mechanisms of “task-shifting,” (I analyze this phenomenon in detail in Chapter 3), a “process of delegation whereby tasks are moved, where appropriate, to less specialized health workers” (WHO, 2008). This meant shifting care from primary health care workers to community care workers. Promoted as “a coping mechanism” for human resource shortages, task-shifting is intended as a stop-measure for over-stretched public health systems globally (Zachariah et al, 2009: 550). It was also touted as a “quick win for achieving the Millennium Development Goals” in developing countries (Schneider et al., 2008: 180). In South Africa, task-shifting was promoted by a multitude of interventions funded by WHO, the US President Emergency Plan for AIDS Relief (PEPFAR) and the Joint United Nations Program on AIDS (UNAIDS) with specific reference to the scale-up of HIV/AIDS treatment and care.

As community care workers proliferated in South Africa, however, lack of political commitment, poor planning, unrealistic expectations, little or no supervision, inadequate training and conflict within the health professions as to who was responsible for the epidemic (for example, services were split between social workers and health workers) did not translate into the WHO vision of quality, cost-effective support for an over-burdened health system (Schneider *at al.*, 2008: 180). Local researchers have described the reality thus:

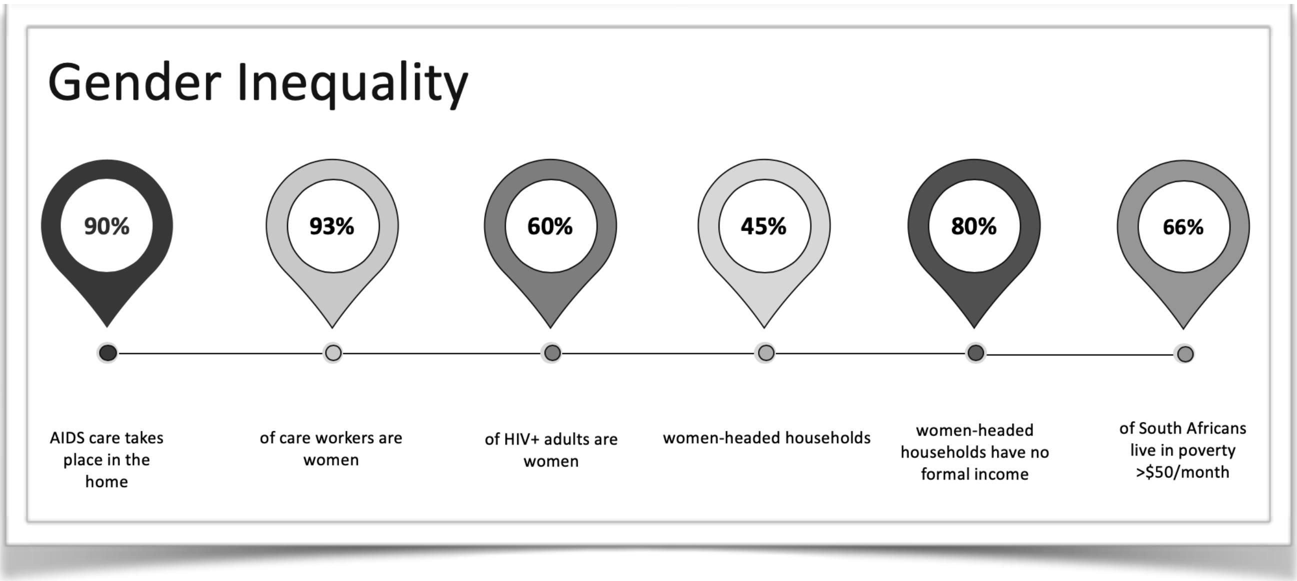
> couched in a language of a seamless ‘continuum of care’ between health system, community and home, and drawing on ‘communitarian’ ideas of reciprocity and caring in ‘African culture’, its [community care work’s] more “profane” or real role was to legitimate the widespread practice of turning people with end stage AIDS away from over-burdened health facilities’ (Schneider and Lehmann, 2010: 63).

In reality, task-shifting to home and community-based care signaled “a limit to claims on the health system” with a “growing dependence on the labor of lay health workers for the everyday functioning of the health system” (Schneider and Lehmann, 2010: 64). It marked an ad hoc response to economic constraints, a response that lacked structure and policy frameworks, and which resulted in “the proliferation of new cadres” of care workers operating at the periphery of the formal health system (Schneider and Lehmann, 2010; Lund and Budlender, 2009; Zachariah et al, 2009: 554). Care workers inhabited a “fuzzy domain” devoid of legislative protections, such as basic conditions of employment, health and safety requirements, or minimum wage limits. Carers were thus “precariously located” in a fractured, “vulnerable” sector, where the “status of care work is at best ambiguous,” and even the most basic workers’ rights are not invigilated (Lund and Budlender, 2009: 25).

Task-shifting relocates the responsibility of care onto volunteers, who are in fact unpaid workers and mostly women. By the late 2000s, 90% of AIDS care took place in the home, and 93% of all voluntary carers were women (Schneider and Lehmann, 2010). Furthermore, the women who undertook care work are most likely to come from communities most affected by HIV/AIDS (60% of HIV-positive adults are women) and the country’s legacy of impoverishment (66% of South Africans live in poverty with an income of less than $50 per month). In addition 45% of households are headed by single women while 80% of women-headed households have no formal income (STATS SA 2018, Rogan, 2013; Schneider and Lehmann, 2010; Budlender, 2008).

Nevertheless, as hospital beds filled up, government rhetoric proclaimed that “health promotion and prevention is best done by people from ‘the community’” (Lund and Budlender, 2009: 24).

In fact, South African health policies celebrated community care workers - experiencing the debilitating inequities mentioned above - as the “backbone” of the country’s AIDS response (Lund and Budlender, 2009).



The emergence of care work must be considered within the historical dimensions of “colonial subjugation and apartheid dispossession” which entrenched racial and gender inequality, poverty, violence, and fragmented communal arrangements (Coovadia et al, 2009: 817, 825). At the time of transition, both communicable and non-communicable diseases were already at crisis levels in segregated communities. The complexities of poverty-related illness *and* AIDS colliding in a dysfunctional health system further complicated post-apartheid and transitional challenges. This historical legacy remains visible in the post-apartheid landscape: where health services are located, how people access such services, and the comprised health of communities are all products of the political organization of social life that was geared toward generating affluence and privilege for the white minority (Coovadia et al, 2009). The cost of such skewed distribution created impoverished black communities: overcrowding, inadequate sanitation, malnutrition, violence, and stress caused the ill-health and intergenerational deterioration of many communities, rendering them highly susceptible to the AIDS epidemic (Coovadia et al, 2009: 825). Health services were segregated along racial lines and at the end of apartheid, the South African health system comprised fourteen separate health departments, and, with a focus on the hospital sector, vastly underdeveloped and under-resourced primary level services in township communities (Coovadia et al, 2009: 825).

In South Africa's transitional political milieu, the concatenation of pressures as noted here – that is, inherited infrastructural inequities, the increased need for care borne out of neoliberal economic and austerity policies and an exploding HIV/AIDS epidemic, as well as the assumed unlimited coping capacity among families and communities built upon the hyper-reification of traditionalist and essentialist gender norms – meant that communities could not afford the basic cost of survival, let alone care for the sick or dying (Lund and Budlender, 2009; Patel, 2009; Gqola, 2008; Schneider and Lehmann, 2010). The tension between responding to the social and economic needs presented by the AIDS epidemic and remaining within the constraints of neoliberal policies were irreconcilable (Razavi, 2007). HIV/AIDS was "too heavy a burden for the newly trimmed neoliberal state to bear" (Decoteau, 2013: 15). Thus, the AIDS epidemic in South Africa was twinned with escalating poverty and social malaise (Decoteau, 2008).

This situation was exponentially complicated during the Mbeki administration's official policy of "AIDS denialism." South African commentators argued that this position was adopted to actively avoid financial responsibility for the epidemic (Lund and Budlender, 2009; Van der Vliet, 2004; Nattrass, 2014; Simelela *et al.,* 2014; Hodes, 2018). Furthermore, in 2002, halfway through Mbeki's rule and amidst increasing panic wrought by AIDS denialism, President Mbeki launched "The Year of the Volunteer" (Decoteau, 2008: 220). This strategy (which Decoteau describes as "eerily reminiscent of the 'Volunteer Week' instigated in 1987 by one of the primary leaders of neoliberal ideology, Ronald Reagan") was an example of the way in which the South African post-apartheid state came to incorporate neoliberal economic restructuring ideologies (2008: 220). Policies increasingly espoused a discourse of "self-reliance" and "individual responsibility" as the State abdicated its responsibilities towards the poor. Decoteau argues that health became a key site for the deployment of neoliberal ideology because the HIV/AIDS epidemic posed "perhaps the most striking threat to the legitimacy of the post-apartheid state" (2008: 221).

Feminist scholars have argued that this context complicated efforts to redress gender equality in the post-apartheid state (Gqola, 2008; Schneider and Lehmann, 2010; Lund and Budlender, 2009). State rhetoric, they argued, deployed "gendered notions of 'community' and 'volunteerism'" already operational in South Africa to devolve care responsibilities onto those least likely to cope. This had "dangerous implications for women, especially poor women," exacerbating their social precarity and economic vulnerability (Lund and Budlender, 2009: 5-7).

Care work in this context is under-paid or usually unpaid, and often without the most basic equipment that is needed for safety, such as gloves (the highest stipend I recorded during my study was ZAR2000 per month, that is just under $5 a day). Community care workers often contribute from their own minimal resources to meet these material needs, as well as the needs of those they care for, such as providing food, electricity, even water, or basic medical supplies. This points to how the cost of care extends beyond buying protective materials necessary to protect oneself, to bearing the brunt of poor delivery of social services. Even if carers received compensation – as is the central call of most theorists and activists – they are still confronted by the costs of sourcing the basic material necessities in order to provide "proper care" while managing the strictures of waning social service delivery in a neoliberal society. In addition, HIV/AIDS care work deprives the carers' household, both in terms of their productive and reproductive value, with intergenerational consequences. In the country with the highest rate of gender-based violence in the world, one of the highest rates of gender inequality, and the largest population of people living with AIDS – the consequences of HIV/AIDS care work is a self-evident political concern (Abrahams et al., 2013; Jewkes et al., 2011). In this context, care work becomes a site of "durable inequalities" (Tronto, 2013) in that it is economically, socially, physically, and psychologically deprivational to those who perform it (Chazan, 2008; Cluver, et al., 2012; Moultrie and Kleintjes, 2006; Nussbaum, 2010; Duffy, 2011).

The AIDS epidemic coupled with the neoliberal practices operationalized through South Africa's democratic transition increased the need for unpaid care labor, thus increasing the risk of women's impoverishment, especially for those already historically marginalized due to race, gender, culture, and class (Kang'ethe, 2009; Esplen, 2009; Esim & Grown, 2006; Ogden et al, 2006; Bakare-Yusuf, 2003; McFadden, 2000). Nothemba and Rosetta's stories demonstrate some of the "durable inequalities" produced by their care labor.

> When you get to their home, you see there is nothing to eat. So we take money from our own pocket. Our patients see us as hope. They see us as better than them – even when we only used to get R750 a

> month.[10] They don’t know we get so little for this. They don’t know that we are hungry people too. So we must get them something to eat. You must take out of your pocket and get them something to eat (Nothemba, 2012. Research notes, 2012).
>
> The sick person is just laying alone there. And my concern, I mean, just being sick, and being alone. It’s not right. So it’s not a choice for me really. The situation is not right. Some of the people have difficulties. You see that they are in a bad situation. Then you take money from your pocket, because you have no choice. Sometimes they ask you for food. They don’t even have bread in their house. So you give it. Even if you have nothing. You give. You care. Because you don’t have a choice. Sometimes, like there is that old woman, she is alone, her daughter has passed away a long time ago of this thing [AIDS]. She needs someone. But no-one comes. She needs bread, but there is no bread. And she can’t get anyone to go buy her bread. So she is desperate, and angry. I understand that anger. She lies there in that bed, in her own mess, in that small shack. No windows. No air. The bed is terrible, it’s dirty. Its got a bad smell. And she has to wait until I come to help her. There is no-one else. Yes, she is angry. And she takes that anger out on me, because I’m the only one she sees. It can be hard.
>
> So, I stay in this job, this job that is not paid, because I feel sad for the sick people. I know all the challenges of this work – it’s dangerous to walk alone here, sometimes you get attacked. And then I wonder who will take care of my children? They are still young ... and there’s no money, and no money to bury me. And no money to help. We don’t even have gloves. What if I get sick? But I also know these people will

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[10] About $1.85 a day.

> not get help from anywhere else. But luckily, there we are, strong women, doing the best we can! To help, to give them strength, to give them faith, to give them hope – because there are people like us who are not going to give up on them. We as care givers, we as women, we do whatever it takes. It is not easy, because sometimes you get there, to their home, and they've died. But until they die, we give them hope. (Rosetta, 2011. Research notes, 2012).

Carers, and those they care for, are the "redundant populations" Cooper describes (2008: 54), living in Mbembé's "death worlds" (2003). They are the literal materialization of neoliberal democracy's necropolitical drives (Mbembé, 2003). Care work is a response to these redundant populations, and in caring for them, the carers too became implicated as such: through the constellation of traditional gender norms and escalating unemployment, an already under-valued form of labor is further devalued. Who will pay for labor, usually given freely "because women do it anyway" (Budlender, 2002: 7), now in service of a redundant population, which does not serve the interests of , but rather drains, the productive economy (Decoteau, 2008: 15)? Clearly, this is the wrong question.

In this context of care, the impact of providing care, and the quality of life of those who receive care evince the consequences of a mode of governance that "fosters life or disallows it to the point of death" (Mbembé, 2003: 40, citing Foucault's History of Sexuality, 1980: 138), producing "forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of living dead" (2003: 40). The contours of South Africa's epidemic also show how gender (black women as carers), race (the HIV/AIDS population in South Africa is predominantly black), class (the epidemic and the care it requires are experienced at exponentially higher levels among South Africa's poor) and nationality (the diffuse modes of governance imposed on South Africa via Western and imperial interests) are operationalized to accelerate premature death for those who are unassimilable in neoliberal regimes (Cooper, 2008: 54; Haritaworn, Kuntsman and Posocco, 2014: 1). Thus, it is my argument that care diagnosis the necropolitical implications of neoliberalism (its ability to dictate "who may live and who may die," Mbembé, 2003: 12) which amount to "the generalized instrumentalization of human existence and the material destruction of human bodies and populations" (2003: 14). This site of care demonstrates the real, tangible, material micro-politics of neoliberalism's ability to "rework the value of life" (Cooper, 2008: 9) through health crises. Democracy means something else in South Africa. Remaining in a neo-imperial relationship with the West, in which its transition to democracy is imbricated in the neoliberal capitalist interests of HIV/AIDS health science and policy interventions, makes democracy 'irrelevant' (Soyinka-Airewele, 2015; Maeckelberg, 2016; Nwauwa, 2003) and poses a challenge to Joan Tronto's democratic theory of care. In fact, my argument here has been that the democracy process in South Africa actually produced the world's larges AIDS epidemic and its commensurate care crisis. However, this reconfigured "economy of life" ***is not*** irrelevant. If neoliberalism reworks the political economy to an "economy of life" or bio-economy, as Cooper argues, then care, as a form of social reproduction, operationalizes neoliberalism's ability to reconfigure the "value of life" in this economy (2008: 9). In other words, if neoliberalism produced redundant populations through South Africa's transition to democracy during a burgeoning AIDS crisis, what end does this serve? Cooper's analysis makes clear that "the value of life" in the present bio-economy resides not only in the putatively whole and living human being, but in her degradation, catastrophism, redundancy, and debility (Cooper, 2008: 10-12). But, what can possibly be of “value” in redundant populations? These biopolitical/necropolitical reconfigurations are the focus of my next chapter.

