A POLITICAL EPIDEMIOLOGY OF HIV/AIDS IN SUB-SAHARAN AFRICA

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Abstract

This study interrogates the persistence of large variation in HIV prevalence and incidence in sub-Saharan Africa. When international policy norms are aligned and funding is widely available, the puzzle becomes a political one. Introducing 'political epidemiology' as an approach for the investigation of epidemics, I employ a mixed methods approach that emphasizes a state-centred perspective, a population's political susceptibility to disease, and the importance of the political context of behaviour. I confirm the importance of political factors in the region's epidemic through a longitudinal analysis, and turn to the cases of South Africa and Uganda, using key-informant interviews and automated text analysis to examine the role of political leadership in South Africa, and the role of government-directed messaging around the epidemic in Uganda. Based on my findings in each case, I propose a typology of political leadership that can be fruitfully employed in future analyses, and demonstrate the utility of using media as a tool to assess changes in elite opinion regarding the epidemic. Overall, this dissertation offers a new approach for incorporating the theories, insights, and methods of political science into the study of epidemics.

Résumé

Cette étude examine la persistance d'une variation importante de la prévalence et de l'incidence du VIH en Afrique sub-saharienne. Tant qu'il y ait un consensus international quant aux normes de la politique publique, et tant que le financement soit largement disponible, l'explication de cette variation se trouve au royaume politique. De ce fait, nous introduisons l'épidémiologie politique comme approche á l'investigation des épidémies. En particulier, nous plaons l'accent sur l'État, sur la susceptibilité politique d'une population aux maladies, ainsi que sur le contexte politique du comportement. Nous utilisons des méthodes mixtes dans notre analyse empirique. D'abord, nous étayons l'impact des facteurs politiques dans l'épidémie sub-saharienne du VIH avec une analyse longitudinale. Ensuite, nous nous penchons sur les cas de l'Afrique du Sud et de l'Ouganda. En profitant d'entrevues avec des répondants clefs ainsi que d'une analyse automatisée de textes, nous clarifions les rôles du leadership politique (dans le cas de l'Afrique du Sud), ainsi que des discours orientés par le gouvernement et portant sur l'épidémie (dans le cas de l'Ouganda). En nous basant sur les données des deux cas, nous proposons une typologie du leadership politique, ce qui peut être employée fructueusement dans les analyses futures. En outre, nous démontrons la valeur de l'analyse des médias comme outil pour estimer les changements des opinions des élites par rapport á l'épidémie. En somme, cette thèse offre une nouvelle manière d'incorporer les théories, les aperçus, et les méthodes de la science politique á l'étude des épidémies.

Acknowledgments

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Mark Daku
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Montreal, QC

Acronyms

ABC Abstinence, Be Faithful, Condomize.

ACP AIDS Control Programme.

AIDS Acquired Immune Deficiency Syndrome.

AMREF The African Medical Research Foundation.

ANC African National Congress.

ART Anti-Retroviral Therapy.

ARV Anti-Retrovirals.

BCC Behaviour Change Communication.

CAPRISA Centre for the AIDS Programme of Research in South Africa.

CBO Community Based Organizations.

CIGI The Centre for International Governance Innovation.

DA Democratic Alliance.

GDP Gross Domestic Product.

GDP (PPP) Gross Domestic Product (Purchasing Power Parity).

GEMS Government Employees Medical Scheme.

Global Fund The Global Fund to Fight AIDS, Tuberculosis, & Malaria.

HEARD The Health Economics and HIV/AIDS Research Division.

HIV Human Immunodeficiency Virus.

LNA Large-N Analyses.

MCC Medicines Control Council.

MDG Millennium Development Goals.

MEC Member of the Executive Council.

MTCT Mother-to-Child Transmission.

NERCHA The National Emergency Response Council on HIV/AIDS.

NGO Non-Governmental Organizations.

NSP National Strategic Plans.

PAC Provincial AIDS Council.

PEPFAR The President's Emergency Plan For AIDS Relief.

PLWHA People Living With HIV & AIDS.

PMTCT Prevention of Mother-to-Child Transmission.

PSP Provincial Strategic Plan.

RC Resistance Councils.

SANAC South African National AIDS Commission.

SNA Small-N Analyses.

STI Sexually Transmitted Infection.

TAC The Treatment Action Campaign.

UAC Ugandan AIDS Commission.

UNAIDS The Joint United Nations Programme on HIV/AIDS.

WDI World Development Indicators.

Note on contents

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Chapter 1

Political Epidemiology

"Once you bring politics into health, you've messed it up."
(Ugandan Interviewee #8 2012)

Much more work (perhaps integrating the insights of demography, political science, sociology, and economics) needs to be done by social epidemiologists before Rose's observation - that the causes of cases within populations may be very different from the causes of differences in incidence between populations - can be fully appreciated.
(Kaplan 2004, p. 130-131)

1.1 Prelude

One summer morning in 2012, I was driving from Durban to Pietermaritzburg. The ocean faded in the rearview as the landscape ahead slowly changed, and the more I drove, the more I kept drifting towards the shoulder. It is difficult to overcome the innate understanding you have of driving. The dimensions of your car to the left and right, the lane you are supposed to turn into, the simple location of the turn signal. The first time I drove in South Africa, I immediately underestimated the width of the car and drove straight into a curb, sending a hubcap rolling down the street. I had since mastered curbs, but that morning I could not stop drifting to the shoulder, unable to overcome my subconscious desire to position myself on the road in a place that was more comfortable with what I knew. I drifted into a space where people were walking, transporting goods and animals, and waiting for public transportation. The shoulders of roads in most of sub-Saharan Africa are not there for foreigners to accidentally drift into.

No matter where you start driving from in South Africa, after about an hour or two you find yourself in a different world. Ocean licked coastal cities fade into rolling hills and desolate desert, savanna pushes out to the horizon halted only by the menacing silhouette of the Drakensberg Mountains. Sprawling informal settlements share the scene with modern urban landscapes, world-class wineries touch on the land of traditional homesteads, but these contrasts fail to capture the diversity of the country's 50 million

people. In pre-colonial times, Bantu speakers pushed their way into the region from the North, displacing the San and Khoi. Then the Dutch came, and the British, and quickly the country was a violent mosaic of races and cultures and languages. The racist policies of apartheid led to a situation of segregation and separation, and manifest themselves today in vast inequalities, violent crime, xenophobia, and persistent racism. The legacies of these policies remain and will be important realities for South Africans for some time. South Africa has a taste of everything; but it is a pot that somebody forgot to stir.

I arrived in Pietermaritzburg, the province's sleepy capital, a place that holds the awkward distinction of being the catalyst for Mahatma Gandhi's decision to devote his life to the struggle against oppression.[1] I passed Gandhi's statue, and eventually found my way to the auditorium where there was a government workshop on the new HIV/AIDS Provincial Strategic Plan (PSP) being run by the office of the Premier, a rare opportunity to see for myself how these policies were made. I had found out about the workshop the day before from a participant, and had confirmed that, while not intended to be a public event, it was indeed open to the public. I parked and walked in, getting a nametag and some Nescafé before sliding into a seat of a large auditorium. The room filled quickly, introductions were made, and then a representative took the stage and addressed the crowd in a firm and

[1]Gandhi had been kicked off a first class train car in Pietermaritzburg by a white man who objected to his presence, a story that is told on a statue commemorating Gandhi and marking the centenary of that fateful day in 1893.

commanding voice.

"I want to state and acknowledge those departments who submitted their inputs," for the development of the PSP, she said. "Department of Health submitted, Department of Economics submitted, Human Settlement submitted, Arts and Culture submitted." She paused, alternating her gaze on various sections of the packed auditorium. "And also there were departments who really disappointed us. We were chasing you all over, chasing you trying to get hold of you, chasing you trying to get your review? There were departments that failed to submit their inputs." She was visibly annoyed, her voice changing in tone to hammer home the words that came out of her mouth. "Department of Transport, if you're here, I'm disappointed. We are disappointed with the Department of Transport. No inputs submitted." She found the representative from the negligent department and addressed them directly, "Did you send it to me? No. You didn't" (Yengwa 2011).

The development of the PSP had as much to do with getting the proper policies on paper as it did with the perennial political problem of herding cats. And in the case of the province of KwaZulu-Natal, the entire process was being driven by the personal determination of Provincial Premier Zweli Mkhize. In later discussions, the representative from the PSP as well as an official at KwaZulu-Natal's Department of Health elaborated on the importance of the Premier's leadership, something that had become evident from the PSP meeting. The Premier had launched 'Operation Sukuma Sahme'[2]

[2]I was told by an interviewee that the rough Zulu translation is 'get up and do it.'

a unique multi-sectoral approach to social development that incorporated the HIV/AIDS response into every aspect. Leadership for Premier Mkhize meant more than taking on the formality of making a plan and publicly supporting it; he went much further by actively demonstrating his remarkable commitment. "The premier doesn't care about the proceedings," I was told, "instead he flips to the back, looks up the list of people who were supposed to have attended the meetings and goes home with a list of names and phone numbers. He spends his evening telephoning these people and demanding of them 'why weren't you there?', 'what did you learn?', 'what needs to change?'" (South African Interviewee #9 2011).

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Later that year, I was in Mbabane, Swaziland's capital, trying to learn a little bit more about what was being billed in the international media as a corruption scandal surrounding Swaziland's use of The Global Fund to Fight AIDS, Tuberculosis, & Malaria (Global Fund) money. With over 26% of the adult population infected with HIV/AIDS, Swaziland holds the dubious distinction of having one of the world's worst HIV epidemics (NERCHA 2010). While technically a lower-middle income country, the majority of the country's wealth belongs to King Mswati III, and the people of Swaziland by and large live below the poverty line (Phakathi 2011; World Bank 2012a). As such, the country is heavily dependent on external money and expertise, such as that coming from the Global Fund, to address domestic health issues.

The National Emergency Response Council on HIV/AIDS (NERCHA) is tasked with implementing Swaziland's National Strategic Framework for HIV and AIDS. What made NERCHA's response stand out in my mind was the fact that it was not only based on established evidence and research, but it also actively sought to use existing cultural and societal institutions to deliver information and services. For example, KaGogo Centres (literally "grandmother's house") had been constructed to "mobilize and empower communities in the response to HIV" (NERCHA 2011). Built and owned by the communities themselves using local labour and materials, these spaces have traditionally been part of Swazi culture as a neutral space for gatherings, discussions, or dispute resolution (NERCHA 2011).

During my week in Mbabane it became clear that there was a divide between the objectives and the standards of the technocrats from the Global Fund, and the reality of operating in Swaziland. An informant told me that NERCHA informed the Global Fund that they were going to buy 'Coke,' but it turned out to be cheaper to buy 'Fanta' - so they bought twice as much 'Fanta.' While in reality, 'Coke' referred to 4x4s and 'Fanta' referred to sedans, for NERCHA, they were interchangeable and it meant that they could do more with the resources. For the Global Fund, this was unethical and sparked corruption investigations.

What was most troubling about this misunderstanding was that it affected Swaziland's reputation with other donors, threatening their ability to secure funds and maintain the progress they were making with the programs.

This became even more of a problem when the Global Fund announced that it was cancelling Round-11 funding. Swaziland had spent a lot of time, resources, and money developing a proposal that would secure them funding - and all of these resources could have been directed towards program implementation. Instead, due to the Global Fund's funding problems, Swaziland and many other countries faced the prospect of the proverbial well running dry.

Public health workers in Swaziland were not blind to this reality. Sitting in the hotel bar one night, a man struck up a conversation with me about what I was doing in Mbabane. When I told him, he gestured to the corner and said, "There is the man you need to speak to. I will send him over." A few minutes later I was speaking to a government official who worked on malaria control in the country. In between long sips of his whiskey, he told me that he was concerned about the global funding environment, that many programs that people relied on to survive would disappear if funding dried up. Because of this, the Malaria Control Program did its best to use Global Fund money for long-term goals such as training, health-systems strengthening, and long-lasting bed nets. Testing and treatment, things that had immediate and important impact on peoples' lives, were funded as much as possible through more stable sources. Another sip of whiskey, and he confided: "I'm worried that things are just going to get worse. If someone were to offer me a package right now to retire, I would do so happily, so I could say 'things were like this when I left.' I don't know what's going to happen in the future with these

programs."

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About a year later I found myself on the dusty streets of Kampala, Uganda's bustling capital. Uganda is riddled with Non-Governmental Organizations (NGO) and other organizations that address HIV.[3] Giant billboards still spread awareness about the disease, but they were always funded by international organizations or civil society. Heading out for the evening, I hopped onto the back of a barely serviceable Bajaj Boxer 100, one of the ubiquitous *boda-boda* motorcycle taxis that are Kampala's only viable form of public transportation. The driver turned to me and asked if I was having a nice time in Uganda. I replied enthusiastically, and he continued, "Mmm, there are very beautiful women here. But you must be careful. Do you know about the AIDS?" I conceded that I knew a little bit, but I wanted to learn more about it from him. "It is a very big problem in our country. You see, AIDS only happens in Uganda and South Africa, so you must be very careful. You must always wear a condom." I didn't correct him, but I asked if he spoke to all of his customers about AIDS, and he replied with a vigorous nodding of his head. "Yes. I talk to everyone about AIDS and I tell them to use condoms."

While in the early days of the epidemic, President Museveni had embraced the Abstinence, Be Faithful, Condomize (ABC) approach, more recently condoms have dropped out of the picture. Indeed, condoms are somewhat hard

[3]Officially, there are 174 registered NGOs, though informally the number is much larger.

to find in Kampala, usually buried beneath the counter, and rarely ever in plain view. You are also most likely to encounter products named 'Rough Rider,' 'Exotica,' 'Wet N' Wild,' and 'Bareback,' all accompanied by racy pictures on the packaging. From what I saw in Kampala, condoms are treated like pornographic magazines, out of sight and requiring a willingness of the purchaser to subject themselves to what may be an embarrassing situation.

That this man was talking openly about condoms was surprising to me. HIV/AIDS is not a new disease for Uganda. Most people in the country know someone who has died from it (Afrobarometer 2008), the President has spoke openly about it in the past, and the number of posters, and NGOs constantly reminds one of the ubiquity of the disease in the country. But outside of Westerners or individuals working in the field of HIV, this was the first time I had heard a Ugandan even mention the disease, and besides a few inaccuracies, this boda-boda driver was exceptionally knowledgeable, and almost messianically committed to spreading the information. Decades of educational campaigns and interventions had done something, it seemed.

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During my time in Southern and Eastern Africa, it became more and more apparent that a country's response to diseases, especially HIV, had little to do with what was actually written on paper, and had everything to do with other factors: the country's experience with the disease, the extent and nature of the involvement of political leaders, and the level of the public's

knowledge. HIV is an exceptionally political disease.

1.2 The puzzle of HIV/AIDS

This research is motivated by the observation that the scientific knowledge and financial resources to control the global HIV pandemic are abundant and available, yet there is still great variation in HIV infection rates between countries. On the African continent, prevalence rates[4] range wildly, from 0.47% in Madagascar to 26.5% in Swaziland (UNAIDS 2012).

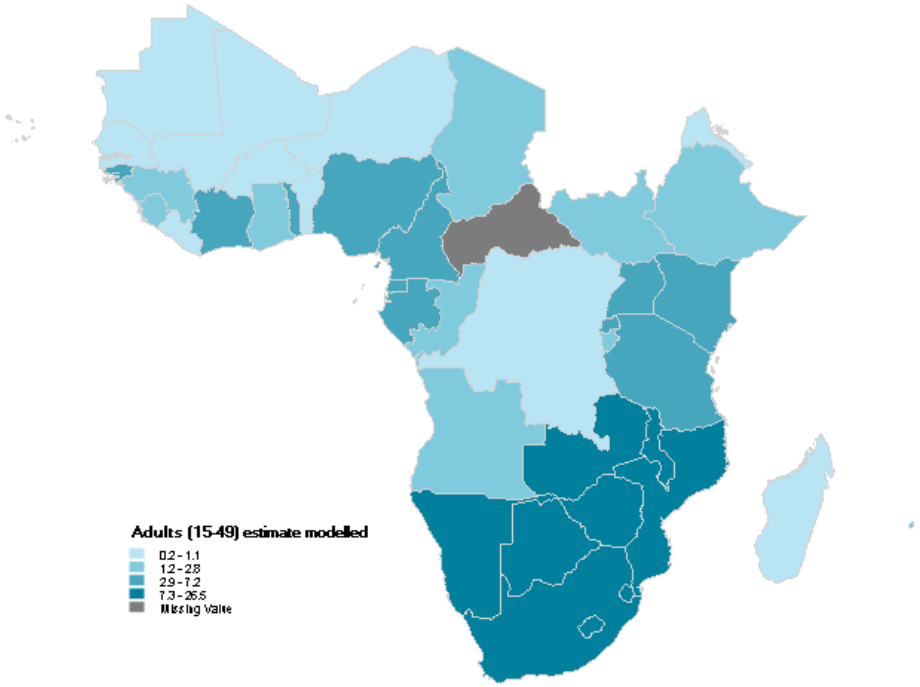

Figure 1.1: HIV prevalence in sub-Saharan Africa (2012)

[4]Prevalence rates capture the percentage of the population that is infected with HIV. These are distinct from incidence rates, which capture new infections. See footnote 7, below, for a more in depth discussion.

The real puzzle of the pandemic is not what needs to be done, but why some countries fail and others succeed at controlling the virus' spread.

Research on HIV/AIDS has been going on for over 30 years, and has not been limited to the medical realm. In this time, scientists, social scientists, policy makers, and local actors have learned a lot about how this disease works, how it spreads, and how to prevent it. Most countries in sub-Saharan Africa pursue similar approaches, rooted firmly in the approach advocated by the global North. Regardless of these similarities, as Figures 1.1, 1.2, & 1.3[5] demonstrate, there is still substantial variation between countries in terms of key indicators such as incidence rates, prevalence rates, and the percentage of infected people who are on Anti-Retroviral Therapy (ART).[6]

These discrepancies in access to treatment, prevalence, and incidence rates[7] may simply be a question of different countries having different fi-

[5]Data for figures 1.1, 1.2, 1.3, and 1.4 are from the UNAIDS AIDSINFO online database (UNAIDS 2013b).