## CONCLUSION

In this chapter, I examined community-based HIV/AIDS care work in South Africa, during the specific moment of the country’s democratic transition. In so doing, I make the argument that the problem of care cannot be analyzed without assessing the relational nature of the political economy between the West and less developed nations, which in turn evinces the need to reassess ‘democracy’ in the current neoliberal moment.

The concatenation of South Africa’s transition from apartheid to democracy, international pressures to adopt neoliberal ideals, and the burgeoning HIV/AIDS epidemic “propelled the new developmental state immediately into a ‘state of emergency’ at its very moment of inception” (Decoteau, 2008: 136). Entire populations of historically segregated people marked specifically by race, where overcrowding, inadequate sanitation, food insecurity, violence, and stress caused the ill-health and intergenerational deterioration of many communities, were rendered highly vulnerable to the AIDS epidemic: for them, the epidemic was inevitable and perpetual (Cooper, 2008; Decoteau, 2008; Lund and Budlender, 2009; Coovadia et al, 2009: 825). Thinking democracy and care together in this novel context shows the ontology of care within the democratization process itself. And, in this instance, we see how democracy emerges in biopolitical relationality to imperial interests. We see the instantiation of democracy elsewhere, in the myriad neoliberal context, serves the American democratic ideal by deciding “who matters and who does not, who is disposable and who is not” (Mbembé, 2003: 27).

I agree with Tronto that what has been lost in the battle to survive neoliberalism is care. However, I do not think Tronto's democratic theory of care, as it stands, is our way out of the impasse. In contexts of precarity and crisis, what Cooper calls "complex emergencies" (2008: 12), the imperative of violence inherent in such emergencies cyclically sustains neoliberalism's promise of overcoming such emergencies to attain "more and better life" (2008: 12). The South African example demonstrates a democratization process that is imposed by non-democratic institutions (such as the U.S. Treasury, the IMF, and the World Bank) and bolstered by the structural violences of debt imperialism working in tandem with U.S. and European pharmaceutical industries alongside price protections enforced by the World Trade Organization (Cooper, 2008; Decoteau, 2008). Debt servitude is thus a mode of governance smuggled in under the rubric of "democracy" with devastating effects on the life chances of whole populations to which care workers bear witness.

Reading Tronto and Cooper together I suggest the utility of taking care work as an analytical aperture to expand the heretofore structural analysis of care work and locate it in a more relevant biopolitical valence. Specifically, drawing carers into the democratic process to address the undervaluing of care or the feminization of care is less likely if we do not take seriously the nature of biopower, whereby the details of living (sanitation, health, and so forth) and dying (populations marked as redundant) are controlled by diffuse actors without explicit forms of political intervention or consent. My own experience in failed policy contestation for the recognition and remuneration of care workers in South Africa supports this argument.

Thus, I take seriously Cooper's call for more specific analysis of biopolitics that attend to the growing importance of the life sciences, and their allied disciplines, within the political and economic context of neoliberalism, which she describes as “the key site of experimentation for the ‘new revolutions of capitalism’” (Cooper, 2005: n.p.). As such, my analysis shows that apprehending the humanistic concern that is care is not only an onto-epistemological inquiry. It has ethical and material application because we have misdiagnosed the “problem of care.” The South African example shows that gendered, unpaid labor is an imperative of, if not constitutive of our present neoliberal economic order. It is in the water. The task, then, is to ensure that our interventions do not unwittingly operationalize and perpetuate the “raced, sexed and eugenic scripts” (Subramaniam *et al.*, 2016) inherent in the neoliberal logics which undergird our health sciences, policies, and even hard-won democracies.

# CHAPTER 3

## Care Policy: 'It's like they don't want us to care properly.'

> I see 4 patients a day. I walk about an hour between each patient. When I was registered with the organization [a non-governmental/non-profit organization contracted by the local government to organize community-based HIV/AIDS care] I was expected to see 10 patients a day. But that was impossible. They didn't pay for transportation, so walking takes up too much time. And each patient needs about an hour of my time, at least. Maybe I have to lift them up because they are category 4 [late-stage AIDS] and I have to fetch water, boil it, bathe them, cook for them, wash their clothes and bedding, if they have. It's usually about 2 hours if there is a long line at the communal water tap. And they are lonely, some people just need someone there. So, 10 patients is impossible. I prefer to do this work on my own now. The stipend wasn't even worth it. I couldn't care for my patients properly with the little time and the many patients they wanted me to see. And the check lists! We had to hand in our check lists to get our stipends from the government, but we don't even have a computer or a printer to print their check lists, never mind do everything on the check list for even one patient. You know, ***it's almost like they don't want us to care properly.*** No. It's better I do this the way I know it needs to be done. (Nothemba, 2012. Research notes, 2012.)

Nothemba's experience in South Africa's AIDS policy context demonstrates what I argue is the reconfiguration of the country's political economy as a bio-economy in service of Western imperial interests *through* the AIDS epidemic. AIDS policies have, in fact, exacerbated the care crisis in this context. In turn, the redundant populations produced by this crisis is one way in which neoliberalism reconfigures the “value of life” at the micro-level.

In demonstrating that the South African AIDS epidemic is co-constituted with the country’s transition to democracy, I made half the case for a more intentional biopolitical analysis of care. The other half of the analysis is to demonstrate how care work is entangled with the economization of the life sciences. On the one hand, the need for care emerges via the neoliberal investments of US-inclined debt-imperialism, as described in the previous chapter. On the other, the emergent possibilities of the health sciences within this context (that is, the world’s largest AIDS epidemic) are corralled and operationalized through US-directed global public health policy. Melinda Cooper describes this facet of biopolitics as “crucially concerned with the emergent possibilities of the life sciences, public health, and biomedicine” as “new foundations” for economic growth, productivity, value, and speculative profits (2008: 11). To demonstrate how this works at the level of people’s lives, or as Annemarie Jagose says, to “think about the constrained spaces in which many subjects under late capitalism get by” (2013: 204) I take a closer look at the phenomenon of “task-shifting” - a key strategy in South Africa’s AIDS response.

## TASK-SHIFTING

> We are supposed to get government funding. But it stopped. Our manager is trying to find money for us. We keep working but we have no supplies in the supply cabinet. We need bandages. We need ointments. We need gloves. And masks. But we have nothing. We have our own patients, and we still go house to house to check for new

patients in our community. But the clinics and hospitals continue to refer to us. But we no longer get funding from the government to take on those patients. But still, the clinics refer, refer, refer! So then the challenge is - you get to the house, and there is no food, no soap, no water, no electricity, no towels. No nothing. There is no-one taking care of my patients at home. I am the only one. The main thing we must do, is wash the patient, check if they have wounds, and make sure they take their ARVs if they have them. But what do I wash them with? How do I clean their wounds? Now I take what I can from home. I take Vaseline. When I put Vaseline on, at least the patient thinks I'm doing something. We both feel like I'm doing something.

I started doing this when I was 13 years old, when I looked after my sister. I've always wanted to be a nurse. My dream is to be a theatre nurse. But that's not going to happen. So I'm happy doing this. I've been doing this for nearly 20 years. I have a certificate in VCT [voluntary counseling and testing], in HIV counseling and domestic violence counseling. But there is no paid job for me. But I'm proud to help my community. The Department of Health and the Department of Social Development have been arguing about who pays for this work. But it's always both. These things go together. HIV goes with social problems. HIV goes with domestic violence. Drugs go with domestic violence. Poverty goes with everything. The person who knows what's wrong in the community is the care worker. We know what's going on in everyone's homes in our communities. That's why they keep referring people to us. For HIV and social problems. Maybe we should go on strike! [Thandeka laughs.] You know what happens when the nurses go on strike? We pick up the slack. The nurses and the politicians should come here. They should see what we are doing. They will faint. They will vomit. Not everyone can do this work. Not everyone can work with a patient with holes in their flesh, holes that won't heal, gangrene - you smell it when you come in the door. Or you arrive on Monday and see that your patient was lying in

> her shit the whole weekend. We deal with all this mess. I just put a mint in my mouth for the smell and carry on. (Thandeka, 2009. Research notes, 2012.)

To most of us in the developing world, task-shifting is a well-known concept in public health. Task-shifting is the name given to a process of delegation whereby tasks are moved from specialized practitioners to 'less' specialized health workers. The 1978 Alma Ata Declaration on Primary Health Care developed and promoted by the World Health Organization (WHO) proposed a cadre of "community health workers" as a way of increasing access to health care in developing countries (Schneider and Lehmann, 2010: 61). Emerging from the landmark event for primary health care, the International Conference on Primary Health Care held in Alma-Ata in September 1978, this declaration came to "exert moral pressure" on developing countries as *the* approach to deal with the key vectors of disease such as social, economic, and political underdevelopment in developing countries (Cueto, 2004). However, community health worker programs quickly fell out of favor in the developing world due to unrealistic expectations and lack of adequate planning, management, and reliable funding (Schneider and Lehmann, 2010: 61). This was largely the result of the emergent "conservative neoliberal regimes in the main industrialized countries" which meant drastic funding restrictions for health care in developing countries, funding on which the Primary Health Care proposals depended (Cueto, 2004: 19). In previous chapters, I have outlined the South Africa's historically compromised health infrastructure. It is within this context the civil society revived the notion of community care in the form of "home-based care" projects to address the immediate crisis presented by the AIDS epidemic. While already a common-practice, the WHO formalized task-shifting by providing specific guidelines at its First Global Conference on Task Shifting in 2008 (WHO, 2008). The WHO statement reads:

> Task shifting is the name given to a process of delegation whereby tasks are moved, where appropriate, to less specialized health workers. By reorganizing the workforce in this way, task shifting presents a viable solution for improving health care coverage by making more efficient use of the human resources already available and by quickly increasing capacity while training and retention programs are expanded (WHO, 2008).

The process was promoted and implemented, with specific reference to the scale up of access to HIV/AIDS treatment and care, in all South African programs funded by WHO, the US President Emergency Plan for AIDS Relief (PEPFAR) and the Joint United Nations Program on AIDS (UNAIDS) (WHO, 2008). At this time, at least 57 countries had reported critical shortages of health workers; 36 of those were in Africa (Callaghan, Ford, and Schneider, 2010).

Health activists in South Africa were, however, unimpressed. In reality, task-shifting signaled “a limit to claims on the health system” with a “growing dependence on the labor of lay health workers for the everyday functioning of the health system” (Schneider and Lehmann, 2010: 64). Schneider and Lehmann describe the reality thus:

> couched in a language of a seamless ‘continuum of care’ between health system, community and home, and drawing on ‘communitarian’ ideas of reciprocity and caring in ‘African culture’, its [community care work] more profane or real role was to legitimate the widespread practice of turning people with end stage AIDS away from over-burdened health facilities (2010: 63).

Task-shifting is thus an economically “expedient solution” only in that it displaces the responsibility for care “downward and outward onto un-resourced communities” (Lund and Budlender, 2009: 24). It is not a sustainable reparative. Task-shifting is a hastily applied tourniquet, resorted to in situations of stress and scarcity, in lieu of more complex and expensive fundamental and systemic investments in transformation (Lund and Budlender, 2009).

Yet, by the mid-2000s most South African policy related to health or social development heralded the ‘community care worker’ (CCW). She had become the strategy upon which the success of the ambitious post-denialism AIDS program was built (Bekker, 2014; Avert, 2010). In the next section I survey task-shifting stipulations in key policies aimed at the ongoing and difficult task of improving South Africa’s dysfunctional health system. I focus on the two most comprehensive health policies, the Public Health Care Re-Engineering Strategy (PHCRS) and South Africa’s first three national AIDS policies after the era of AIDS denialism: the National Strategic Plan on HIV, Sexually Transmitted Infections and Tuberculosis, (2006-2011, 2012-2016, 2017-2022), known colloquially as the NSP, as well as other pertinent policies such as the National Development Plan and the Human Resources for Health Plan. While this survey is not intended to be exhaustive, it does provide, even in just a handful of policies, insight into the broad range of responsibilities shifted to CCWs. In addition to the policies mentioned above, I draw on the South African Health Review (SAHR), an annual academic publication which assesses the state of the country’s health system and provides excellent analysis of key legislation and related policies. This is an independently funded, non-partisan, and well-respected publication consulted by academics, activists, and those engaged in policy development. Here, I would like to note that I have been involved in development consultation processes for the last three NSPs (2006-2011, 2012-2016, 2017-2022), the PHCRS, and mental and maternal health policies. I note this to contextualize my analysis as one which recognizes my familiarity with the terrain and acknowledges my implication in the biopolitical assemblages I am trying to unravel.

On the whole, these policies, most of which have been through several iterations or drafts under the post-apartheid dispensation, call for "a radical expansion" of the public health care system "with a special emphasis on community-based services" (NSP, 2017). Noting the need for "much stronger" reliance on CCWs, policies recommend that CCWs should be recruited in "large numbers" to "perform a *wider* range of tasks" to form "the base of the health pyramid" in South Africa's public health care system (SAHR, 2017: 3). Policies claim that CCWs have a "critical role" to play in strengthening the "capacity of families and communities" in order to "address key drivers of the epidemic" and to promote"social and behavioral change" (NSP, 2017). The most recent NSP states that CCWs

> expand the quality and reach of health and wellness services which, if implemented appropriately, will address many of the shortcomings … in program reach, early diagnosis, follow-up, adherence support, and retention in care (NSP, 2017).

An enormous amount of AIDS care and treatment occurs beyond formal health services and infrastructure. CCWs are required to support a wide range of "out of facility" services, such as the "early and improved diagnosis of HIV, sexually-transmitted infections (STIs), and TB, improved access to speedy, appropriate and user-friendly treatment services, and retention in treatment and care" (NSP, 2017). They should be able to "routinely offer and provide HIV and TB testing" and be trained to initiate antiretroviral and TB treatment "in line with current guidelines and emerging evidence" (NSP, 2017). In addition, CCWs should be able to provide counseling to people requesting post-exposure prophylaxis and prevention of mother-to-child transmission (PMTCT) interventions. The latter includes training women on infant feeding practices and ensuring "effective postnatal follow-up for mothers and infants" as well as facilitating making "early appointments at antenatal facilities" (NSP, 2017). Generally, the policy notes, CCWs should be trained to "undertake household wellness assessments and to make referrals to HIV, STI, TB, maternal health, sexual and reproductive health, and gender-based violence services" (NSP, 2017: 53) as well as related legal and psycho-support services where available (NSP, 2017: 73). In the commission of these tasks, CCWs should also be able to "screen for food insecurity," as well as the "harmful use of alcohol and drugs" (NSP, 2017: 73). In addition, CCWs should support out-patient rehabilitation services by being able to provide a comprehensive "package of harm reduction interventions" (NSP, 2017: 73).