[6]Antiretroviral therapy is the key drug-based method of treating HIV and preventing its further development into full-blown AIDS.

[7]HIV/AIDS infection rates are measured primarily in two ways, and the difference between the two is important to measurement, prevention, and claims of success. HIV prevalence is the percentage of people within a given population who are infected with HIV. Prevalence rates are tricky measures for success, as an effective campaign to test and treat people will result in an increase in prevalence as more people are identified as HIV positive and more people are living longer due to access to Anti-Retrovirals (ARV). Decreases in prevalence can also be a product of better data collection (e.g. testing a larger sample of people and finding that overall rates are lower), but can also be a result of high death rates due to the disease. The better measure is HIV incidence, or the rate of new infections in a population. Unfortunately, until recently, this was is an exceptionally difficult figure to measure accurately. Knowing if and when a person had become newly infected had been nearly impossible. Instead, epidemiologists relied on the prevalence rate of 15-24 year-olds in order to proxy the overall rates of new infection in the population. The assumption being that any infection found within the newly sexually active group will represent a case of a new infection as opposed to a case of a previously undiagnosed

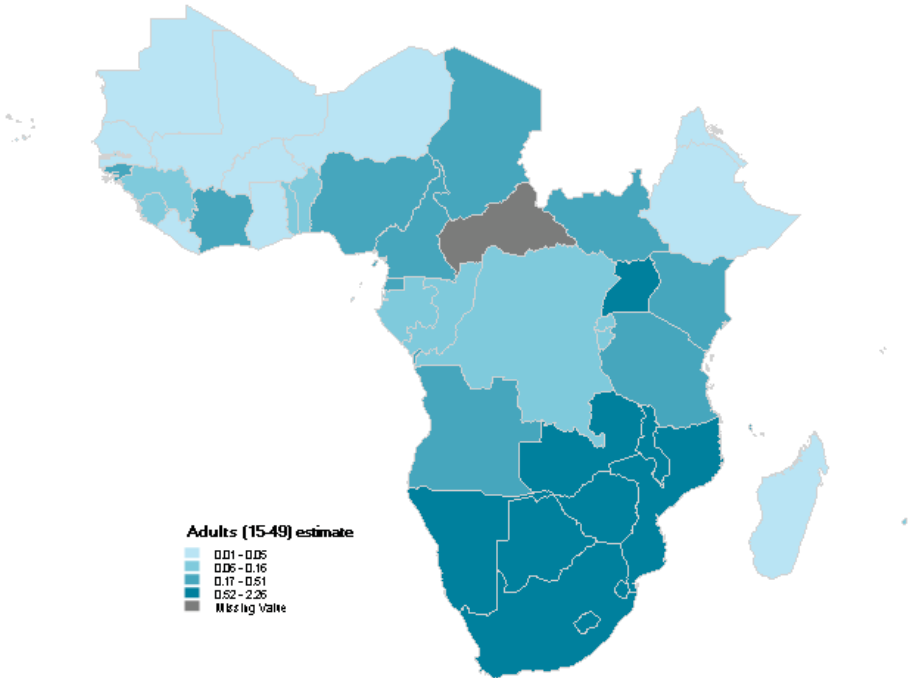

Figure 1.2: HIV incidence rate (new infections) in sub-Saharan Africa (2012)

nancial abilities to adequately implement interventions. Testing, treating, and preventing new infections of HIV can be an expensive endeavor for any government, especially for low and middle-income countries. That being said, since the beginning of the pandemic, the amount of available funding has skyrocketed. Between 1990 and 2010, global funding grew from 0.198 billion USD to 6.76 billion USD (Institute for Health Metrics and Evaluation 2012). Almost 60% of all global HIV/AIDS funding goes to sub-Saharan Africa, and while the amount varies, no country in the region does not receive funding for HIV/AIDS related activities (Kates et al. 2013). While spending

infection. Recent scientific advances have allowed for better measures of incidence based on the amount of time the virus has been active in the body.

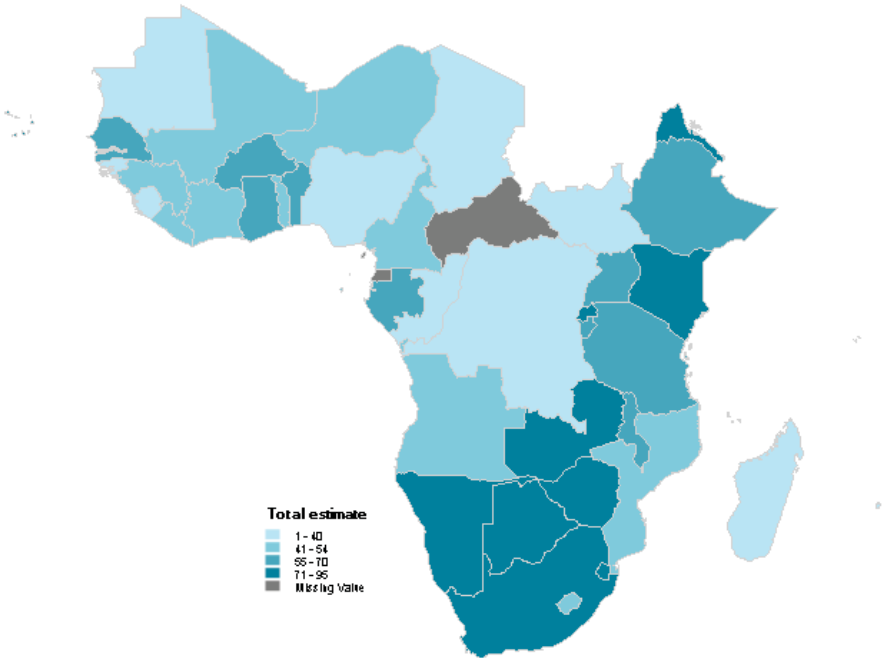

Figure 1.3: Antiretroviral therapy coverage in sub-Saharan Africa (2012)

varies dramatically by country (see Figure 1.4), governments, with the help of international organizations, are spending considerable amounts to control their respective epidemics.

This money must be spent on something if it is to be effective, and a large amount of the variation between countries may have more to do with institutional capacity. Increased health spending or funding will not necessarily be correlated with improved outcomes. However, as Chapter 3 will demonstrate, institutional capacity may not be the crucial factor. Compared to Uganda, South Africa's health care system was well developed and was regarded as more than capable to address the country's epidemic. The fact that Uganda managed to successfully control their epidemic, while South Africa did not,

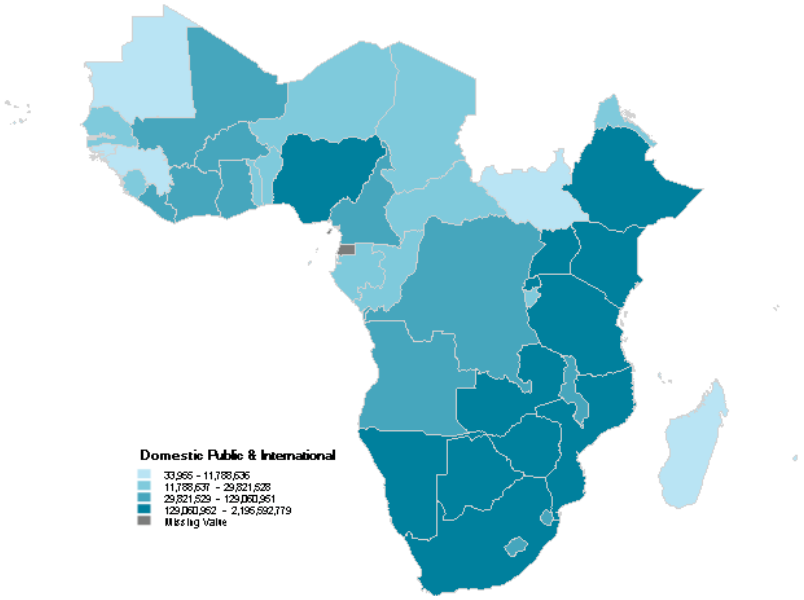

Figure 1.4: HIV spending by country (most recent data)

has little to do with institutional capacity.

How can there be so much variation in incidence and prevalence rates between countries? How is it, when scientists agree on the interventions, governments agree on the policies, and international donors are lined up to provide funding, that countries can have such vastly different results? I examine the epidemic in sub-Saharan Africa using a *political epidemiology* approach, that is an approach to examining epidemics that recognizes, identifies, and stresses, the political nature of public health events. HIV/AIDS in sub-Saharan Africa, as such an incredibly political disease, is an excellent case to demonstrate the contributions of a political epidemiological approach.

1.3 Dirty hands & dirty water: The need for a 'political' epidemiology

While working as an assistant in an Austrian hospital in 1847, Ignzaz Semmelweis observed that there was an exceptionally high rate of maternal death due to puerperal fever. He also noticed that doctors would move back and forth from the morgue to the delivery room, performing autopsies right before performing deliveries. Thinking that there may be a relationship between the two, Semmelweis introduced a hand washing policy, and subsequently witnessed a considerable reduction in the incidence of puerperal fever. Yet given the dominance of the miasmatic[8] theory of disease, Semmelweis could not articulate a mechanism that connected the two. His fellow doctors, who considered themselves 'gentlemen,' wondered how he dared to accuse them of being unclean and refused his advice. As he was unable to convince these gentlemen to wash their hands between touching a corpse and delivering a child, maternal deaths due to puerperal fever remained high (Riegelman 2009).