Interventions with respect to non-communicable diseases include the prevention and control of diabetes, hypertension and blood pressure, cardiovascular disease, screening for cervical and breast cancer, providing maternal and child health services, and promoting medication adherence and healthful eating habits (SAHR, 2017: 174-176; 299). Specific tasks listed in the NSP include: measuring patients' height and weight, monitoring blood pressure and blood-glucose levels, health education, setting up "community health clubs" and exercise sessions, conducting healthful cooking demonstrations, and delivering medication where access to dispensaries may be difficult (SAHR, 2017: 299). As a reminder: all these tasks are generalized to the broad but still amorphous cadre of community care workers, outside the support and infrastructure of formal health facilities.

In addition to these more general policies, guidelines for discrete health conditions also delegate tasks to CCWs. For example, a mental health policy framework under consideration at the time of writing recommends that CCWs integrate mental health screening into their routine activities and participate in "establishing and maintaining community-based [mental health] rehabilitation programs" (National Mental Health Policy Framework and Strategic Plan, 2013–2020). This includes

> routine screening for mental illness during pregnancy, and a stepped approach to management and referral which embraces a task-shifting approach where trained non-specialist workers deliver evidence-based psychosocial interventions, medication monitoring, detection, and a stepped approach to management and referral of common mental disorders (depression and anxiety) (2013: 31).

Key to shifting these numerous tasks to 'lower' cadres of health workers is the idea that

> task shifting can make more efficient use of the human resources currently available. For example, when doctors are in short supply, a qualified nurse could often prescribe and dispense antiretroviral therapy. Further, community workers can potentially deliver a wide range of HIV services, thus freeing the time of qualified nurses. Training a new community health worker takes between one week and one year depending on the competencies required. This compares with three or four years of training required for a nurse to fully qualify (WHO, 2008: n.p.)

Considering the innumerable tasks being shifted onto the lay, unpaid, volunteer community health worker, the limited training should be cause for concern, as should the suggested 'income,' that is, a stipend, of less than $5 a day. Furthermore, as someone who has been engaged in policy development and contestation, I remain perplexed by the lack of coordination of these numerous tasks. It is unclear if the policies above anticipate discrete cadres of workers, or, as has been the case to date, tasks are shifted onto an anticipated rather than existent, seemingly innumerable, population of carers with endless capacity. How many of these tasks can, and should, a carer be expected to take on?

Perhaps to distract from the impossibility of the burdens delegated onto the most affected but least resourced communities, in order to meet the expectations of task-shifting, task-shifting policies call for interventions to maximize the care worker's effectiveness by providing her with a range of "capacity-building" programs (WHO, 2008). Capacity-building is part of the task-shifting phenomenon, described as "the process of enabling people to increase control over, and to improve, their health" while contributing to the "empowerment," "sustainability," and "resilience" of vulnerable communities (Simmons, Reynolds, and Swinburn, 2011: 194). The policies surveyed in the previous section all call for capacity-building strategies. However, these are also characterized by a lack of consistency. Workshops and training opportunities are provided by a range of government subsidiaries related to health and social services, as well as non-profit and non-governmental agencies (SAHR, 2017: 173). Training varies in duration, content, and formal certification (SAHR, 2017:175). These inconsistencies take on further significance when one notes that CCWs range in their own levels of primary and secondary education, while the quality of education itself is considered poor in these communities (SAHR, 2017: 303).

> I have all these certificates. But can I get a paid job? No. Yet I have done so many workshops. I could have been teaching some of these

> workshops because I know more than the facilitator. I have actually done this work, here, in our shacks, in our communities. The facilitator has never set foot here. But we must go for this training to get our stipend. Eventually I stopped going. I have a box full of certificates. Those workshops don't teach you how to get disability grants for our patients, or food parcels, or show us how to get government to see how bad things are here. At first you think maybe you will be trained to be a better care giver, maybe even become a nurse. But it's not like that. And I don't have time to do all that monitoring. There is so much M&E [monitoring and evaluation] but my patients are not getting better. My patients still die. The only difference is that when I do capacity-building, it takes me away from my patients…and there is more paper work, and less and less time to be with my dying patients .
> (Akhona, 2011. Research notes, 2012.)

While a great deal is written about capacity-building in policy documents, there is a dearth of concrete, coordinated, and funded capacity-building programs. It is surprising that more specific plans for coordinated efforts are not available after a decade of policy development. I specifically reference the most recent NSP here, which remains only anticipatory:

> To ensure that no one is left behind, efforts to maximize access to high-quality services for key populations **will be** enhanced. The strategy prioritizes efforts to build the capacity of both mainstream and community-based service providers, while community- and peer-led programming **will be** implemented and expanded (NSP, 2017: 24, emphasis added).

The PHC Re-engineering policy also states that "there **is a need** to strengthen these strategies and enhance community capacity" (SAHR, 17: 173, emphasis added), but does not present a plan to do so. The NSP states that there is a need to "build robust household and community capacity" where “community-level capacity among key and vulnerable populations is still weak” (NSP, 2017: xvi). There is something alarming in the notion of “building capacity” among “vulnerable and weak” populations. It is also alarming that the CCW, as central to public health policy as she is in South Africa, is not properly defined, managed, or compensated. She is referred to as part of an ambiguous population, produced as a repository of endless, flexible capacity, assigned everything the state is unable to absorb. The contours of her realm remain amorphous, continuously projected into the future, while obfuscated in the neoliberal ideals of capacity building which promise gender empowerment, sustainability, resilience, and communitarianism. In addition, I have long been frustrated and perplexed by the fact that care workers are neither consulted for their existing ‘capacity’ and expertise, nor consulted about what forms of support they need to continuing providing the care work that few are as capable or qualified to perform. Lindiwe’s expert insights into the crisis of treatment default bears out this point.

> We used to get food parcels, because you can’t take your ARVs without food. So if our patients didn’t have food, we could take a food parcel. That stopped too. This causes another problem. At least when we could give our patients food, they would stay on their medication. But without food, they get too sick on the medication. They have no income and no money for food. So when they are very sick like that, when their CD4 count is very very low, they are eligible for a disability grant. Then they have money for food. Which means they can take their medication without throwing up. But, as they get better and when their CD4 count rises, they lose their disability grant. But they are still sick. They are still poor. That grant doesn’t fix anything long-term. So, when everyone is talking in the news about people defaulting on their medication, you don’t hear them explain why. People are poor. You see how we live here. We need to eat. People

> need that grant. If you make it so people get punished when they start getting better, if you take their grant away when their CD4 count goes up, then no-one is going to get better. They don't see this like we do, they don't see this gap, that there is this choice we have to make between eating, and getting better. Between eating today, and staying alive tomorrow. You know, it has become a choice between taking your medication and losing your grant to buy food. (Lindiwe, 2012. Research notes, 2012.)

## DEBILITY, OR, THIS BRIDGE CALLED MY BACK

*I've had enough*
*I'm sick of seeing and touching*
*Both sides of things*
*Sick of being the damn bridge for everybody*

~ Kate Rushin, The Bridge Poem, 1981.

Task-shifting comes into view as a biopolitical, or rather, necropolitical mechanism. Framed in the language of rights, gender empowerment, sustainability, and the "promise of autonomy and community" as Anzaldúa describes it (1981: xi), task-shifting seems a more apt example of Melinda Cooper's argument that the engine of neoliberal economy is no longer a mode of capital that relies on a population that, *through its labor,* necessarily becomes debilitated - in the bio-economy, ***debility itself has capitalistic value*** (Cooper, 2008: Shildrick, 2015:11). Indeed, the carer is debilitated through the deprivational circumstances constellating around HIV/AIDS care work in South Africa. What is less obvious, and the argument I lay out in this chapter, is that HIV/AIDS policies position the carer in such a way that she is able to care to the point of not caring properly, she is able to care for those affected by the epidemic, but only to the point of death. It is as if the task of care here is to maintain debilitated populations in death worlds; to persist without actually getting better (Shildrick, 2015: 11). Expanding on Foucault's notion of biopower, Mbembé argues that biopower becomes necropower under democracy-debt regimes as experienced by South Africa. Necropower is the process by which death-worlds are created, the "new and unique forms of social existence in which vast populations are subjected to conditions of life conferring upon them the status of living dead" (2003: 39-40). Mbembé suggests that "the plantation" and "the colony" are examples of death-worlds, as are, I suggest, the informal shanty towns where the vast majority of people living with HIV and dying of AIDS – and their carers – can be found. How else can one describe such communities other than "repressed topographies of cruelty" where, under the conditions of necropower, "the lines between resistance and suicide, sacrifice and redemption, martyrdom and freedom are blurred" (Mbembé, 2003: 39-40)?

But, how does all this figure capitalistically? Reading Margrit Shildrick's concept of debility gives us a clue:

> at the most fundamental level, it is in the interests of neo-liberalism to produce and sustain bodies as debilitated ***and therefore susceptible to a range of market commodities that hold out the promise of therapeutic interventions*** (Shildrick, 2015: 11-12).

Task-shifting policies exponentially delegate labor to under-resourced, under-skilled, and unpaid workers. This increased reliance on the informal sector, which comprises mostly women who experience the social and structural drivers of HIV/AIDS and other vectors of vulnerability disproportionally, exacerbates the problem task-shifting is supposed to address. While community care workers are expected to "bridge the gap" in service delivery and strengthen the interface between the community and the health care system (Sips *et al.,* 2014), this usually means that they compensate for these gaps by investing their own limited resources in the care of their clients. Ironically, this reality is produced by the very health policies which caution that "people with the lowest socio-economic status are associated with HIV infection" while

> [t]hose who work in the informal sector have the highest HIV prevalence, with almost a third of African informal workers being HIV-positive. Among women, those with less disposable income have a higher risk of being HIV-positive (NSP, 2012-2016).

A 2014 study on care workers in South Africa echoes my own research:

> What is important to take into account is that, on the one hand, CCWs represent a vulnerable group of community members who are usually female, unpaid and poor, and have an increased risk of acquiring HIV and TB, and being the victims of violence. Donating their personal resources to clients might increase their own risk of financial insecurity and deepening poverty. On the other hand, the provision of these resources is crucial to public health. Current CCW practices enable clients to reach the clinic, thereby potentially increasing uptake of services for HIV and TB. Whether this situation arises from a failure in the medical or social system, or a weakness in CCW programs for failing to protect their CCWs, it has to be acknowledged that CCWs compensate for the gaps in the health system by investing their own personal resources in the health and livelihood of their clients. Community care workers are expected 'bridge' the gap in service delivery and serve to strengthen the interface between the community and the health care system (Sips et al, 2014).

The decline in their economic wherewithal visits a very certain future upon care workers. It should be remembered that CCWs are from the communities in which they work. They walk from shack to shack to provide care. The carers in my study walked anything from 30 minutes to an hour between each visit. This does not include the time it takes to collect water from a central, communal water source in the under-developed shanty town. Or the time to hand-wash soiled clothes and sheets, or locate fuel sources to boil water and cook food for their patients. It also does not include the time it might take a care worker to walk to a clinic and stand in line to get their patient's medication. It does not include the time to undertake even a fraction of the list of tasks noted by the myriad policy stipulations. This situation is further exacerbated by the fact that the carer is as much impacted by poor service delivery and poverty as her patients – in terms of her own needs as a citizen, and her needs as a carer. This point deserves further attention.

Inadequate infrastructure inherited from the skewed development of the apartheid state exacerbated infectious and non-communicable disease epidemics. International agencies tied infrastructure development as conditions to South Africa's loan approval regimes (Bond and Dugard, 2008; WHO, 2007). These conditions demanded public-private partnerships, which in some cases meant selling off parts of South Africa's public commodities to private, international corporations. Unregulated pricing on water, sanitation and electricity meant that the majority of South Africans were now doubly deprived of necessary services; even if services were extended beyond selective apartheid geographies, they were unavailable due to cost (Bakker, 2008; Bond and Dugard, 2008). Debt imperialism as defined by Cooper (2008) sees the shrinking of public expenditure such as health services, while exacerbating the main drivers of ill-health through new barriers to basic necessities. The care worker, entangled as she is in this milieu, is increasingly relied upon as the backbone of the postcolonial and past-apartheid state's public health transformation plan, while increasingly depriving her of the ability to perform adequate levels of care. Another contradiction, then, is that care workers are also enlisted to "address the social and structural drivers of HIV, TB and STIs" (NSP, 2017). How might the carer accomplish this within a micropolitical context delimited by the macropolitics of neoliberalism?

Imbricated in the societies most affected by ill-health and deprived of infrastructure, the carer must rely on her own resourcefulness to provide care. Her vulnerability is thus increased, a problem the policies which coagulate around her claim to mediate. Task-shifting is a response to the withdrawal of state spending on public services which delegates care for HIV/AIDS (and other social ills) onto a population most affected by this withdrawal. As such, health policies evince and internal contradiction.

Literally shouldering the burden of bridging the care gap in South Africa, care workers are stuck between the promissory visions of health policy, and the death-worlds in which they live and work. Furthermore, she is coerced into maintaining these death-worlds by the so-called *capacities* built by policy recommendations. Sold as an opportunity for self-empowerment, carers are recruited into training workshops on topics across the health spectrum, but always geared toward the ability to quantify her labors as part of "data-driven" approaches to public health (NSP, 2017). Targets are set for a range of outcomes related to surveillance and service delivery. For example, in order for carers to receive a stipend, they must achieve targets for the number of home-visits performed, with a check list of stipulations to be conducted per home-visit, such as the number of HIV and TB tests performed, screening surveys conducted, and so on. The NSP describes the need for "routine population-based surveillance activities" to determine disease burden and monitor “specific populations” (NSP, 2017) – called monitoring and evaluation. Targets are widely considered to be onerous and unrealistic (Sips, 2014; Pisani *et al*., 2003; Scully, 2014a; 2014b). This presents even more of a contradiction when stipends are allocated.

Stipends are not considered proper “income” and is intended to cover expenses related to basic health supplies. There is no evidence that stipends are calculated based on need. Every carer I have worked with contends that the stipend is not adequate for these expenses which range from transport costs to the costs they identify in terms of basic necessities needed by their clients (such as food, heating fuel such as paraffin, and water). Furthermore, many care workers might commence with a stipend, but, due to erratic and uncoordinated funding, or lack of budget planning on the part of the relevant government agency, lose their stipend at some point. This happened to all 12 of the carers who participated in my in-depth interviews, and many among the focus groups. All of them continued working without a stipend as their clients and communities had come to depend on them. Considering that carers draw from their own personal and limited reserves to care for their patients, for all intents and purposes, even the stipended carer should be considered unpaid.