A few years later, in 1854, a major cholera epidemic hit the Soho district of London.[9] John Snow, a physician at the Westminster Hospital, conducted an investigation of the outbreak. His discussions with residents led him to believe that the primary vector of infection was the local public water pump.

[8]The miasmatic theory of disease posited that certain illnesses, such as cholera, were a product of 'miasma' - a kind of bad or polluted air.

[9]Much of this discussion is drawn from Chapelle (2005, p. 80-85).

Snow did not find any direct evidence of contamination of the water, however the way in which he documented and described the epidemic and who was getting infected was convincing enough that the local government removed the handle from the pump and closed it down. This coincided with the decline of new infections, and is commonly credited with ending the epidemic. The success was short-lived, as the pump was re-opened a few weeks later. As it turns out, cholera thrives in high temperatures with a significant amount of salt, and the water at the Broad Street pump had neither. The bacteria simply died over time due to poor conditions and as Snow analyzed the water after the outbreak, he was unable to detect contaminated water in his samples. This gave the government enough reason to reject the theory that cholera was spread through contaminated water. According to the Board of Health, Snow's theory that the water had been contaminated by the 'rice-water evacuations' (diarrhea) of cholera patients was not worth accepting. "After careful inquiry," they noted, "we see no reason to adopt this belief" (Summers 1989). There were excellent reasons not to accept this belief. For government officials, accepting Snow's assertion that cholera was being spread through contaminated water meant telling the public that they had been drinking water that contained traces of feces in it.

Both Snow and Semmelweis are considered to be some of the earliest practitioners of modern public health and epidemiology and their experiences are insightful. In both cases, what stands out is how political factors can be barriers to a more effective implementation of public health interventions.

In fact, the ultimate effectiveness of both of their proposals hinged on their ability to convince others to implement particular practices, which is the essence of politics.

As these two brief examples demonstrate, there was much more at issue than whether or not these early public health researchers were scientifically correct. Why was Snow able to convince the Soho parish to shut down the Broad Street Pump, while Semmelweis could not convince doctors to wash their hands? Why was the pump closed and then opened again? How could the evidence available at the time have been better presented to convince others to follow these interventions? All of these emerge as crucially important questions for determining how deadly these public health problems were. While the interventions that these early epidemiologists proposed fit nicely under the study of epidemiology, the particular context, challenges, oppositions, and circumstances of their attempts to implement their findings do not. There is no doubt that if Semmelweis had been able to convince others to wash their hands that more lives would have been saved. Likewise, if Snow's theory of cholera being spread through water was immediately accepted, cholera epidemics may have been prevented or better controlled.

These two interventions could not have been simpler, requiring neither money nor any special equipment. In both cases, it was a simple matter of convincing a group of people to do one thing instead of another. While perhaps Snow and Semmelweis may have had an easier time convincing others of the merits of their proposals had they had access to the germ theory of

disease, there is no guarantee. Scientific evidence and good policy do not necessarily go hand-in-hand[10] - political and social considerations invariably play a role.

As these two early cases demonstrate, and as will be examined in this dissertation through an analysis of the HIV/AIDS pandemic, the factors that influence or determine the incidence of disease in a population are not limited to biological or social factors, but can also be influenced by political factors.

From the days of Snow and Semmelweis, the study of epidemiology has expanded significantly. While defined as "the study of how disease is distributed in populations and the factors that influence or determine this distribution," over time greater attention has been afforded to the importance of social factors, to the point where social epidemiology is now clearly its own sub-field within the study of epidemiology (Gordis 2009, p. 3). The social-ecological model of health that social epidemiology is based on has gained enough credibility that, as one author notes, "the hope is that the 'social' in epidemiology will become so integral a part of epidemiology that the term can be dropped all together" (Kaplan 2004, p. 124). Social epidemiology, while defined in a multitude of ways, in general investigates the "social determinants of population distributions of health, disease, and wellbeing, rather than treating such determinants as mere background to biomedical phenom-

[10]See Chapter 4 for a discussion of this in the context of HIV in South Africa or see gun, food, or health laws in the United States.

ena" (Krieger 2001, p. 693). Amongst other elements, what is crucial to a social epidemiological approach is a population perspective and the recognition of the importance of the social context of individual behavior (Berkman and Kawachi 2000, p. 7; Honjo 2004, p. 193; Krieger 2001, p. 697). While this may seem non-controversial to contemporary readers, it has been observed that the "original concept of social epidemiology was concealed within the prosperity of modern epidemiology" (Honjo 2004, p. 194); that "the seeds of social epidemiology have [...] grown from within epidemiology" (Berkman and Kawachi 2000, p. 4). Indeed, as epidemiological research proceeded and became more complex, it was recognized that beneath the surface was a valuable sub-field worthy of its own attention.

In this dissertation, I will make a similar claim regarding what I am calling 'political epidemiology.' While social epidemiology, in its broad mandate to include the "social" determinants of health, may often draw on political determinants of health and public policies, there is growing recognition in the literature that political factors have been overlooked and require more attention. Nothing about social epidemiology *precludes* the study of the political, but nothing pushes for its primacy either. The articulation of a political epidemiology is an effort to bring more attention to the role of political variables in influencing population outcomes. Indeed, Mackenbach (2014) notes the dearth of empirical research linking health outcomes to political variables. In relation to population-level health, political factors have simply not received the attention that they deserve. Navarro & Muntaner lament that "[t]he

absence of political factors in social inequalities of health has been a major cause of concern," noting that "[p]olitics remains the most neglected area of social epidemiology" (Navarro and Muntaner 2004, p. 555). The question is not whether politics needs a greater role in epidemiological analysis, but rather what that role would be. To understand this "will require ingenuity, as well as some stealing from other disciplines (such as comparative political science)" (Mackenbach 2014, p. 2). In the rest of this chapter, I aim to help facilitate this theft.

1.4 Political epidemiology defined

The term 'political epidemiology' has been floating around since at least Brownlea (1981) who used the term to refer to "the importance of political and bureaucratic processes in coping with epidemiological information" (Brownlea 1981, p. 57). In this piece, Brownlea argues that there has been a shift from public health to political epidemiology, where "political activities in resolving health problems and health hazard management have a co-equal primacy with medical and epidemiological insights" (Brownlea 1981, p. 57). For Brownlea, political epidemiology was about the processing of epidemiological information within the political process, noting that public health had shifted towards a paradigm that included the politics of epidemiological information.

While it was Brownlea's intention to create a 'new interdiscipline,' the

term has not been widely adopted. More importantly, when it has been used, authors have not been consistent or precise in its meaning. As will be demonstrated below, far from the way that Brownlea conceptualized it, 'political epidemiology' has been used to speak of the politicization of epidemiology or the inclusion of politics into epidemiology, though the term is largely absent from the academic discourse. In fact, a search for 'political epidemiology' on Thomson-Reuters Web of Science produced nine (9) articles, three (3)[11] of which were of direct relevance to political epidemiology as conceived in this research. Examining articles citing these pieces, no additional articles were identified. These articles are discussed below, highlighting the fact that a unified understanding of 'political epidemiology' is absent from the literature and is worth articulating. It is my intention to more clearly define the term political epidemiology as the systematic analysis of the politics of epidemics, which would include Brownlea's insight regarding the importance of how politics affects the use of epidemiological data, but also goes much further in stressing the importance of politics to understanding epidemics.

In a three-page briefing, Gil-Gonzàlez et al. (2009) discuss how 'political epidemiology research' can help explain the failure to achieve the Millennium Development Goals (MDG). They state that "the construction of a Political Epidemiology Research Agenda could contribute towards a more objective approach to the situation, identifying those factors that are hindering MDG achievement while at the same time providing future policies and proposals

[11]This review looked only at the six English-language articles.

with greater coherence and supported by a broader, empirical knowledge base" (Gil-Gonzàlez et al. 2009, p. 78). However, beyond this statement they do not articulate what 'political epidemiology research' is. They also state that "from a political epidemiology perspective, the intention is to go even further [than social epidemiology], and to identify the political elements affecting the social factors that are impeding MDG fulfillment. This can be achieved by applying epidemiological methodology to the study of the effect that decisions (or lack of decisions) made by the institutions representing political power have on a population's health" (Gil-Gonzàlez et al. 2009, p. 78). As will be demonstrated through this dissertation, it is not merely political *institutions* that are of interest, and politics can contribute to health outcomes through many different avenues. The call from Gil-Gonzalez et al. is to bring politics into epidemiology; it is to include "the assessment of politics and ideology" in epidemiological research, but to do this requires a clear articulation of what political epidemiology is (and is not), what it examines, and how it should be performed.

In a piece also published in 2009, Taylor defines political epidemiology as "the analysis of the social, economic, and political conditions affecting disease management interventions" (Taylor 2009). Looking specifically at the eradication of disease through vaccination programs, Taylor notes that disease eradication campaigns can potentially do several things: spark conflicts about sovereignty; interact with other agendas of political dissent; and, empower marginalized sub-groups. Similar to Gil-Gonzalez et al., Taylor's

definition of political epidemiology is a slight modification of social epidemiology. On one level, it seeks to examine how politics affect the effectiveness of particular *interventions*, an area of research that is already performed by public health practitioners. On another level, Taylor seems interested in how interventions can have political effects. While this is of great interest and importance, it is a limited understanding of the interaction that politics and epidemics can have. Particular interventions will undoubtedly have political effects, but a political epidemiology that only examines interventions will likely miss the myriad ways in which politics and epidemics interact. If epidemiology is concerned with "how disease is distributed in populations and the factors that influence or determine this distribution" (Gordis 2009, p. 3), then a political epidemiology should not be so limited in its scope. Programs and interventions will be important, but as will be discussed below, there are other political factors that deserve attention as well.

Rodriguez et al. (2013) also engage in what they refer to in single quotation marks as 'political epidemiology,' stating that it is "reasonable to posit that political ideologies may affect health, either directly or indirectly" (Rodriguez et al. 2013, p. 2). The study examines whether or not the political party of the president has any impact on infant mortality. They find that it does: during Republican presidencies, infant mortality rates are 3% higher than they are during Democratic presidencies. Rodriguez et al. are engaging in the kind of activity that political epidemiology should be engaged in - examining how uniquely political factors impact health outcomes - however,

as 'political epidemiology' is still a somewhat undefined concept, they run the risk of engaging in a different kind of 'political' epidemiology.

Catalano (2014) argues that, based on Rodriquez et al.'s work, "'political epidemiology' apparently does not need theory" (Catalano 2014, p. 1). Catalano observes that their findings are hard to believe, and may be rooted in the biases of the researchers. In his words, "if epidemiologists 'bought' claims of health effects for the same reasons we buy dog food, the grocer would have to pull this brand from the shelf" (Catalano 2014, p. 1). The lack of a theoretical connection between political variables and health outcomes is indeed a major issue within Rodriguez et. al.'s work. Without theoretical justification, the authors may be doing little more than data mining, attempting to find the link that they want to justify their own political agendas. Indeed, as suggested by Catalano, 'political epidemiology' becomes nothing more than a tool for partisanship - epidemiology for political ends. In this case, we can see 'political epidemiology' referring to the ideological positions of epidemiologists, and how these positions may influence the choice of topic, the data used, and the findings that are stressed. For example, a researcher concerned with maternal health in the United States may analyze its relationship to a particularly divisive political issue such as immigration, and may draw on data that supports a claim that immigration policy in Republican states leads to higher maternal mortality. In such a case, epidemiology becomes politicized, being used as a tool for partisan ends.

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Krieger (2011, p. 185) notes that political epidemiology "refers to epidemiological analyses of how population health is shaped by political systems and their economic priorities and conflicts." This is the core of political epidemiology, yet what a political system is, and which ones are relevant to the study of population health is left unclear. Krieger observes a growing interest in the study of how 'political-economic systems, priorities, and policies' impact population health, which while a promising trend, does not contribute to refining what is an exceptionally broad and inclusive definition. What is needed is a clearer definition of political epidemiology that sets it apart from other perspectives. Although he does not articulate what a political epidemiology would be, or how it would be executed, Mackenbach's argument that the goal of 'political epidemiology' should be to identify the casual effects of political variables on population health provides a good point of departure for developing a more systematic political epidemiology approach (Mackenbach 2014, p. 2). As Mackenbach notes, political systems are comprised of structures, processes, and outputs, and these should be the focus of political epidemiology. To expand on Mackenbach's approach, I argue that the unique role of political epidemiology is to *identify, measure, and assess the causal impact of these political factors on population health.* Discussing the emergence of a political epidemiology, Clarke et al. (2007, p. 194) note that "[e]pidemiology, policy research and political science together can form a powerful and sophisticated alliance," and that the goal of a political epidemiology is to "construct and frame social and political

problems as legitimately within the ambit of public health." The question that remains is how to do that, as simply tacking 'political determinants' on to an epidemiological analysis is not going to capture the complexity of the relationship between politics and health. Instead, a political epidemiology must endeavour to apply the most relevant tools, theories, methods, and insights of political science to the field of epidemiology. To do this, I propose the following definition:

> Political epidemiology is a mixed methods approach to identifying and examining the political structures, processes, and outputs that affect population health. At its core, it interrogates the political susceptibility of health risks, employs a state-centred perspective, and focuses on the political context of behaviour.

1.4.1 Political susceptibility to disease

Just as social epidemiology takes seriously the idea that social factors may influence a population's susceptibility to disease, a political epidemiological approach takes seriously the idea that political factors may make a population more susceptible to certain health risks or outcomes. Authoritarian regimes may be better at combatting fast-moving epidemics, while democracies may be better at reducing the burden of non-communicable diseases. For example, Sen (1981) argues that famines occur not due to a lack of food itself, but rather due to a combination of factors that prevent access to food. For Sen, famines do not happen in democracies that are accountable to their citizens because in these cases, due to the accountability mechanism inherent

in democracies, the combination of factors that contribute to famine cannot materialize. On the other hand, authoritarian regimes, as they are subject to different constraints than those faced by democracies, can often have a freer hand when it comes to acting in the name of public health. An example that will be explored in this dissertation is Yoweri Museveni's quick and decisive action against the spread of HIV. Others include Cuba's provision of universal health care, and the efforts of both Cuba and the Soviet Union in quickly providing millions of doses of smallpox vaccine (Brown et al. 2006).

The implications of this are clear for understanding the political epidemiology of HIV/AIDS. According to recent Afrobarometer surveys, South African citizens do not prioritize spending on HIV/AIDS (Afrobarometer 2008). However, there is a clear and immediate need to increase spending on HIV/AIDS to control the epidemic. The problem is that there is no electoral reward for doing so - indeed, spending more money on HIV programs will take away money that can be spent on other programs that are more electorally viable. Somewhat paradoxically, Strand (2012) refers to this as a governance dilemma, because democratic states are poorly positioned to respond to certain health challenges precisely because of their accountability mechanisms. Conversely, different accountability mechanisms permit less democratic states to engage in longer-term investment in health, as they will likely be around to reap the benefits (Dionne 2011). More generally, this suggests that political institutions, political norms, electoral rules, the place of the political leader in the national psyche, and other political factors may

all have an impact on a populations' susceptibility to disease.

1.4.2 A state-centred perspective

To bring the full benefits of political science to the study of epidemics, a political epidemiology must start with the state (including its absence). One major area of interest is how state structures (e.g. federalism or presidencies), processes (e.g. elections), and outputs (e.g. policies or health care systems) impact population. Different states have different state structures, and thus depending on the investigation, it may make more sense to investigate phenomena at sub-state levels. What is important about 'political epidemiology' as I define the concept is that it pays close attention to populations that are politically defined, and can thus bring to the analysis of epidemics a broader range of insights from political science. A political epidemiology should be more concerned with citizens, political leaders, migrants, prisoners, ethnic groups, and illegal migrants - those categories of individuals that are politically defined, and may vary in different political contexts.[12]

A good example comes from Kampala, where there are thousands of motorcycle taxi drivers that comb the streets looking for fares. These *boda-boda* drivers often do not wear helmets or work long hours well into the night. Most of these boda-boda drivers are not from Kampala, having migrated there from rural Uganda and neighbouring countries. Illegal migrants from

[12]Importantly, this also allows for critical investigations of other population categories that are often not seen as 'politically' defined, such as age or gender.

other countries may face specific problems, such as more dire consequences if stopped by the police, and an inability to secure a license or plates for a vehicle. This may lead them to rent a motorcycle, which reduces their take-home income, and makes it difficult for them to join local taxi associations that provide insurance and support. Their reduced income likely makes purchasing a spot at a taxi rank difficult. With no spot at a taxi rank, and a desire to avoid police, these boda-boda drivers may end up working long hours and all night. Roughly five people a day die on motorcycles in Kampala, and illegal migrants - due to factors that do not directly apply to road safety - are likely at a higher risk of death on the roads *because they are illegal migrants*.

Social epidemiology examines the risk of illness of the individual alongside the risk of the overall population, as they are intricately related. For example, once enough of a population has been vaccinated against a disease, there is marginal gain from vaccinating others. The ability for the disease to emerge and to spread is curtailed by the population's high level of immunity, and thus even the unvaccinated will gain protection from the disease if enough people are vaccinated. Population level factors are important for individual outcomes, but it is also important to ensure that the right populations are being examined. Expanding on this example, it is one thing if 99% of the population is vaccinated and the unvaccinated 1% are randomly distributed across the country; it is quite another thing if the unvaccinated population is all ruled by one leader (or party), or are all prisoners, or are all living in a refugee camp. Without specifically examining these populations with

a political lens, researchers may see a random distribution that is anything but. Political epidemiology takes seriously the role of the state in defining and affecting populations. How individual leaders, parties, sub-state structures, sub-state policies and practices all interact with population health is of great interest.