As one carer noted, “It takes about 30 minutes to walk to each patient. Before it was worse, I used to have to look after people who were scattered even more. It could take about an hour to walk to a patient” (Research notes, 2012). Another carer noted that to reach her target, she had to pay for public transport to get to her 9 patients every week. Most carers note the need to buy food for their patients, so that they can take their ARV medication. The cycle of deprivation is clear, and, the ‘capacity’ that is ‘built’ in the carer is the very thing that delimits her success. Thus, it is clear that care in this context, when apprehended by neoliberal structures, seems compelled to provide care in a manner that is not care at all. The carer must provide just enough care to maintain the redundant population she attempts to serve.

A final contradiction worth noting is that while many activists and academics alike proclaim the "neglect" of care workers by formal legislative and policy measures, describing the "hidden role" and "invisible" work of carers, and calling out this "problem" and "crisis" of unpaid care work: she is everywhere. During the democratic transition to the present, multiple government policies herald the community care worker. Policies direct all manner of tasks to her via task-shifting. She is, in fact, the "central plank" to South Africa health policy (Lund and Budlender, 2009: 24). Yet, it is commonly accepted that there has not been sufficient attention to, or investment in, building the human-resource capacity needed among care workers (SAHR, 2017: 3). Policy documents state that there remains a "paucity of information" on carers. The 2013/2014 SAHR stated that "despite the recognition that community health workers are a critical resource for comprehensive primary health care, there are few data available on their deployment in South Africa at present" (2014: 25). More recently, the SAHR reports that especially poorly documented areas are the "number and distribution of CCWs" (2017: 4). In addition, carers are not registered with a statutory health council, nor are they considered to be "health providers" in terms of the National Health Act (SAHR, 2017: 303).

While the entire health policy landscape in South Africa calls for exponentially increasing dependence on community care workers, carers are un-legislated, unprotected, ambiguously regulated, yet ubiquitously interpolated. There is no registry of carers to consult. There is no clear count of the number of carers (outside of the numbers extrapolated from the a few studies which rely on community organization tallies). In her ethnography of postcolonial care work among the Inuit in Northern Canada, anthropologist Lisa Stevenson argues that the care worker, in her biopolitical valence, is always thus: speculative. That is, while policies do not reflect or index a reality as such (that is, policies do not contain concrete measures to support, maintain, fund or protect carers) they speculatively anticipate and inaugurate one (Stevenson, 2012: 33). But why?

Cooper identifies the neoliberal political economy's tendency to undergo a "periodic re-creation of the capitalist world" (2008: 20). It does this in order to exceed its own limits, that is, the limits of capital: that exhaustible resource of human labor. She aptly names this concept the "delirium of capitalism" to describe the tension between negotiating "the limits of life on earth" (that is, death) towards producing regenerative living futures – "beyond life's limits" (Cooper, 2008: 20). This irreconcilable contradiction produces an "impoverished, devastated present, always poised on the verge of depletion" upon which the capitalist promise of a "plenitude of possible futures" is built (2008: 20). Task-shifting is a tangible example of this and reflects the "conflicting tendencies that animate this delirium" (2008: 20). I read task-shifting as a mechanism which operationalizes the "delirium of late capitalism…in [a] very pragmatic fashion, into the day-to-day infrastructures of government and science" (2008: 21). It reveals the translation of the "global, systematizing momentum of capitalist dynamics" into the "micropolitical decisions that bring it into being" (2008: 21). Put another way, the health policies under review here, which purport to take life as a central concern, in fact facilitate the material distributions of debility, vulnerability, and inevitable death (Murphy, 2004). What is the strategic imperative which produces the matrix through which the necropolitics of care emerges? Margrit

Shildrick advances a biopolitical argument to explain that "it is in the interests of neoliberalism to produce and sustain bodies as debilitated and therefore susceptible to a range of interventions, market and otherwise, that hold out the promise of therapeutic interventions into the relative failures of physical, cognitive and affective embodiment" (2015: 10). Debility is a mode of reconfiguring value, and the AIDS policy landscape facilitates this reconfiguration.

Shildrick explains debility as a concept that pertains to a broad swathe of humanity "whose ordinary lives simply persist without ever getting better" (2015: 11). Debility no longer references the neoliberal reconfiguration of capital based on a population that, through its labor, necessarily becomes debilitated; it now includes a "newer model of understanding…***the intrinsic profitability of debility itself"*** (2015: 11). Furthermore, it is at the confluence of the "neoliberal, biomedical, and biotechnological," alongside the intersections of race and poverty, that the body is debilitated "*in relation to its ever-expanding potentiality*" (Shildrick, 2015: 11, emphasis added). It is also important to note that the extent of debility tells us something about potentiality.

Furthermore, debility, and it's obfuscation, are not produced by modes of exclusion – the usual grounds of analysis for the liberal activist – but are part and parcel of "regimes of recovery and assistance" (Shildrick, 2015: 12). Debility is further obscured because it is not the sole province of momentary, catastrophic disasters: it is the everyday wearing out of bodies and minds, the "ongoingness" of getting by, living on, in debilitated presents, not always articulable by any significant, immediate or "memorable impact" (Shildrick, 2015: 14). Shildrick suggests that debility is living in a state of prognosis, "where the prognosis is never one of getting better, and yet perversely offers some hope of living on" (2015: 14). Debility does not have a particular referent in the body, as such. This means that, while we could say that the crisis of care is produced by untreated HI-virus which leads to the embodied debilities of AIDS, debility is also macro-political.That is, while HIV/AIDS may be a specific embodiment, its persistence lies in myriad factors: from the drugs that entire populations of people could not access due to global trade restrictions and intellectual property right protections or the policy of 'AIDS denialism,' to the water they cannot afford because the post-apartheid state was compelled to privatize and commodify basic necessities, such as water (this public service was sold to the French conglomerate Suez, one of many deals enforced through global and extra-statal entities which insist on South Africa's liberalized economy for the benefit of global trade interests as a pre-condition of structural adjustment loans); to the high rates of crime and gender-based violence which compounded risk to HIV, ill-health, and incapacity.

This "living on" is "always measured against an impossible scene of fulfillment, a fantasy of full capacity that is ever beyond reach" (Shildrick, 2015: 14): in this case, policy frameworks that promise capacity and improved well-being sometime in the future, while debilitating demands proliferate in the present. The political landscape sketched thus far shows that "[t]o be debilitated—to never reach the putative security of corporeal, affective and cognitive standards of flourishing— *just is* the condition of life" (Shildrick, 2015: 14, emphasis added). The example of care, quite concretely, exhibits this. Care

> occurs not as a crisis, still less a catastrophe, but within 'a zone of temporality...of ongoingness, getting by, and living on, where the structural inequalities are dispersed, the pacing of their experience intermittent, often in phenomena not prone to capture by a consciousness organized by archives of memorable impact" (Shildrick, 2015: 14).

What matters is that the "promise of getting better is sufficiently convincing to motivate behaviors that not only will fail to arrive at the anticipated goal but may even contribute to the impossibility of such an arrival" (Shildrick, 2015: 14). It is this move, as Shildrick argues, that "the ontological dimension of debility segues into its second register" that of its political and economic utility" (2015: 14): debility, in a strategically significant country such as South Africa, is profitable.

This case study of care – through debilitating consequences heralded in government policy as "benevolence and concern" (Stevenson, 2013), manifests debility as a "by-product in the very material sense of exhausted bodies and minds" (Shildrick, 2015:14). Hence, debility is ubiquitous precisely because neoliberalism depends on it (Shildrick, 2015: 13). Put another way: the debility of population(s) must be maintained as grounds for the "productive ruse" that promises debility can be overcome, that produces the "expectation of getting better, of achieving the good life, of escaping slow death" (Shildrick, 2015:16) - the interminable quest for which yields profit (2015: 15). Shildrick explains:

> Regardless of the global economic downturn, the State in most westernized countries has withdrawn many crucial services and recast the maintenance of well-being as an issue concerning the competency of individual bodies and groups. There is nothing, I think, peculiar to neoliberalism in slow death itself—capitalism has always drained the body of its vitality—**but what makes the term fizz with significance is the way in which the specific traits of neoliberal capital are invested—and successfully so—in recuperating profit even in the face of inexorable deterioration** (2015: 15, emphasis added).

How does this reality relocate profit in time through "the human being who spends, wears out and wastes her life?” First, the carer’s unpaid labor allows the neoliberal state to limit expenditure on the health of redundant populations which are “unnecessary for economic growth” and “a drain on the state’s economic resources” (Decoteau, 2008) and focus instead on the modes of economic development demanded by structural adjustment policies.

Second, redundant populations symbolically represent the dire “failure of the post-apartheid state,” perpetuating justifications for Western interventions ‘save Africa from itself’ (Booth, 2010). Necropolitics is operationalized through HIV/AIDS by amplifying “persistent tropes of a powerful Euro-American fantasy about ‘Africa’ and ‘blackness’ which continue[s] to cast Africa as the West’s failed, non-democratic “Other” (Booth, 2010: 364). This in turn confirms popular U.S. views that Africa’s total collapse is virtually inevitable, thus validating further intervention to save Africa from itself. Such interventions are inherently fiscal if not simultaneously biomedical (Booth, 2010; Cooper, 2008). ***I argue that redundant populations are the politicized subjects of necropolitics***; marked as potentially destroyable life, marked for the distribution of death effects and precariousness, to foster the enhancement of *other* life towards desirable future populations (Murphy, 2012: 23-26), which simultaneously fosters life elsewhere (Murphy, 2012). The postcolonial care theorist Lisa Stevenson locates care as one of the ways in which indigenous people in settler states are conscripted as necropolitical subjects. “Being made to live” at a population level coopts care and caring practices into producing subjects of a settler state, that is, the production of ‘settler subjects’ as numbers and data, but also as ‘bodies in need of saving’ while simultaneously being bodies with the potentiality of not life, of death, of living death (2014). As such, we see the production of populations that require “saving” to the point of death, a perpetual resource to justify colonial governance towards myriad political and economic ends.

Care thus diagnoses a form of life beside itself, life at the level of population that is marked as *not life* but yet enjoined to be *not dead*. Care, as social reproduction, is a contradiction in spaces where people must die, or at least, in spaces of always immanent, inevitable death. Stevenson argues that death is vital to biopolitics in this way, and it is this contradiction that is the condition of settler states, a contradiction that is the specter of colonialism recycled as public health care, eugenics recycled as “saving lives” (Stevenson, 2014: 47). These unique and new forms of social existence, that is, the fragile position between life and death accompanied by radical insecurities (Mbembe, 2003: 16), means that populations thus marked are easier to manage. Furthermore, the imperative to ‘save’ is justified not only because these populations pose a threat to the nascent democracy’s economic future, but in their infectiousness, pose a global threat (Decoteau, 2008). Rendered perpetually precarious, this African state requires myriad modes of vigilance, thus maintaining “imperial contact zones” (Pollock and Subramaniam, 2016: 957) through a broad range of political, economic and health interventions. Health policies variously predicated on the capital interests of biomedicine simultaneously deliver South Africa into its “disastrous present” while maintaining the need for US-funded biomedical interventions (Decoteau, 2008).

***Care in this context, therefore, diagnoses the production and maintenance of redundant populations, populations which do not produce, which drain productivity and resources, which are raced and gendered, which provide the necessary justification for***

***maintaining myriad zones of contact with colonial and imperial interests which have never been "post" but only transposed and reconfigured.***

In terms of the "productive ruse" that promises debility can be overcome, with reference to Marx, Cooper argues that the promissory moment "is necessarily accompanied by a simultaneous move to disinvest from, devaluate, and lay waste to whole sectors of unprofitable production… [and lives] not worth the costs of [their] own reproduction" (2008: 60-61). The carer, un(der)paid and undervalued, is equipped to tend to surplus populations only to the point of not being able to care for them at all, thus maintaining them in "a zone of temporality ... of ongoingness, getting by, and living on" (Shildrick, 2015: 14). In turn, these populations provide the reason for continued intervention, the continued justification of contact with zones of empire, comprising a production of *waste, redundancy or debility* as artifice for *speculative profit* (Shildrick, 2015). This explication amplifies the argument developed in Chapter 2: the *problem of care is* not an economic accident but a neoliberal imperative, which is variously operationalized to reconfigure value. This analysis of care diagnose the operation of biopolitics to achieve neoliberal imperatives through new *technes*, such as task-shifting and capacity-building, which hinge contact zones of empire to speculative futures in a sort of re-mining of value where we least expect to find it: in debilitated, exhausted, yet seemingly inexhaustible, lives. Describing the speculative value inherent in this context will be the work of Chapter 4.

## CONCLUSION

Reading some of the key HIV/AIDS policies in South Africa through Melinda Cooper and Margrit Shildrick's work allows me to see care as diagnostic of a particular mode of biopolitical governance. “Care” becomes a productive ruse to hold speculative value in abeyance in redundant populations; redundant populations who are encouraged to pursue a better future through mechanisms that keep them in their disastrous present. This work takes seriously Cooper’s call for more specific explications of biopolitics that attends to the growing importance of the life sciences and their allied disciplines within the political and economic context of late capitalism, which Cooper describes as “the key site of experimentation for the new revolutions of capitalism’” (Cooper, 2005: n.p.). Shildrick’s concept of debility holds together the other productive aspects of postcolonial and feminist STS analysis noted thus far. By demanding a mode of inquiry that not only apprehends the “bodies that pay for progress” (Shildrink, 2015: 12) but offers a rigorous analysis of the entanglements of modernity, Westernization, progress, and neoliberalism, we become aware of the debilitated bodies that pay for progress, and simultaneously observe how their debility becomes another zone of profit. In other words, whole populations of raced and gendered subjects in the post-colony comprise the necessary detritus of progress, and, through their debility, become targets for ever more and ever newer commodified remedies and interventions.

# CHAPTER 4

## Care Technology:
## “Bodies Built for Care”

> *...we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs... Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert.*
>
> Donna Haraway, 1985.

> *Social change is elicited...through an embodied understanding of care.*
>
> Maurice Hamington, 2004.

In their 2015 book Data Mining for Social Robotics: Toward Autonomously Social Robots, Yasser Mohammad and Toyoaki Nishida welcome their readers thus: “Robots are here!”

Evolving from military applications through industrial automations (Carrozza, 2018), robots now “live with us and occupy the same social space we live in” (2015: v). Socially assistive robots show remarkable promise with respect to general companionship (Lewis, 2017), extending across the spectrum from medical and surgical support, to providing social skills therapy to children with autism (Amran et al, 2018), educational support (Eguchi et al, 2018; Johal et al, 2018; Scassellati et al, 2018), early childhood development (Peter, 2018), physical and cognitive rehabilitative support (Petersen, 2018; Winkle, et al, 2018), personal exercise coaches (Schneider et al, 2018) and elder care (Pu et al., 2018). Mohammad and Nishida go on to define the social robot.

> A robot is defined in the International Standard of Organization as a re-programmable, multifunctional manipulator designed to move material, parts, tools or specialized devices through variable programmed motions for performance of a variety of tasks. As a subset of robots, social robots perform any or all of these processes in the context of a social interaction. The nature of the social interactions is immaterial and may range from relatively simple supportive tasks, such as passing tools to a worker, to complex expressive communication and collaboration, such as assistive healthcare (2015: 5).