1.4.3 The political context of behaviour

The political context at the state or the sub-state level also has an effect on individual behaviours. For example, on the highway between Toronto and Montreal, the posted speed limit is 100 km/h. The norm is to drive 120 km/h, and police officers will rarely pull anyone over for doing so. The norm is above the law, but is fairly well respected. Anyone driving that highway is fairly confident that 120 km/h is acceptable, and that it would be unreasonable for a police officer to pull them over for the offence - even though the driver is legally in the wrong. These drivers' past experiences with the police, and their perception of them as just or fair, creates a context where exceeding the speed limit - and thus potentially putting oneself at a greater risk of an accident - is normal and acceptable.

How individuals from different populations interact with various political institutions and how this interaction shapes health outcomes is of interest to political epidemiology. For example, do neighbourhoods with more community organizations have better health outcomes? Are strong police states are better or worse for health outcomes (and for whom)? Political institutions

and the laws, policies, and procedures that they produce shape how individuals behave, often in unintended ways. A political epidemiological approach suggests that it is not simply the outputs that are important, but also how they are implemented or enforced, and where.

Of course, political context can also be as simple as the very existence of a functioning state apparatus. In its absence, there is a need to assess what norms and rules (if only informal) are shaping peoples' behaviours. Diplomats who engage in drinking and driving while abroad are a good example. Doing so at home is out of the question, however with political immunity from prosecution, there is effectively no state regulation and their behaviour changes. Political immunity from prosecution' can include more than formal immunity: it may include the ability to talk or bribe your way out of a situation. The state and its institutions, and the state's ability to broadcast its power over particular groups in society, will have important implications for population health.

1.4.4 A mixed methods approach

Political epidemiology requires the use of multiple methods. As should be clear from the above discussion, determining which political factors will apply to which populations in which context will not be immediately clear. A key challenge in using a political epidemiological approach is to identify and conceptualize those political variables that might matter: to examine epidemics from a political lens in order to determine how political science can

aid in understanding the distribution of disease.

As such, political epidemiology seeks to understand the health outcome under investigation in as much detail as possible. It requires the political scientist to engage with epidemiology, to understand the biological, social, economic, and other determinants of the disease in order to correctly identify and assess any political factors. A strong understanding of an epidemic combined with a strong understanding of the political factors affecting it will contribute to improving the policy responses and interventions required: if Snow or Semmelweis had a better grasp on the political implications and barriers they were each facing, then perhaps their prescriptions would have been adopted much sooner.

We simply do not know at the outset what political factors are going to be important in the study of an epidemic. Political epidemiology seeks to identify these factors, and thus should engage in a variety of methods, approaches, and units of analysis in order to discover, measure, and assess the interaction between politics and epidemics. I propose an iterative approach, based on Lieberman's 'model building' paradigm for nested analysis (Lieberman 2005). Lieberman demonstrates the advantages of combining Large-N Analyses (LNA) with Small-N Analyses (SNA), which allows for models to be refined and further developed. Such an approach allows LNA and SNA to "inform each other the the extent that the analytic payoff is greater than the sum of the parts" (Lieberman 2005, p. 436). In Lieberman's framework, initial LNA supply "information that should ultimately complement the find-

ings of the SNA, and that will guide the execution of the SNA" (Lieberman 2005, p. 438). As political epidemiology is concerned with the identification of the mechanisms through which politics affect epidemics, such a nested analysis is wholly appropriate, and efforts to combine qualitative (case studies) and quantitative (population-based) studies should be encouraged.

1.5 Overview of the dissertation

This dissertation aims to demonstrate that analyses of epidemics that employ multiple methods, investigate the political susceptibility of disease, take a state-centred approach, and analyze the political context of behaviour can provide valuable insights into how politics and public health interact. Bringing political science closer to epidemiology will not only further understandings of the political determinants of health, but will also shed light on how public health - especially epidemics such as HIV/AIDS or Ebola - can impact politics.

The dissertation proceeds as follows. Beginning with a longitudinal analysis of HIV prevalence and incidence in the region from 1990-2012, Chapter 2 demonstrates that the HIV pandemic can be better understood through the addition of political variables. Specifically, Chapter 2 provides the justification for looking closer at the role of political leaders and the press, and for examining the cases of South Africa and Uganda. Chapter 3 provides background information on these cases and demonstrates that the epidemics in

these countries cannot be understood *without* taking into account the political factors that shaped the two epidemics. Chapter 4 draws on interviews and additional literature to examine the role of political leadership in the South African case. The importance of non-presidential, and non-governmental, leadership is highlighted, and a typology of political leadership is developed in order to facilitate further research on this crucial determinant of population health. Chapter 5 turns to the political context of behaviour, examining the discourse around HIV/AIDS in Uganda. The dissertation concludes in Chapter 6 with a summary of the study's findings and contributions.

Chapter 2

Exploring the political determinants of HIV/AIDS in sub-Saharan Africa

The poorest parts of the world are by and large the places in which one can best view the worst of medicine and not because doctors in these countries have different ideas about what constitutes modern medicine. It's the system and its limitations that are to blame.
-Paul Farmer

2.1 Introduction

Over thirty years since the first confirmed case, the global HIV/AIDS pandemic and its response has reached a point where curbing the rate of new infections is a reality. While 'the end of AIDS' will still require a concentrated effort by scientists, policy makers, organizations, and individuals, we are at a point where the effectiveness of some policies and some countries can by contrasted with the poor performance of others. As will be demonstrated, simple explanations are insufficient for explaining the shape, size, and nature, of a country's epidemic. While the virus itself is simple to understand, how it interacts with populations is complex and requires a more nuanced understanding. One thing is crystal clear, though. By accident or by design, some countries have done much better than others. As shown in Figure 2.1, HIV prevalence rates across the country differ not only in size, but also in their growth over time. The same is true of HIV incidence, the rate of new infections. Figure 2.2 shows that across the region countries have had vastly different experiences in terms of the size of the epidemic, its growth, and their ability to prevent new infections. In short, countries' experiences with this disease have not been uniform.

2.2 What determines a country's epidemic?

Assessing the determinants of HIV is a complicated task. Each determinant is intricately related with each and every other, and it is difficult to con-

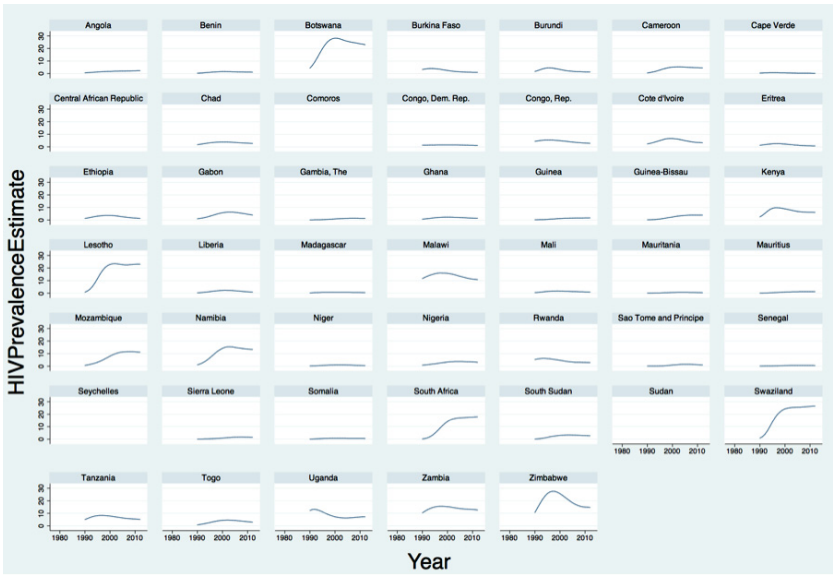

Figure 2.1: HIV prevalence estimates for sub-Saharan Africa

sider them in isolation. Furthermore, each country's epidemic is markedly different, not only in terms of the number of people infected with HIV, but also in terms of what is the major driver of new infections. What further complicates the matter is that there are various strains of HIV, some more infectious than others (Kanki et al. 1994; Marlink et al. 1994; Popper et al. 1999). In sub-Saharan Africa, the HIV-1 subtype is most prevalent, while HIV-2 is found primarily in West Africa. This may explain some variation in HIV rates in the region. In addition, many other factors contribute to higher risk of HIV infection. There is evidence of the importance of early sexual debut, transactional sex, condom use, and multiple concurrent partnerships, and the prevalence of these risky behaviours are determined in large part by social and economic conditions.

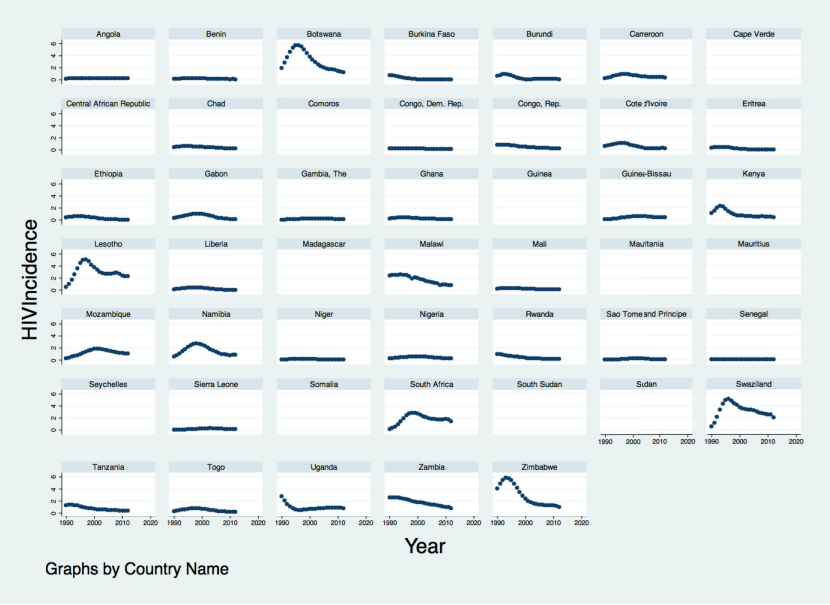

Figure 2.2: HIV incidence estimates for sub-Saharan Africa

Poverty is generally, but not always, an indicator of HIV risk. In both the developed and the developing world, associations have been found between poverty and individual risk behaviours, but what seems to be more important is gender inequality in income (Gillespie et al. 2007). There is some evidence that poorer women are more likely to be sexually active at a younger age and engage in riskier sexual behaviour (Dinkelman et al. 2008; Madise et al. 2007), both important predictors of HIV infection (Pettifor et al. 2004; Harrison et al. 2005). Furthermore, poorer women are more likely to engage in transactional sex, which increases HIV risk due to economic dependence on men and the accompanying reduction in the woman's ability to negotiate safe sex.[1] But it's not just absolute poverty that is an

[1]As noted by Magadi and Desta (2009), gender inequality is perhaps the single most

issue. For example, the 'sugar daddy' arrangement (in which wealthy/older men engage in transactional sexual relationships with younger women) is not only present between poor and wealthy, but often between the relatively rich and the relatively poor (Luke 2005). Indeed, the ways in which wealth and HIV interact in sub-Saharan Africa are complicated. As Mishra et al. (2007) note, HIV does not have the same relationship with poverty as most other diseases do - poorer people are not necessarily at higher risk than the rest of the population. Furthermore, there is evidence that at the early stages of an epidemic, wealthier individuals are at much higher risk due to higher mobility and closed sexual networks (Gillespie et al. 2007). While absolute poverty levels are likely important, relative wealth and income inequality must also be taken into consideration.

HIV prevalence rates are higher in urban settings (Dyson 2003), and being an urban dweller has been connected with higher rates of transactional sex, earlier sexual debut and higher rates of multiple partnerships (Dunkle et al. 2004a; Dodoo et al. 2007). Mobility in employment has been associated with higher levels of transactional sex and higher numbers of sexual partnerships for women, especially in urban settings (Khan et al. 2008). When workers move around a lot, or are stationed far from home for long periods of time, the risk of HIV infection is increased for both the worker and their families. For example, long-distance trucking and any work that requires semi-permanent

important determinant of HIV risk, and must be taken into account wherever possible. It is crucially important given that women are biologically at a higher risk of HIV infection (Coombs et al. 2003).

relocation, such as mining, has been shown to increase the likelihood of transactional sex and multiple concurrent partnerships by both the worker and their partner (Orubuloye et al. 1993; Singh and Malaviya 1994; Campbell 2000). Population distribution and population change due to migration will thus be important predictors of HIV prevalence rates.

Education is an extremely important determinant of HIV prevalence. Higher levels of education, particularly amongst women, reduce the likelihood of participation in risky sexual behaviours. Higher educational achievement is also associated with lower rates of transactional sex and higher rates of condom use (Dunkle et al. 2004b; Lagarde et al. 2001). Conversely, a high prevalence of HIV/AIDS has adverse effects on the educational system and attendance, especially for the poor (Coombe 2000; Yamano and Jayne 2005).

The size of a country's epidemic will also be related to new infections. Simply, the larger the population of individuals infected with HIV, the higher the likelihood of exposure to the virus, and thus the higher likelihood of new infections occurring. On the other hand, the number of deaths due to AIDS will bring down a country's prevalence rate. As there is a long lag period between HIV infection and the onset of AIDS, governments cannot simply wait out the disease. The larger the epidemic, the more pressure a government should have to be spurred to action, be it through perceived threats to the economy, or political pressures.[2]

[2]Though see Dionne (2011) & Strand (2012) for discussions of the complexity of political pressures on action regarding HIV.

Other factors are expected to contribute to the dynamic of a country's epidemic as well. For example, circumcision has been shown to dramatically reduce the risk of infection for men (Gray et al. 2007; Bailey et al. 2007; Auvert et al. 2005). Male circumcision is almost universal in North Africa, highly prevalent in West Africa, while in Eastern and Southern Africa, circumcision rates are more varied (World Health Organization and UNAIDS 2007). Differences in circumcision rates will likely have an impact on the rate of transmission in each country. Furthermore, the provision of anti-retroviral drugs will also impact a country's epidemic. As people on treatment will live longer, HIV prevalence rates will increase, however, as treatment lowers an individual's viral load, it also decreases their likelihood of spreading the disease (Cohen et al. 2011). As such, high uptake of ARVs should both increase a country's prevalence rate while decreasing its incidence rate.

The factors that contribute to the characteristics of an epidemic are complex, interrelated, and often different depending on the country in question. They cannot be addressed in isolation, and as such, the promise of political level factors becomes evident. A successful intervention or policy - in order to be successful - must pay attention to more than just the number of new infections or the number of people who are receiving treatment. Due to the complexity of the pandemic, successful countries will necessarily have grappled with a multitude of issues in their approaches.

This research begins with insights from the HIV-specific literature discussed above in order to develop a model of change in both HIV prevalence

and HIV incidence. It differs from other analyses of the political determinants of HIV/AIDS by beginning with an epidemiological model to ensure that key explanatory variables are not omitted. After demonstrating the effectiveness of the general model, political factors are then included to assess their importance. Before moving on to the analysis, a brief discussion of why it is expected that political factors will be important follows.

2.3 Why might politics matter?

The literature on the determinants of HIV provide a fruitful starting point for examining HIV epidemics over time, however they neglect the possible role of political factors in lieu of individual level and social factors, such as those discussed above. There should be interest in political factors for a few reasons. First, as noted in Chapter 1, countries should have the ability and the means to address their epidemics. In terms of policy, there is a global scientific consensus on what needs to be done, articulated by UNAIDS and other international bodies, and most countries have embraced this framework. A recent analysis of National Strategic Plans (NSP) demonstrates that in sub-Saharan Africa, most countries follow the same (recommended) approach: all employ a multi-sectoral framework, more than eighty-percent employ a human-rights based approach, and all countries but one specifically identify vulnerable groups in need of interventions (Hanass-Hancock et al. 2010). This observation has been confirmed by Oberth (2012), who demonstrates

that most countries in the region are fully in line with the Monitoring and Evaluation (M&E) indicators promoted by the global North.[3] In terms of funding, approximately 16.8 billion (USD) was spent globally on HIV/AIDS in 2011 (UNAIDS 2012). Approximately 57% of global funding for HIV goes to sub-Saharan Africa, and every country receives outside assistance for the epidemic (Kates et al. 2013). While this is still below the global goal of 22-24 billion USD, and international funding has been in decline, domestic spending in low- and middle-income countries has been increasing, suggesting that countries are able and willing to contribute to the development of stronger HIV prevention and management programs (UNAIDS 2012). Simply, the knowledge and the financial resources are present, and the real puzzle of the pandemic is not what needs to be done, but why some countries fail and others succeed at controlling the virus' spread. Given access to knowledge and resources, the implementation of successful programs then becomes a question of institutional capabilities, leadership, and resource allocation - it is a political problem.

Prevention of Mother-to-Child Transmission (PMTCT) is an excellent case in point.[4] PMTCT programs are established interventions that have been refined over time by international organizations who provide effective best-practices and guidelines for reducing the number of new infections in

[3]As Oberth (2012) notes, those countries that have the financial ability to shake off the constraints of international conditionality, such as Botswana, are shifting away from some recommendations with promising results, but still tend to be much in line with international norms.

[4]Portions of the discussion of PMTCT were previously published in (Daku 2014).

children (De Cock et al. 2000; UNAIDS 2013a; World Health Organization 2012). When implemented properly, these programs reduce Mother-to-Child Transmission (MTCT) rates to less than 2% - an incredible improvement from the 20-45% transmission rates observed in the absence of any intervention[5] (UNAIDS 2013a; World Health Organization 2007). The intervention itself is straightforward and cost-effective, ideally involving starting pregnant women on ART as well as providing daily ART for infants during breastfeeding (World Health Organization 2010). Furthermore, every country in the region with a publicly available NSP concerning HIV/AIDS articulates a need in that plan to direct efforts towards the prevention of new infections amongst infants. Regardless, uptake of PMTCT programs across sub-Saharan Africa is mixed. Some countries have done a remarkable job, ensuring that over 75% of all women who require PMTCT receive it,[6] while others fall terribly short, providing access to 25% of eligible women or less[7] (UNAIDS 2012).

Second, while political scientists have been relatively slow to engage with the global HIV pandemic, recent research has highlighted the ways in which political institutions, political leaders, and political processes can impact the nature of a country's epidemic. In short, there is a general consensus that political factors affect and are affected by HIV epidemics; this study contributes to this research agenda by first confirming that political factors

[5]The wide range here reflects short- to long-term breastfeeding.