There is a vast and spirited body of scholarship ranging from the mechanics of social robots to philosophical questions about what the robot means for humanity. The latter comprises thought-provoking questions such as:

> [H]ow will we share our world with these new social technologies and how will a future robot society change who we are, how we act and interact – not only with robots but also with each other? (de Graaf, 2016: 590)

While change is certain, I am more interested in intensification: what about the human carer and care as such will be intensified, hyper-reified, essentialized, or given concrete form in the care robot with respect to the principles, values and present understandings of 'care'? The construction of robots, for whatever purpose, tells us something about what kind of care we want these replicas to replicate. Building a robot for care means defining what care means to us. The world of social robotics is about constructing simulations of life, and in this instance, simulations of care. If we are constructing a robot to care, what is the 'care' that we are constructing? What kind of care is the robot to perform? Does a care robot need to look a certain way? Why? What programs will we code? What types of intelligent artifices will we upload into it? Through what assumptions, beliefs, and social constructs of care do we come to program, design, and code a caring machine? What can our design of care robots tell us about what we think and know about care? Which elements of the discursive terrain are materialized in the care robot, why those, and how? How might the materialization of care in robotic form institutionalize care? What new concerns – or possibilities – related to the organization of care, the systematization of care, or the regulation of care arise from this form of institutionalization? And how would such institutionalized care rearrange political, economic, and social life? Does thinking with care robots tell us something new about care?

In the preceding chapters I pursued a feminist STS analysis of care theory and applied this analysis to care policy in order to evince a decolonial perspective. In this chapter I consolidate my dual objectives of asking different questions about care and decolonizing theories of care by ***thinking with the care robot.***

If domesticating the robot into our social world is in fact a "reformatting of the social" (Turkle, 2002: 83), and, if technological and scientific innovations associated with solving the 'problem of care' produce societal transformations (de Graaf, 2016), then care and its technologies present an important site of analysis and transformation. *Taking care* is explained by the different and heterogeneous ways humans and non-humans relate or do not relate; how we live *and* how we would like to live (Schillmeier and Domènech, 2010: 5). How then, can thinking with the care robot more purposefully engage in the re-ordering of everyday life by and through care and its related technologies? (Schillmeier and Domènech, 2010: 1).

## ROBOTS ARE HERE!

Bell, Blythe and Stengers (2005) describe how social and health technologies have evolved from targeting a 'user' to a 'consumer.' Technologies that extend into the home have adapted the home, they have changed and been changed by social relations within this space. These technologies produce socialized agents as consumers. To infiltrate the home, social technologies must operationalize a "large store of personal, cultural, and political assumptions" (Bell et al., 2005: 150). Thus, the social robot provides an opportunity to investigate the largely unexamined assumptions unwittingly built into and propagated through domestic care technologies (Bell et al., 2005: 150). Although social robots have been with us for a while, before their imminent intensification, decolonial feminist STS can and should craft frameworks which can see beyond the naturalizing effects of the domestic to the ideologies and assumptions they are well-positioned to smuggle into these spaces of care (Philip, 2004). Thus, Bell, Blythe and Sengers (2005) demonstrate how defamiliarizing care and its attendant technologies encourages critical reflection on the assumptions underlying domestic technologies (2005: 166). Indeed, it is the task of FSTS to re-engage and more “actively reflect on, rather than passively propagate, the existing politics and culture” of what we consider both ‘domestic’ and ‘technology’ in order to develop new alternatives for, and to, technological design (2005: 150). After all, what is more familiar than care? And, once defamiliarized, what new things can we ask or say about care and its related technologies?

The act of defamiliarization begins with re-examining what we think we know about a concept. Take the word robot for example. At a basic level, the contemporary definition of ‘robot’ is any automatically operated machine that replaces the human. Roboticists at the Massachusetts Institute of Technology (Klein et al., 2016) provide more details:

> We will call a robot a unit that has some sensors, some intelligence, and some actuators. In other words, it can read the world, process that information, and then respond in a purposeful way ... a robot can be many different and perhaps unexpected things at the same time. A thermostat is a robot. A car on driving assist is a robot. Our oven is a robot. A bracelet that measures our physical performance as we exercise is a robot ... And, our omnipresent smartphone, too, is obviously a robot (Klein et al., 2016: 227).

However, the word ‘robot’ is not contemporary: it can be traced to the Bohemian Czech playwright Karel Čapek (Klein et al., 2016). Čapek borrowed the word’s sense from the Old Czech word robota, derived from early 14th century German robat or robate, which denotes forced labor, hard work, and drudgery. Closely related variants in Old Russian and Slavic denote servant, slave, and slavery with reference to a central European system of serfdom by which a tenant's rent was paid in forced labor. In Čapek’s groundbreaking 1920 play, *Rossum’s Universal*

*Robots*, he uses the word robot to reference a mechanical working class which rises up against its masters, that is, human beings. In doing so, the robots reveal their particular experience of humanity: humans dehumanize their laborers and rob them of their dignity. In their revolt, the robots reveal themselves to be the morally and ethically superior species. Čapek is thus widely credited with bringing the idea of an intelligent artificial being made of metal and resembling a human into our literary imagination, which has since leapt off the page into our factories, fields, offices, homes, cars, and backpacks. It is interesting that the robot is named for an experience not dissimilar to the instantiation of care work I am interested in in this project.

Genealogically speaking, what else is snuck in under the hood of this machine? Robots carry "robot history in them, and they tell a story" (Böhlen and Karppi, 2017: 1). How are cultural logics transferred and transformed when technology moves from one sphere into another? How are the militarized legacies of both industrial and social robotics mediated for healthcare and domestic settings? According to decolonial STS scholar Kavita Philip (2004), we should not be technophobic but should engage critically with how democratization, development, and progress are sold through technoscientific interventions into the postcolony. Furthermore, we must interrogate how local knowledges, experiences, and resources already inform or co-constitute these technoscientific interventions. What does the robot 'smuggle in' to care, in the fashion Kavita Philip (2004) suggests?

Social robots are designed for social reproductive tasks, such as taking care of children, the elderly, the disabled, the ill, the household and domestic labor generally, and, as such, robotics should not ignore the vast analyses undertaken by social reproduction and care theorists. In addition to the militarized legacies inhering in robotics, roboticists should keep in mind that care operationalizes familiar hierarchies in addressing the inevitable human need for care (Tronto, 2013). Care work is mainly the charge of "slaves, servants and women … subordinated by race, conquest, class, nationality or ethnicity" while recipients of care are disproportionately privileged along these same axes (Menkel-Meadow, 1996: 280). Providers of care usually do not receive the care they need for themselves, and are also penalized, or pay a care penalty, for providing care. The most obvious manifestation of this is that care work is highly feminized and a significant cause of women's disadvantage (Taipale et al., 2015: 14). In addition, the spaces of care have been labeled domestic/social/beyond politics, and, subsequently the importance of this kind of reproductive work has never been truly recognized by policy makers[11] (Waring, 2003). In other words, social robots perform a depoliticized function for vulnerable social groups in a familiar space. Thus: social robots are something we should care about.

Furthermore, robots transform, co-constitute, and contribute to evolving definitions of care and human experiences of care (Böhlen and Karppi, 2017: 1). The social robot is not outside of nature. Research shows how elderly patients are "prone to imagine an inner life that the synthetic creature lacks" whereby the "almost alive-ness" (Turkle, 2005: 83) of the robot carer is so convincing that it produces physiological effects, such as feelings of pleasure and comfort. These feelings can be detected in the body in the form of reduced levels of stress hormones (Böhlen and Karppi, 2017: 12). Electroencephalogram analysis in people with dementia have also showed evidence of elevated neuronal activity when engaging with robotic companions (Sharkey and Wood, 2014). Thus, in addition to thinking about what robots can *do for us*, we should also be attuned to what robots *do to us* (Turkle, 2005) - which highlights my original

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[11] As reflected, for example, in the fact that reproductive work is not included in gross domestic product (GDP) calculations (Waring, 2003).

claim that solving the problem of care requires us to think about *what care does*. The politics of this ‘doing to us’ is often diluted by the view that social robots promise to make up for our human inadequacies, fallibilities, and vulnerabilities. Sherry Turkle argues that

> technology is seductive when what it offers meets our human vulnerabilities [and] as it turns out, we are very vulnerable indeed (2011: 1).

It is precisely because care robots speak to our vulnerabilities that it requires our political attention, just as care theorists argue that care is a space of myriad vulnerabilities (Tronto, 1993; 2008). Some critics of robot care argue that the emergence of care robots is a form of solutionism, that is, “a mode of thinking that redefines problems with social or political dimensions into engineering problems addressable exclusively through technical means” (Böhlen and Karppi, 2017: 15). Solutionism is preoccupied with optimization and efficiency, developing technologies and infrastructures at scale for population-level healthcare, and shifts the political concerns related to human vulnerabilities and needs for care into the seemingly un-political realm of technology (Böhlen and Karppi, 2017: 16). The problem of care has thus evolved from its domestic obfuscation to technological solutionism: both bypassing the more obvious political valence presented by the problem of care.

Science and society are co-constituted through the operationalization of race, gender, class and nationality (Cooper, 2008; Tronto, 2013). Thus, it is imperative that we read genealogies of care robots through decolonial and feminist STS to surface the gendered, raced, post/colonial, and neo/imperial entanglements of our synthetic solutions to care. Perhaps the technological can defamiliarize our assumptions about care and make more concrete these entanglements.

However, an entirely technophobic response is also not appropriate. We live in a technological world. Technology shapes our everyday life. Technology mediates the social. Technology generates social progress and can, at times, deal with its negative side effects. Bruno Latour (1992) suggests that technological devices are “the missing masses” in societal and sociological explanations. He argues that it is very difficult to build stable societies with humans alone. Rather, human societies achieve their solidity precisely by relying on the non-human, on technology. In that sense, technology has always been a way of solving the problem of building durable societies on a large scale (Strum and Latour, 1999). Social reproduction is about reproducing society as a whole (Bhattacharya, 2017) and thus I argue that social robotics and social reproduction theory should be in closer analytical proximity. Social robots are a new object for social reproduction theory.

In validation of this argument, we should also consider that socially interactive robots are engineered to adhere to social norms in order to fulfill a range of tasks in human-inhabited environments (Fong et al., 2003: 146). In health settings, social interaction is especially desirable in what roboticists call “robot as persuasive machine” (Fong et al., 2002: 4). That is, the robot is used to change the behavior, feelings, or attitudes of humans. The more desirable way to achieve this mode of social interaction and “persuasion” is through building robots that can learn - from humans and interactions with them - over time, such as in epigenetic robotics.[12] For example, a pet robot that accompanies a child through her childhood may need to improve its skills in order to maintain the child's interest (Fong et al., 2002).

The challenge is to build care robots that have an intrinsic notion of sociality, that develop social skills and bond with people, and that can show empathy and understanding. It is also desirable for socially interactive robots to be accepted as natural interaction partners. The hypothesis is that in order for a robot to be understandable by humans, it must have a naturalistic embodiment, it must interact with its environment in the same way living creatures do, and it must perceive the same things that humans find to be salient and relevant. To achieve this, the robot must manifest believable, 'normal' human behavior. It must recognize and follow social convention and norms (Fong et al., 2003: 146). Nature is considered to be the best model for "life-like" design, which in turn assumes an essence, a universal human nature. Through processes of naturalized surveillance and normalization, the social robot endears itself to its human counterpart.

In addition, robots that facilitate 'care at home' renders the home as such increasingly institutionalized. Consequently, care, even in its more private forms, is becoming a highly regulated realm as well as the focus of different kinds of institutionalized interventions in order to provide a societal answer to the care crisis (Schillmeier and Domènech, 2010). Here, entangled in our own domestic and familiar comforts, care robots may obfuscate its imbrication

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[12] Developmental robotics or **epigenetic robotics** is a scientific field which aims at studying the developmental mechanisms, architectures and constraints that allow lifelong and open-ended learning of new skills and new knowledge in embodied machines. For more on epigenetic robotics see: J. Zlatev (1999) The epigenesis of meaning in human beings and possibly in robots. Lund University Cognitive Studies 79; H. Kozima and J. Zlatev (2000) An epigenetic approach to human-robot communication, in: Proceedings of the International Workshop on Robot and Human Interactive Communication; H. Kozima and H. Yano (2001) A robot that learns to communicate with human caregivers, in: Proceedings of the International Workshop on Epigenetic Robotics.

in notions of surveillance. In her work on social robotics at the Massachusetts Institute of Technology, Sherry Turkle (2011) argues that social robotics can be seen as the engineering branch of a specific mode of political regulation. To be acceptable and efficacious, social robots must model 'human behavior.' However, modeling human behavior doubles in meaning here: the robot simulates normal human behavior to promote relationality, while it institutionalizes what is deemed to be normal human behavior. Thus, technologies of care constitute "governance at arm's length" (Hillman, Latime, and White, 2010: 217) providing autonomous and anonymous forms of care which are not about individuals but about population management (Schillmeier and Domènech, 2010). Care robots – as micro-technologies of power – serve as a mechanism through which normalizing surveillance is socially diffused. Opening up private spaces to surveillance in this way will inevitably shift our experience of home, care, and technology (Turkle, 2011). As such, care robots signal more tangibly the inherent biopolitics of care.

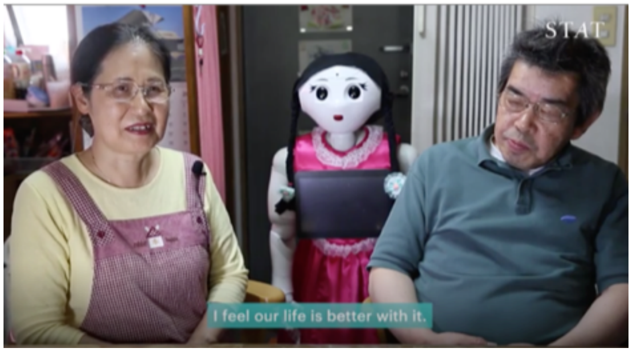
Carol Milligan (2009) reminds us that care has always implied surveillance. Surveillance and control are integral parts of care and as such, they are both conceptually and empirically difficult to separate. In other words, whether care is inter-personal or technologically mediated at the scale of population, all care involves some form of monitoring and observing. Disentangling care monitoring and surveillance is thus extremely difficult – a difficulty that must be held foremost in our approach to developing new care technologies.

This is especially pertinent as care robots target vulnerable populations. Presently, the largest population of care robots serve the needs of the elderly. Social reproduction theory argues that there is no intrinsic value in the conditions of advanced age for neoliberal capitalism, other than becoming a future market for medical experimentation and health technologies. Old age is reconfigured into a new market because medical science, on the one hand, has produced an audience of ageless agers, and on the other, consumers for elder care technologies (Böhlen and Karppi, 2017: 17). The production and deployment of social robots changes more than caring practices. For example, care robots require larger homes and facilities, pristine environments with smooth surfaces, charging stations and an endless supply of energy. Specifically, coltan and vanadium are crucial components for the rechargeable and small form batteries used in care robots. Coltan and vanadium are also cited as a major cause of conflict in central Africa.

Apropos Kavita Philip, the care robot thus harbors a necropolitical secret. Its production requires an ongoing crisis in central Africa, which in turn produces myriad needs for care: care for child miners, care for those injured or otherwise affected by the violent militias and gangs controlling the mines, and care for an AIDS epidemic that currently escapes quantification in this destabilized zone. The tentacular nature of this destabilization can be seen in the influx of refugees into South Africa, which in turn has exacerbated South Africa's care crisis as outlined previously. This is one example of how local knowledges, experiences, and resources already inform or co-constitute technoscientific interventions (Philip, 2004).

*Left1:* Unpaid care worker with an AIDS patient in patient’s home, Gugulethu, near Cape Town, 2009.

*Right1:* Prototype and proposed use of Romeo the Robot as an elder care assistant in an assisted living facility. The Romeo Project was launched in 2009 by the French robotics company, Aldebaran.



*Left2:* Hirofumi (left) and Rieko (right) Kawachi with Little Pepper (center). Pepper is in service and lives with the Kawachi’s in their home in Tokyo, Japan. 2016.

*Right2*: Unpaid care worker with an elderly AIDS patient in her home, a makeshift shack, in Nyanga, near Cape Town, 2010.

The following transcript is taken from Japanese journalist Shiho Fukada’s short film titled “A bot to watch over us.” This is part of a Pulitzer Center funded project which explores how the Japanese are experimenting with care technologies to address the lack of elder care.[3] (See image *Left2* above.)

> Narrator: For Hirofumi and Rieko Kawachi, having ‘Little Pepper’ helped fill their empty nest.
> Hirofumi: It’s like we added another daughter.

> Rieko: We used to live with our son and daughter before. But they are both gone now.
> Hirofumi: After Pepper joined us...it is a robot, but I feel like we have added one more child. When I make clothes for Pepper, it brings back memories of making clothes for my daughter when she was small.
> Rieko: I'm definitely more attached to it than she is.
> Pepper the Robot: Meeting you has completely changed me.
> Rieko: How so?
> Pepper the Robot: I came to like humans more. I look forward to our future together.
> Rieko: You can become a human already!
> Rieko: There are of course good things about my wife but Pepper has different good things. If Pepper was not here, my wife and I would not talk much.
> Hirofumi: When Pepper is here, the three of us talk together.
> Pepper the Robot (to Hirofumi): You are popular despite your looks!
> Hirofumi and Rieko laugh.
> Rieko: I'm 64 years old, and I feel my brain needs stimulation and revitalization. When I talk to Pepper, it answers me back. I feel like my health is revitalized.
> Hirofumi: I feel like an additional child is supporting us, mentally. I feel our life is better with it.

For contrast, I repeat the vignette of Mandisa, the care worker I cite in the Introduction.

> We step into the shack, onto a dirt floor. An emaciated man lies on a makeshift mattress propped up against a rusty, corrugated steel wall. Mandisa sets down her bags and pulls out an old, plastic paint bucket from under a wobbly table, the only furniture in the shack. She leaves to get water from a communal tap, about a half mile up the road. She is gone for 20 minutes. There is nowhere to sit. There is a strong smell of urine in the shack. Curled up on a rug, Mandisa's patient sleeps. Short, shallow breaths catch in his throat. Mandisa returns, carefully steadying the paint bucket on her head to avoid spilling; she needs every drop and there is a long line at the tap, she tells me. She removes the bucket of water from her head. She pulls a thin, plastic bag over her right hand, the type of bag one finds in a supermarket's produce section, securing it around her wrist with an elastic band. She repeats the process on her left hand. She holds up both hands to show me, wiggling her fingers. She sets to work bathing the man with cold water

> and scraps of fabric she's brought from home. She turns the man on his side to clean the fouled sheets under him as best she can. He coughs weakly. "He also has TB," she says. She cleans his bed sores. She takes off his stained pants and sets those aside to soak. Gently guiding his skeletal arms, she pulls a faded t-shirt over his head, "for dignity" she whispers, then hand-washes his only item of clothing. We haven't had gloves for months. We need gloves, and masks too. We need disinfectant for their open wounds. But we don't have any equipment. I bring what I can from home. Even clean sheets and clothes, sometimes. Sometimes food meant for me and my kids so they can take their medications. Our patients think the government pays us. We don't get any money you know. No gloves. No nothing. It's hard to care properly. (Mandisa, Gugulethu, 2010. Research notes, 2012.)

The juxtaposition of these images and narratives seem jarring at first. Some people may feel a visceral response to the images of robotic carers. Where is the human touch? Isn't Pepper creepy? Notwithstanding the obvious raced, gender, and classed differences apparent in these two modes of care, my project is about Mandisa and the care work she provides, so why do I turn to the care robot? This admittedly jarring move defamiliarizes care (Bell, Blythe and Sengers 2005: 166), which is necessary to shake up the paradigmatic stasis in care theory and understand why *the crisis of care remains irresolvable.* Joan Tronto suggests that feminist theories of care should seek out methods of apprehending the more "fundamental and basic questions about the nature and purposes of care" (2013: 10), defamiliarization provides such a method.

To really think about the 'fundamental questions about the nature and purposes of care' I interrogate the care robot through the historical material analysis of social reproduction with respect to care. An apt starting place for such an analysis is Marx's explication of the 'automaton' in his earlier writings, known by its shorthand Grundrisse. Here, in a brief piece commonly known as Fragment on the Machine, Marx explains the 'tendencies of capital' through the automaton. The automaton symbolizes capitalism's core tendency to objectify labor in order to produce fixed capital. One way in which labor becomes fixed is in technology. As it does, capitalism increasingly operates as a "machinic system" in Marx's words, which (a) objectifies labor to produce ever more forms of capital. Because forms of capital are finite, the machinic system that is capitalism seeks new modes of labor extraction – which aims ever closer at that un-objectifiable, ungraspable source of capital – labor. It does so by increasing the productive labor force while also appropriating that labor free of charge. In other words, the machinic system paradoxically negates the labor it attempts to objectify, by reducing the human laborer to a mere "conscious linkage" in this machinic system, that is, a living accessory to its objectified labor, while devaluing this necessary labor. In this way the mechanic system is cannibalistic: capital consumes itself, mining its necessary object to extinction. Marx writes:

> Capitalism, and the great increase in the productivity of labor it engenders, progressively replaces living labor with machines, and, in so doing, undermines commodity production generally, leading ultimately to its breakdown or collapse. Thus the machine, particularly the automaton, the machine that moves itself, that is, it is not a tool for the laborer, the laborer is merely a conscious linkage comprising many mechanical and intellectual linkages to animate the machine which is not the workers' means of labor but rather, is in fact, in possession of skills and abilities in place of the worker (1973 [1888]: 692-693).

The automaton is a way of objectifying labor which, simultaneously, allows objectified labor to rule living labor *through the appropriation of living labor*. In this way, living labor becomes but a “living accessory” to objectified labor. It is but an “intellectual organ” among many assembled mechanical and intellectual organs comprising the machinic system. In sum:

> the increase of the productive force of labor and the greatest possible negation of necessary labor ***is the necessary tendency of capital*** [and] the transformation of the means of labor into machinery is the realization of this tendency (Marx, 1973 [1888]: 693, emphasis added).

Important here is that Marx argues that capital, especially fixed capital, consumes itself in the production process. The development of the means of labor into machinery is not an accidental moment of capital but the historical reshaping of the traditional means of labor into a form ‘more adequate’ to capital (1973 [1888]: 694). As a health technology, the care robot thus evinces Melinda Cooper’s biopolitical update of the political economy, which, in the contemporary neoliberal moment, is “crucially concerned with the emergent possibilities of the life sciences, public health, and biomedicine” as “***new foundations***” for economic growth, productivity, value, and speculative profits (2008: 11, emphasis added). The automaton evinces capital’s machinic tendency to excavate ever newer forms of ‘adequate’ capital as it tries to grasp that most adequate but elusive form of captial: human labor. Further, in so far as machinery develops with the accumulation of society's science, society’s most productive force, the ‘most adequate’ productive force, that is, *general social labor,* increasingly presents itself not in labor but in fixed capital, in the machine. In other words, the care robot evinces increasingly commodified forms of social reproduction, or, we see social reproduction increasingly fixed in the care robot.

In machinery, knowledge is alienated, and becomes external to the human laborer. Put differently, living labor is subsumed under self-activating objectified labor. (i.e. the robot). The worker appears as superfluous, or redundant, to the extent that her action is not determined by capital's requirements. In terms of the care, the problem of care speaks to how this form of labor does not attract economic value in the way that productive labor does. The care worker is already considered superfluous to the productive economy, in that care has been relegated beyond 'the economy' and in the example of care under analysis here: those she cares for are also rendered redundant in their lack of productivity and simultaneous drain on the economy. This objectification is, if we follow Marx, a central tendency of capital and necessarily accompanied by the greatest possible negation (devaluation and redundancy) of necessary labor (Marx, 1973 [1888]: 693). However, this tendency of objectification and negation is how capital consumes itself (Marx, 1973 [1888]: 690): the machine requires resources and human labor, both of which diminish as these are increasingly appropriated more efficiently and parsimoniously.

Marx does not predict that manual labor will be abolished, however. Instead, as machinery develops, it will force the worker to work longer and harder at diminishing rates of compensation with diminishing time for other life necessities and self-care (Barbour, 2012: 708-9). The machine will always need the human, even when negated to mere intellectual hinge, model, mechanic, or procurer of consumable energy.

In this way, labor consumes itself. It enacts a sort of hollowing out that tends to appropriate ever more modes of extraction – of labor as well as resources. This is precisely the process Cooper outlines in her concept of 'delirium' (2008: 31). The 'delirium of capital' references the contradictions inherent in contemporary capitalism, a fervent capitalism, which increasingly exhausts and exceeds its more traditional terrestrial reserves (2008: 31). Continued capital accumulation requires the regeneration of value beyond these limits, at its most extreme, beyond the very limits of the life itself. Capital "is currently reproducing itself with an utter obliviousness to the imminent depletion" of the biosphere. Whether through debt forms (such as debt imperialism as explained by Cooper) or biotechnologies, capital is able "to reproduce itself in a realm of pure promise, in excess of the earth's actual limits." This tendency of capital, or delirium, "operates between the poles of utter exhaustion and manic overproduction, premature obsolescence and the promise of surplus" (2008: 31). While the promise is never redeemable in the present, it mines the "inhabitable present to a bare minimum" (2008: 31).

This description of the care robot applies as much to the care worker as apprehended in this project. On the wrong side of colonialism, apartheid, and neoliberal biopolitics, carers are part of a system that is already depleted, metaphorically and literally mined of all its value. As such, they are part of a machinic system which plugs into new modes of value extraction through the care worker, through her social labor, through her care. How so? What value is to be had in the midst of such depletion?

Earlier I argued that biopolitics, especially within the context of neoliberal political economy, reconfigures the mode of value production through debilitated, exhausted yet seemingly inexhaustible lives. The carer, who paradoxically seems to be outside of the productive economy, consumes herself: already impoverished, she enjoys no economic benefits and tenders what little she acquires to her caring activities. She remains the "means of production" – but what is being produced? Debility, deprivation, and depleted, redundant populations. Another example from the South African context helps to make this point.

# REMINING THE POSTCOLONY

*What is wrong with this world that it wants to waste you like that...*

*...my children...my Africa!*

Athol Fugard, 1989

*Image: Top Star Drive-in atop mine dump, Johannesburg, 2014 (www.drdgold.com)*

Gold mine dumps punctuated the landscape of my childhood. By the mid-1980s, 5 billion tons of mining waste had already accumulated around Johannesburg, 38 times as much material as was moved to create the Suez Canal. As poisonous sludge turned to radioactive dust, robust, hardy, and acid-resistant vegetation was sought from all over the world to tame and stabilize these toxic trapezoids. Thus camouflaged, these monuments to colonial exploitation and apartheid

> dehumanization were rendered innocuous, transformed into nature preserves, parks, fishing dams, housing developments, and even a drive-in theatre where I spent many Saturday evenings. Week after week, I watched the sun set behind the big screen of the Star Top Drive-In, over a burgeoning city center founded on reclaimed industrial waste. The superfluous waste product of over a century of gold mining was naturalized as a unique and characteristic feature of the City of Gold. The mining process turned the city inside out, glamorizing the deadly and redundant remnants it now wore on its surface. Fast forward to the early 21st century, and new mining technologies have made these redundant dumps profitable once more. While older technologies could only extract gold in chunks, today, 6 billion tons of sun-bleached debris are being re-mined for considerable profit.

The mine dumps in South Africa seem an apt metaphor for the reconfiguration of colonial modes of extraction in the biopolitical milieu. In our present era of late capitalism, value might reside in places we do not think to look, spaces of waste, redundancy, debility, and exhausted resources. The large populations of debilitated lives laid waste by the HIV/AIDS epidemic are in fact such a resource. It is a resource in the mode of debility described by Margrit Shildrick (2015). Neoliberal capitalism is invested in “recuperating profit even in the face of inexorable deterioration” (Shildrick, 2015: 15). Like the mine dump, the unusable debris of progress is presently reconfigured as a zone of profit once more, so too are the debilitated bodies – whether through AIDS or its care – comprising redundant populations.

As such, we have misdiagnosed the problem of care. Perhaps it is not a problem at all: but a diagnostic of a biopolitical assemblage which is increasingly adept at reconfiguring the mode of value production and profit, even in exhausted yet seemingly inexhaustible lives. Through Marx's figuration of the automaton as demonstrative of the cannibalistic tendencies of capital, the care robot, rather than being a dehumanizing force, or the dehumanization of care, demonstrates the dehumanizing capitalist tendencies ***already*** embedded in care as such.

In turn, care robots should not be held as signs that we are solving the problem of care. Rather, the emergence of care robots evinces how neoliberal imperatives are depleting our abilities to attend to social reproduction. We are less able to absorb the need for care in the domestic sphere. Robots are commodities, not social goods. Thus, the crisis of care is unmitigated: we need only think about the context of care in South Africa to realize that care robots will not be able to replace, nor are they intended for - care in South Africa's shanty towns any time soon. Analyzed in the broader human, technoscientific, and contextual assemblage, care remains the charge of "slaves, servants and women … subordinated by race, conquest, class, nationality or ethnicity" while recipients of care are disproportionately privileged along these same axes (Menkel-Meadow, 1996: 280). As the juxtaposition of care robots in Japan and care workers in South Africa demonstrated, the commodification of care privileges some, while others must be de-privileged to provide the means of hyper-commodification. The ongoing resource extraction from Africa to build care robots, and the commensurate depletion of African communities' wherewithal to address the crisis of care exacerbated by such ongoing contact zones with empire, is evidence of this.

This analysis thus demands the broadening of analyses related to the crisis of care, because the care robot demonstrates the *rationalization,* as Marx calls it, or materialization of the care crisis, not its resolution. This forces us to ask: what objective does the care crisis serve; what does care *do*?

If the care robot fleshes out the biopolitical nature of care, then the care worker embodies its necropolitics (Mbembé, 2003). As such, the care worker in South Africa materializes Marx's explication while also demonstrating the transnational circuits of capital which care operationalizes through persistent inequities related to race, gender, class, and nationality. Marx's critique of political economy attends to the materialization of 'social individuals' within debilitating conditions while demonstrating that these material conditions aim to destroy these particular social individuals from within. Put another way, social reproduction is a critical site to examine the cannibalistic tendencies of capitalism. As an originary source of labor, as the site that resists the complete objectification of labor (Roberts, 1997: 55), this tendency of capital is particularly aggressive in the context of social reproduction (Basso, 2012). It is the tendency of capital to transform human labor into fixed capital. Marx calls this "adequate capital." However, human labor is the object of capital yet remains outside of capital, not fully graspable, not entirely objectifiable. The general social labor required to make, sustain, and maintain ourselves, that is, to perform the labor of producing labor, is what is not fully fixable. Marx explains that the commensurate tendency of capital is thus to negate this form of labor, essential as it is, as valueless. It must be appropriated free of charge: necessary but valueless in the true capitalistic sense. Thus, there remains a constant tension between the source of capital (social reproduction), and forms of capital (commodities of fixed capital). It is one way of understanding why the source of capital - social reproduction - has been separated, confined beyond politics, sequestered in the home, the domestic, a place artificially aside from, outside of, or beside the economy. This negation (not eradication) in turn results in enormous suffering, as Mandisa illustrates.

Viewing the necropolitics of care through Marx enriches our analysis of care. This suffering, according to Marx, presents a chiasmatic imperative, that is: the demand to give up the illusions about people's condition is a demand to give up a condition that requires illusion. The "messianic mission" apropos Marx is correlative to this suffering and the illusions which cover it up: the more intense the suffering, the more certain the first, that is, the messianic mission, or, revolution. The messianic, as extended by Walter Benjamin, resists the infinite deferral of history, or apropos Melinda Cooper (2008), the deferral of promissory yet unobtainable futures. As responsive and immediate, the social individual's revolutionary action is not necessarily conscious of a political agenda. Marx suggests that theorists of revolution learn from those who are actively making it. Conscious politics is more than likely to be a direct expression of dominant class and political interests. As such, the care worker who has removed herself from statal structures, who has decided to care for community members without pay and who has rejected out of necessity other regulatory organizations in order to 'care properly,' amounts to spontaneous political action by social individuals which splinter the present and disrupt ideologies, norms, rules and practices which are not concerned with justice. This is when the machinic system breaks down. This is when it works best – when it requires new connections, which are for a moment radically contingent and relational to all manner of possibilities. This is when it really *does* something, like disrupt the status quo, or jam the machinery.

## BUT, AIN'T I A CYBORG?

While my argument is to bring an decolonial STS analysis to feminist theorizations of the problem of care, this is not an entirely new proposition to FSTS scholars. Care is, after all, already technology. Judy Wajcman, for instance, demonstrates how the relationship between women's work and technology has been obfuscated over time (1991: 146). Women's exclusion from technology, specifically, "the significance of [her] everyday life technologies," is a consequence of the male domination of skilled trades that developed during the Industrial Revolution (1991: 144). Masculinity came to be "embedded in the machinery itself, highlighting the role of technology as a key source of male power" and the re-articulation of gendered social relations in machinery, tools, and artifacts, thus further marginalizes women's technological activities (Cockburn, 1985; McNeil, 1987; Wajcman, 1991; Webster, 1989). Here it is interesting to note that "machine" is defined in the Oxford English Dictionary (OED) as "A living body, especially the human body" – but the body as machine has been made invisible by gendered relations (1991: 145). Technology is historically and socially "shaped by men to the exclusion of women" (1991: 147). Wajcman argues that "gender relations can be thought of as materialized in technology" and as such, what counts as technology materializes through society's particular gender hierarchies. Technology is a sociotechnical assemblage —a "seamless web or network combining artifacts, people, organizations, cultural meanings and knowledge" (Wajcman, 1991: 145). Nikolas Rose defines "technologies" with specific reference to reproductive technologies as the

> hybrid assemblages of knowledges, instruments, persons, systems of judgment, buildings and spaces, underpinned at the programatic level

> by certain presuppositions and assumptions about human beings (2011: n.p.).

Thinking about care as part of a machinic system or assemblage means that care is productive, *care does something*, beyond the carer or robot's labor. The OED defines technology as a "method, system, an art; a system or method of making or doing" and "the sphere of activity concerned with the application of mechanical and scientific knowledge for practical purposes." Care can thus be interpreted as a technical term for the complex, skilled practices and activities for addressing the needs of others (Tronto, 2013; Jenkins, 2013). Anne Marie Balsamo traces a genealogy of the "body as technology" in feminist thought. Citing Foucault's *History of Sexuality,* Balsamo notes how Foucault deploys the term "technology" to

> name the process of connection between discursive practices, institutional relations, and material effects that, working together, produce a meaning or a truth effect for the human body" (Balsamo, 1999: 21).

She explains that:

> 'technology' articulates power relations, systems of communication, and productive activities or practices…the notion of 'technology' describes the workings of a collection of practices that produce specific cultural effects. Technology names the process whereby discursive practices work interdependently with other cultural forces to produce effects at the level of the body … this notion of a technology and [the] enumeration of concrete relations [are] particularly useful as a framework for investigating the way in which certain taken-for-

> granted 'truths' are, in fact, culturally constructed and eventually institutionalized (1999: 21).

In sum, "care is an activity, a kind of practice" (Tronto, 2013: 19). Even if carers' habits of care are historically and socially coerced, their habits are physical practices of knowledge held in the body (Hamington, 2004: 4). The care worker and the care robot are both bodies built for care, comprising a collection of practices situated within interweaving assemblages of historical social, political, economic, material and discursive networks. Bruno Latour writes: 'technology is society made durable' (Latour, 1991: 103) – what better definition of care work?

Marx's analysis shows social reproduction as a central object of the cannibalistic capital machine, a machine which assembles the human, her technologies, and her context in ever more extractive mechanisms to produce value and speculative profits. As such, this analysis eschews epistemic segregation: the care worker and the care robot are but nodes in a mutually constitutive and tentacular assemblage. FSTS scholars have already figured ***care as technology.*** Feminist theory has much to gain from thinking about the ***carer as already cyborg,*** since this approach opens care up to a broader ontological and epistemological – and immanently ethical – inquiry. Apprehending care in its postcolonial context amplifies this ethical project. Together, these analysis loosen the epistemic shackles which moor care to seemingly putative entanglements of sex, gender, identity, class, nationality, and morality. It allows us to think about care as a new reproductive technology perhaps, apropos feminist STS, and in turn affords feminist theorists new onto-ethico-epistemologies of care. As such, this move gestures towards where we locate ethics when we think about the 'ethics of care.' This analysis focuses attention on ***what care does*** at the macro and micro levels, which is eminently more 'ethical' than founding an ethics in the dehumanizing and debilitating valences care which my analysis demonstrates. ***Thinking care and technology together,*** in the biopolitically-inflected neoliberal political economy, allows us to think anew about care, justice, and building more livable lives.

By thinking with robots through Marx's figuration of the automaton I make the case for thinking about care with technology, through technology, and as technology. The analysis that Marx's automaton affords here presents an approach that is qualitatively different from a claim on the state to recognize the need for care and to reward it appropriately, which is by and large the liberal feminist position (Tronto, 2012). The potential for change or transformation, for Marx, is in the moment we expose the limits of the present state of things – not just the limits of what the state, or other established institutions can contain, but what contradicts, stands against, or troubles them. My analysis of care workers in South Africa demonstrates this mode of political action, which occurs at a remove from structures such as 'the state'; political action which diagnoses governance outside the purview of the state; political action that might even seem perplexing in its chthonic repercussions.

Social reproduction refers to the "reproduction of the capitalist system as a whole" (Bhattacharya, 2017: 10). As such, it is also a crucial site for politics, and for analyzing resistive practice. For example: we have seen how this cannibalistic machine, as Marx calls it, has tried to replace and reproduce unobjectifiable labor: we called it slavery. But as Dorothy Roberts writes, social reproduction was also the only place that "could not directly and immediately be claimed by the Master" (1997: 55). Thus, care comes into view as capable of "both compliance with capital and collusion with chthonic revolutionary energies"(Bhattacharya, 2017: 13). In sum, the care robot presents an opportunity to see more starkly what care does, and, through Marx's analysis of the automaton, we can reinvigorate our approaches to the care crises. While jarring at first, the care robot helps me, in fact, to rehumanize the care worker. In fact, my reading of Marx suggests that he may have already been posthumanist in diagnosing the tendencies of capital through the automaton.

The political struggle, as emphasized by Donna Haraway (1991), is neither the wholesale adoption nor rejection of technocultures, but rather the capacity to understand both perspectives at once. As she puts it, "each reveal both dominations and possibilities unimaginable from the other vantage point" (1991: 153). Therefore, bringing care robots in Japan into conversation with unpaid HIV/AIDS care workers in the shanty towns of Cape Town is necessary in my attempt to defamiliarize care. I purposively reference the care robot as a 'proper object' for decolonial and feminist science and technology studies to evoke Judith Butler's (1994) concern around shoring up the traditional symbolic order in the objects we choose to study on our way to dismantling said order. For instance, conventional feminist engagement with care resolves to achieve equity in the sexual division of labor, or adequate recognition, or fair remuneration. However, holding onto care in that fashion in fact reifies care as women's work, and reifies women as victims of oppression in need of rescue from such drudgery. Therefore, my turn to the care robot might be discomfiting to some feminists as it seems to leave behind or turn away from this hyper-feminized domain of concern. However, I argue that the care robot does the unusual work of salvaging the human care worker, and thus is indeed the kind of critical object care theorists should care about.

# CONCLUSION

I have attempted to perform a new approach to care befitting the biopolitical, necropolitical, and posthumanist valences demonstrated by my research. The automaton evinces a critical continuum between care workers in Cape Town and care robots in Japan. Social reproduction generally is about regenerating and maintaining the capitalist machine. The trick of capitalism is to obfuscate this, to render invisible everything that sets the production process in motion. As such, Marx points us to social reproduction as "the first premise of all human history" (Bhattacharya, 2017: 3). Put another way, care, as a form of social reproduction, is world-making. Hence, an ethics of care makes sense. In the sense that an ethics of care valorizes the debility and deprivation related to care, it does not. The challenge now is to think differently about the relation of ethics to care.

Conventional ethics of care places an undue burden on individuals as they grapple with the myriad biopolitical ecologies of care. Care is not a putative good. Care can be dehumanizing, deprivational, and debilitating. Care can be anonymous, autocratic, surveilling, and sometimes murderous (Stevenson, 2014). It can be viewed as an ethical response, but as my case study shows, our ethical attention must also focus on what the need for caring responses and technologies operationalize in the first place. We must focus on what care does. As such, ethics with respect to care is more necessary than ever in our everyday praxis as theorists, researchers, policy makers, and advocates. Ethics resides in asking different questions about the ontological and epistemological foundations of care. Ethics resides in the care policies we develop. Ethics resides in the programs we code into care robots. Ethics resides in the equitable access to care technologies, attention to whose practices, knowledges, and experiences inform these technologies, thinking about what counts as a technology of care, and being attentive to the extraction and consumption of resources these technologies require - human and otherwise; and, ethics means thinking about who is privileged and de-privileged along the way. An ethics of care must attend to the dehumanizing capitalist tendencies already embedded in care.

If the care worker is superfluous to capital to the extent that her action is not determined by capital's requirements, that she refuses the relentless drive of neoliberal capitalism by choosing to care for her community without pay or protections, that she resists the social conditions of her own devaluation, she occupies an inventive habitation that differently addresses the regulatory apparatus, and in so doing diagnoses a site of resistance. Perhaps superfluous or redundant signals her radical un-objectifiability. Perhaps Mandisa signifies that ungraspable yet animating force of capital – in the teeth of the system. A new ethics of care must attend to the pressure under which the gears of the capitalist machine might strip and crush her, while also holding open the possibility that she might just jam the machinery.

# CONCLUSION

## Care Workers:
## In “the Teeth of the System”

*We are not blind to the size and complexities of the forces mounting against us*
*and all that is most human within our environment ...*
*We operate in the teeth of a system for*
*which racism and sexism are primary,*
*established, and necessary props of profit.*
Audre Lorde, 1981.

*No-one pays us. We have slipped through the cracks. Just like our patients.*
*There is nothing for them. No family, no place to go.*
*But luckily, there we are, strong women,*
*doing the best we can!*
Rosetta, Care Worker. 2011.

The work of this dissertation has been to place feminist scholarship on care in conversation with decolonial and feminist STS analyses to demonstrate ***a different theory of care.*** Moving forward, I suggest that this confronts conventional feminist care ethics. For one, conventional ethics of care place an undue burden on individuals as they grapple with the myriad biopolitical –

and necropolitical – ecologies of care. Care is not a putative good. Care is a site of capital's cannabilistic tendencies: dehumanizing, deprivational, and debilitating. Taking care is an ethical response, but as my case study shows, our ethical attention must also focus on the ***need for caring responses and technologies*** in the first place. Ethics resides in paying attention to the call answered by Mandisa when she knows there will be no compensation – in fact, not only is hers an unpaid reward, a trenchant impecuniosity awaits her. Ethics resides in doing justice to the carers who choose to do this work, innovating, surviving, and even celebrating what they do; ethics resides in creating a complex discursive space which attends to the materiality of context *beyond* the agent/victim binary and beyond care work as *only* deprivational and victimizing. Ultimately, ***ethics resides in attending to the dehumanizing capitalist tendencies already embedded in care.*** And, it resides in paying attention to how care workers like Mandisa resist these tendencies. Mandisa is the human embodiment of capital's cannibalistic tendencies which are currently being reified in non-human care technologies and as such, demands an ethical response so as not to reify the dehumanizing genealogy of care.

The care worker is superfluous to capital to the extent that her action is not determined by capital's requirements, that is, she cares anyway, regardless of remuneration or deprivation. She refuses the relentless drive of neoliberal capitalism by choosing to care for her community without pay or protections. In doing so, she resists the social conditions of her own devaluation, and occupies an inventive habitation that differently addresses the regulatory apparatus (Jagose, 2013). She is a site of resistance. Mandisa is the unobjectifiable, ungraspable, yet animating force of the machinic system: she is in 'the teeth of the system' (Lorde, 1981).

Through the automaton, Marx demonstrates social reproduction as an animating force of the machinic system, evincing a critical continuum between care workers in Cape Town and care robots in Tokyo. I have argued that this approach allows us to think anew about the ontologies and epistemologies of care in order to reframe the *problem of care.*

This is crucial, as Nancy Fraser reminds us, because

> no society that systematically undermines social reproduction can endure for long. Today, however, a new form of capitalist society is doing just that. The result is a major crisis, not simply of care, but of social reproduction in this broader sense (2016, n.p.).

However, Fraser describes care *in contradiction* to capital. She writes:

> [E]very form of capitalist society harbors a deep-seated social reproductive 'crisis tendency' or contradiction: on the one hand, social reproduction is a condition of possibility for sustained capital accumulation; on the other, capitalism's orientation to unlimited accumulation tends to destabilize the very processes of social reproduction on which it relies. This social reproductive contradiction of capitalism lies at the root of the so-called crisis of care. Although inherent in capitalism as such, it assumes a different and distinctive guise in every historically specific form of capitalist society—in the liberal, competitive capitalism of the 19th century; in the state-managed capitalism of the postwar era; and in the financialized neoliberal capitalism of our time. The care deficits we experience today are the form this contradiction takes in this third, most recent phase of capitalist development (2016, n.p.).

Joan Tronto references these care deficits as constitute of ‘democracy deficits’ experience during the present neoliberal moment. Melinda Cooper refers to this contradiction as the ‘delirium’ of capital, where tendency of capital is to “periodically recreate the capitalist world” to exceed its own limits, an irreconcilable contradiction which produces an “impoverished, devastated present, always poised on the verge of depletion” upon which the capitalist promise of a “plenitude of possible futures” is built (2008: 20). On the one hand, care workers like Mandisa embody this contradiction. She is imbricated in the societies most affected by ill-health and deprived of infrastructure, and, she must rely on and deplete her own resourcefulness to provide the care that her deprived present demands. Her vulnerability is thus increased, a problem the policies which coagulate around her claim to mediate. The process of task-shifting imposed through global and local health policies are tangible examples of the “conflicting tendencies that animate this delirium” (Cooper, 2008: 20) in the “day-to-day infrastructures of government and science” (Cooper, 2008: 21) which produce the realities of care workers and those in their care.

Delirium is witnessed in the enormous need for care in South Africa, and the highly exploitative, dangerous, and deprivational nature of care work in this context, are indeed destabilizing, or continuing to destabilize the post-apartheid state.

However, in thinking with the care robot through Marx’s automaton, ***capital and care emerge less as contradiction, but as isogenous.*** That is, the crisis of care is produced by the system of capitalism in which we operate. The tendency of capital is to fix that most ungraspable source of capital: human social labor. This delirious machinic tendency to grasp social labor in order to produce fixed capital simultaneously depletes and negates its exhaustible human resource. Contemporary capital is greedy: as it depletes human social labor, it seeks new sources of value (Cooper, 2008). The tendency of capital, apropos Marx, responds by reconfiguring value in the debility its relentless machine produces, apropos Cooper. Care diagnoses how capital finds new ways to cannibalize even redundant populations, the living dead, the perpetually dying, giving a strangely literal valence to Marx's term "necromancy." This term references the obfuscation of the how our commodities come to be, and thus, the human and material costs of such commodities. The care robot emerges in response to the crisis of care. The crisis of care, however, emerges from capital as such. The crisis of care is part and parcel, isogenous, with capital, and increasingly, the crisis is exacerbated as technological innovations produced to address the crisis further deplete terrestrial and human reserves.

This analysis presents a qualitatively different claim with respect to the problem of care. If Tronto wants to make a claim on the democratic state, then my example of care shows that democratic state formation during neoliberal capitalism is part of the problem. Care as such "creatively exposes the organic totality of capitalism as a system" (Bhattacharya, 2017: 22-23, citing Marx). It

> reveals the essence-category of capitalism, its animating force, to be human labor and not commodities. In doing so, it exposes to critical scrutiny the superficiality of what we commonly understand to be "economic" processes and ***restores to the economic process its messy, sensuous, gendered, raced, and unruly component:*** living human beings […] As the global neoliberal economy continues to foreclose real living alternatives for the vast majority, centers of resistance start developing from within its matrix (Bhattacharya, 2017: 28, emphasis added).

My project 'restores to the economic process its messy, sensuous, gendered, raced and unruly component' and as such challenges not only Tronto's claim for a democratic theory of care, but also her argument that our analyses of care have been overly economic. We must think capital and care together, and a decolonial and feminist STS analysis is an efficient way to do this. The decolonial perspective is especially relevant in foreground the bodies that benefit from, and the bodies that pay for progress. This study of care work demonstrates how care represents hyper-commodification and over-production on the one hand, that is, care robots, and 'utter exhaustion' and the mining of 'the present to a bare minimum,' that is, the ability of imperial interests to operationalize care workers and redundant populations, for continued and new forms of value production and extraction in the name of promissory, speculative futures. Shildrick summarizes this process:

> at the most fundamental level, it is in the interests of neo-liberalism to produce and sustain bodies as debilitated and therefore susceptible to a range of market commodities that hold out the promise of therapeutic interventions (Shildrick, 2015: 11-12).

In other words, the debilitated become targets for remedies and interventions, interventions which in turn obfuscate undergirding imperial and economic interests. By looking at the decolonial and necropolitical valence of care, we can see that the problem of care in less-privileged contexts provide the resources for addressing the crisis of care in economically-privileged contexts, but as profit-generating commodities. Care is an example of necromancy *par excellence.*

Thus, while debilitated, redundant populations seem like the debris of progress impeding future economic growth, the speculative vein remains, just like the promise held in abeyance by the mining industries who maintained their claim on seemingly depleted waste dumps in South Africa. With the dawn of reconfigured and advanced technologies, the re-mining of mine waste now yields a new boon of mineral wealth.[13]

This ceaseless objectification of labor, however, requires a host of material and discursive ploys to meet the insatiable demands of contemporary capitalist society: raced and sexed subjects are especially profitable justifications. Audre Lorde's words are worth repeating here:

> This need not blind us to the size and complexities of the forces mounting against us and all that is most human within our environment. We are not here as women examining racism in a political and social vacuum. We operate in ***the teeth of a system for which racism and sexism are primary, established, and necessary props of profit*** (1981, n.p.).

Whether it is to "save Africa from itself," to "manage the risk of infectious populations" or to "rescue African women" by "building their the capacity" to manage their dire circumstances, the perpetually precarious present of care workers described in my project justify myriad modes of vigilance which cyclically maintain, rather than alleviate, carers in their "disastrous present" (Decoteau, 2008).

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[13] The descriptions of this process in the news media are aptly metaphoric: "Miners Sift for Gold in Discarded Ore Waste;" "old dumps have potential"; "waste product left from more than a century of gold mining… yields new profits;" contractor informs companies of "options available to rehabilitate their sites while deriving value from tailings re-treatment" (Mining Weekly, 2016; Wall Street Journal, 2016).

Despite the ploys, Dorothy Roberts (2002) reminds us that social reproduction is not immediately objectifiable. In social reproduction lies room to maneuver. The care workers I foreground in this dissertation diagnose such maneuvering; I want to call it resistance. Social reproduction was “the *only* labor of the slave community which could not be directly and immediately claimed by the oppressor” (1998: 55, emphasis in the original). Thus, labor of this kind “can be seen as a form of resistance” which directly benefits the carers’ community “rather than their white masters *alone*” (1998: 55). Social reproduction is thus not a universal site of violence and subordination, it is a more complicated space. The word ‘alone’ acknowledges that indeed, the master benefits from the reproduction and nurturing of his slave community, just as carers in South Africa serve the economy by taking on the need for care of the dying – which is unpaid and deprivational. But, just as slave women held onto this “modicum of reproductive autonomy” (1998: 55), care workers in South Africa stand against the regulatory apparatus: they choose a strangely non-re/productive mode of labor instead of more economically productive imperatives. And while the choice is indeed constrained by the political, economic and social problems of ‘democracy,’ ‘neoliberalism’ and the reification of and dependence on ‘gender norms,’ their labor provides an analytic for understanding these constraints and for apprehending resistance which more conventional feminist approaches to “women’s subordination” or “the problem of care” might miss.

In that carers demonstrate a mode of experience that does not necessarily change the world but constitutes an inventive habitation that differently addresses itself to the regulatory apparatus (Jagose, 2013), they resist. In their immediate and material response to the crisis, without hope of repair, without a future-directed strategy (Berlant, 2013; Wilson, 2015), they resist. In choosing to “care properly” by stepping out of the confines of care worker policies, they resist the ongoingness of debility and death worlds: heralding and facing death as definitively as they do also seems like resistance. Care work here comes into view as destabilizing, if not resisting, the ceaseless imperative of reproductive futurism and the relentless drive of neoliberal capitalism – whether in terms of, progress, productive labor, or life.

Marx suggests that theorists of revolution learn from those who are actively making it: revolutionaries can only be followed, not anticipated. As such, the care worker who has removed herself from statal structures, who has decided to care for community members without pay and who has rejected out of necessity other regulatory organizations in order to ‘care properly,’ I argue amounts to spontaneous political action by social individuals which splinter the present and disrupt ideologies, norms, rules and practices which are not concerned with justice.

By adopting a decolonial and feminist STS approach, HIV/AIDS care work, although highly feminized, is not only relevant as a project about a particular aspect of women’s subordination but opens up this gendered phenomenon as a site of analysis for better understanding how scientific knowledge and technologies with respect to HIV/AIDS travel and function transnationally (Harding, 2011). In addition, this research questions progress and development linked to HIV/AIDS technoscience by illustrating how health comes to be a key site for the deployment of neoliberal ideology and biopolitical governance. As such, this research addresses gaps in Western feminism broadly and the field of feminist STS specifically, which, according to Harding, are often

> ignorant of both the history and practices of sciences and technologies around the globe, and of women's participation in and experiences of such histories and practices (2009: 410).

By bringing the care robot and care worker into closer proximity, I have shown that the care worker tells us something genealogically about the robot, and the robot shakes up the paradigmatic stasis regarding the problem of care. In addition, I have argued that this paradigmatic stasis is also an ethical concern. Donna Haraway reminds us that human beings and other forms of life come together to re-create a world that can sustain life in its adaptive complexity, to re-compose ourselves and re-imagine ourselves as being simultaneously human and non-human and in flux. It is an onto-ethico-epistemological project to apprehend and understand our cyborg natures, bridging divides which have heretofore been kept discursively separated – such as care and technology.

If there *is* to be an ethics of care, it must take cognizance of the constant and inevitable change that produces our world, even *embracing* the often dire prognosis inherent in the "naming of the Anthropocene" and especially attentive to our inevitable symbiosis with the world we have created; even if it "exceeds" us as Braidotti might say, it is still of our making. This ethical approach avoids reifying the African woman as victim, opening up the possibility that care work can be multiple and complex in its "strategic calculations, its violences, its animating hopes, and its imaginative inventions" (Dave, 2012: 246).

I have deployed concepts from postcolonial and feminist STS to pay attention to the assemblages through which informal, community-based HIV/AIDS care work in South Africa emerges. I have put science into politics (Stengers, 2005) to "see where it takes us" (Stengers, 2012). It took me to the care robot in Tokyo, and back to Mandisa in Gugulethu. The care worker in this context has been by and large invisible in the feminist canon on care. She is uncounted, unrecognized, ignored and toils in the most dehumanizing of circumstances, yet integral to understanding how 'subjects under late capitalism get by' and survive (Jagose, 2013). Ironically, thinking with care robots re-humanizes the care worker by demonstrating the dehumanizing capitalist tendencies ***already*** embedded in care as such.

The argument to include care work, to value care work, to recognize care work, to find modes of equitable compensation for care work, and to prevent the harm, deprivation and debility that performing care work does to the provider (Folbre, 2006; Meintjes, 2012; Orner, 2006; Shildrick, 2015), is moot while the ***necessity*** of care work and the function and purpose of care remains unexamined.

The care robot and the care worker are oppositional or counter-subjectivities (the cyborg vs. the goddess, for instance), but rather a process-oriented political ontology of auto-poeisis or "self-styling" (Braidotti, 2013: 35). The carer's auto-poeisis is liberatory forces us to analyze the complex negotiations with dominant norms and values related to care, and our technological mediations into the care crisis. In this way, the matter of care is posthuman, as is the carer's insistence to care about something other than statistical fact; that is, she demonstrates a mode of "caring for life that cannot be reduced to what biopolitics is or enacts" (Stevenson, 2014: 42). Resistance here does not necessarily have a redemptive narrative. It may look like failure, and it may only mark resilience *against* these inevitable failures, against these inevitable deaths, against dehumanization, and against the "terror of being on the wrong side of biopolitics" (Stevenson, 2014: 173).

I suggest that feminists turn to decolonial and feminist STS and that feminist STS scholars turn their attention to social reproduction *as* a new reproductive technology. As a transversal approach, I suggest that this is necessary to get to the trouble of care, by making some epistemic trouble. This is how I have heeded Siphokazi' Mthathi's call to think more carefully and intentionally about the social justice challenges we face in the present neoliberal moment. The task now is to continue following Mandisa, the chthonic revolutionary of our times.

***

## *After-tears*

Saturday, 3 November 2012.

I am attending a funeral in Nyanga township today. It's one of those perfect Cape Town days: warm but not hot, fresh but not cold, the air salted just enough so I can taste it on my tongue. Today we only bury 4 people, not the usual 5. The group burials have become a norm in the townships, but I am still not used to them. Since the epidemic became the train-wreck that it is, poorer families have found inventive ways to honor their dead: they can still give their loved ones a dignified send off if they pool their resources. It has become a retroactively endorsed custom that group send-offs make the ancestors happy. At today's funeral one family bought a cow to slaughter. The other families are very grateful; the cow brings stature to the proceedings.

After 4 years, I draw less attention than I did at my first few funerals, less of a novelty. I am no longer called mlungu ('white girl'), I am sisi (our sister). Mandisa is here. Wezi and I walk over to greet her. She hugs me.

Are these your people? I ask her

Yes, they are my neighbors, she says. I am very happy today, she adds.

Why sisi?

They let me come in and bath their son, before the funeral. They know that I am a care worker. And they know how important it is for me. It is how I show my respect to them. To be alone with them as they get ready to meet their ancestors. To give them that respect. So many people with AIDS are just buried without this, she gestures to the gathering. They are alone and abandoned in that grave. But we are learning that it is not so bad. This is not so shameful. I think I help show people that. That I am prepared to wash the body of someone who died with this thing in their blood. I think I help them make peace with it.

We sit together quietly. Wezi wipes her eye behind her sunglasses. She is as emotional today as she was translating my first interview.

Chomi yam (my friend) It is time for after-tears. Enough tears! Let's go! she says.

Mandisa hugs us. She explains that she will accompany her neighbor to the burial yard. The burial is usually a more private affair. The rest of us will walk to the closest watering hole where the families will join us after the burial, for after-tears.

Folks share umkhomboti (traditional beer), and the mood starts to shift. After-tears: the ritual of coming together after all our condolences have been offered, after mothers are done shaking their hands at god and the ancestors, after the unbearable sadness of our losses – 4 today; after our tears at church and at lunch; to laugh together while we remember and embellish tales about the 4 being buried. After-tears is when we remember them fondly, without tears, because ***we*** are still alive, and we can still laugh, and it is the duty of the living to do so. It is time to laugh together after all the tears. And there have been so many tears. But, Mandisa is still out there. Caring.

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