[6]Botswana, Ghana Namibia, South Africa, Swaziland and Zambia are above 75% PMTCT coverage.

[7]Angola, Chad, Congo, Eritrea, Nigeria, and South Sudan are below 25% PMTCT coverage.

are crucial determinants of epidemics, and then through closer investigation of particular cases, by identifying additional political factors that should be included in future analyses.

Regime characteristics have emerged as particularly important. In recent research, Justesen (2012) demonstrates that democratic regimes do better than authoritarian regimes regarding access to treatment of HIV/AIDS, finding that this difference is more significant in democracies that employ proportional electoral systems. For Justesen, more accountability to citizens is the mechanism that accounts for better performance. Paxton (2012), in an analysis of Mexico's response, shows how elites functioning within particular political institutions can determine how organizations learn and respond to the epidemic. Incorporating the perspectives of high-risk populations, international organizations, and emerging research, Mexico's political context encouraged an evidence-based approach to handling the epidemic. The political context in South Africa between 1994-2004 followed a similar process but produced different results. An approach based on poverty, nutrition, and palliative care was adopted because it met less resistance in the political context of post-apartheid South Africa (Butler 2005).

There is also evidence that the lack of strong public opinion can create situations where it is rational for elites not to act to prevent or control HIV/AIDS. Across much of the continent, there is a large disconnect between public opinion on HIV and the need for strong political action (Dionne 2012). Recent research demonstrates that even in countries with large epidemics,

HIV/AIDS is not a particular concern for respondents (Whiteside et al. 2002; Justesen 2011). Strand (2012) demonstrates that only in Botswana, Namibia and South Africa is HIV a salient political issue.[8] The problem for Strand is that this creates a 'governance dilemma' - governments need to be investing heavily in a range of treatment and prevention programs, but there is no pressure from the electorate to do so. Furthermore, Strand demonstrates that there is no electoral benefit to providing access to ARVs.[9]

Political institutions, constraints, and motivations shape the actions of elites, and help determine when HIV/AIDS is put on the national agenda. As will be discussed in more detail in Chapter 3, in the lead up to South Africa's first elections in 1994, HIV was an emerging issue. The newly elected African National Congress (ANC) was aware of the size and scope of the epidemic, but more pressing problems of democratic consolidation and post-apartheid reconciliation were on the minds of the political class. In the case of South Africa, political considerations that emerged from the democratic system determined when attention would be directed to the disease.

South Africa's transition to a multi-party democracy is an extreme example of how politics can affect the timing and nature of HIV responses, however there is evidence that politics can affect timing more generally in the context

[8]Botswana did an excellent job controlling the epidemic, South Africa did not, and Namibia fell somewhere in between, so there is little evidence here of a connection between size of epidemic, or government response, and the salience of HIV/AIDS as a political issue.

[9]Governments, it would appear, have every incentive to acquire massive amounts of funding for HIV/AIDS, but little incentive to actually treat the issue in any more than a cursory way that appeases donors.

of competitive elections. In an analysis of 15 African countries, Dionne (2011) finds that the length of an executive's time horizon is related to government spending on health and on the comprehensiveness of AIDS policies. Executives with longer time horizons (i.e. authoritarian leaders) tend to spend more money on health, presumably because they expect to eventually reap the benefits. Conversely, shorter time horizons (e.g. amongst democratic leaders with upcoming elections) lead to more comprehensive AIDS policies, likely because policy positions are free and are not required to be successful (or even implemented) to help sway an election. Regimes that are less democratic may then have better performance but less developed policies.[10] Both Dionne's research and Mandela's empirical example demonstrate that how leaders approach and engage with the epidemic is filtered through existing political institutions and their corresponding constraints.

Indeed, regimes and the institutions that exist within them also shape how governments direct the distribution of resources if HIV policies are in place. Amy Patterson's (2006) work, *The Politics of AIDS in Africa*, demonstrates that African states' tendency towards the centralization of power, neopatrimonial networks, low state capacity and state instability all contribute in various ways to shaping the policy making process. Her analysis highlights the complexity of the interactions, as these factors interact with the state, democratic transitions, civil society, and external donors. Lieberman

[10]One interviewee in Uganda confirmed that the country's successful approach to controlling the epidemic (the ABC approach, discussed more in Chapter 5) was only starting to find its way into official policy documents in 2011.

(2009) demonstrates that in countries with institutionalized ethnic boundaries, where ethnic groups are concentrated geographically, policy responses are weaker. As risk of HIV is conceptualized along ethnic lines, there is little support for broad and aggressive HIV/AIDS policy responses amongst elites or society in general. For both authors, the institutions that exist and thrive within particular regimes have a tremendous impact on elite action and epidemic outcomes.

However, sometimes even with political support, other factors can be more important. In Botswana, for example, the government responded early and aggressively, launching a National AIDS Control Program in 1985, a national campaign in 1988, and an official National Policy on HIV/AIDS in 1993 (Osei-Hwedie 2001; Allen and Heald 2004). Botswana is a stable democracy with a well-developed economy, and as such did not face the same institutional constraints as other countries in the region (Heald 2006; Osei-Hwedie 2001). Regardless, the programs put in place focused heavily on condom use, an intervention designed for populations "that practised recreational and not procreational sex," which was not the case in Botswana (Heald 2006, p. 6). While President Mogae became the first President on the content to publicly take an HIV test, leading to the development of comprehensive testing and treatment programs, the level of stigma and shame associated with the disease remained high in Botswana, interfering with efforts to reduce the spread of the disease (Heald 2006). Today, Botswana's response is paying off dramatically, with 95-percent of those who need treatment receiving it (AVERT

2014), but in earlier years, even with government support and strong institutions, political will was not enough.

In short, while literature in political science about HIV/AIDS has yet to conform to a cohesive research agenda, there has been a growing interest and body of work over the past twenty years on how political systems interact with national epidemics. Importantly, there have been attempts in recent years to examine broader political factors that may apply more generally to all affected countries. As previously discussed, Justesen (2012) and Patterson (2006) provide good examples of this approach. Desmond et al. (2008), in providing a quantitative analysis and ranking mechanism for country progress in implementing HIV policies, should also be included in this list.

Political factors are likely to play a large role in determining the characteristics of a country's epidemic. The remainder of this chapter seeks to examine the political determinants of HIV/AIDS in sub-Saharan Africa. Instead of beginning with theories stemming from political science (for example, that democracies will perform better than authoritarian regimes), it begins with the literature on HIV/AIDS in order to model the epidemic. After demonstrating that insights from epidemiology, sociology, demography, and other disciplines provide a solid base for modelling the epidemic in the region, political variables are introduced into the model. Proceeding in this manner mitigates against the accidental omission of key explanatory variables. As will be shown below, the addition of political variables to the model suggests that not only are political variables crucially important, but points towards

the need for further investigation into two specific political variables: non-presidential political actors and media.

2.4 Determining a pandemic

This study employs a longitudinal analysis in order to examine the effects of contextual and political variables on HIV epidemics between 1990 and 2012. The variables under investigation are described below, and are presented in the model as L1 (levels, lagged one year) or D1 (concurrent one-year changes). Unless otherwise specified, all of the contextual data has been taken from the World Bank's World Development Indicators (WDI) online dataset (World Bank 2012b). Data from the WDI was collected from 1990 to 2012, and where applicable, missing data was interpolated[11] based on existing data.

2.4.1 Changes in HIV prevalence & incidence

The first dependent variable under examination is the change in HIV prevalence (hiv_p), or the percentage of people within a given population who are infected with HIV. The distinction between prevalence and incidence (the rate of new infections) is an important one to make. Prevalence rates report the percentage of the population that are infected with HIV, while incidence captures the rate of new infections. This analysis examines both prevalence

[11] All interpolations were performed using Stata 9's *ipolate* command, which generates a linear interpolation of missing values.

and incidence change. Importantly, changes in HIV prevalence are complicated to assess. A successful test and treat program, for example, should be expected to increase a country's HIV prevalence rate as more people are identified who are HIV positive. Of course, they may also decrease the rates if the estimates were poor to begin with. Further, successful treatment programs should increase HIV prevalence over time. As more and more people get on treatment, and live longer, they will remain in the HIV prevalence measure, which will increase over time. In fact, there are only three ways that HIV prevalence would be expected to decrease. First, HIV prevalence can be reduced statistically, through better data collection. In Uganda, the original estimate of 30% in 1992 dropped to 10% by 1998. The original data was based on one antenatal clinic in Mbarara, and President Museveni claimed the reduction as a major success. However, it is not particularly clear if this change was a result of effective behaviour change programs (the claim), better data collection (the likelihood) or the deaths of a lot of People Living With HIV & AIDS (PLWHA) (also a possibility) (Parkhurst 2002). A large number of AIDS-related deaths is the second way in which prevalence can be reduced, as deaths which necessarily reduce the number of people infected in a population. Finally, HIV prevalence will decrease if the number of new infections is fewer than the number of AIDS-related deaths. Untangling these mechanisms is difficult. Looking just at prevalence allows for an examination of the overall complexity of the epidemic, though it does not allow for more precise examination of particular mechanisms. Looking at the change in incidence

does permit an examination of mechanisms driving change, as the analysis is focused directly on what may be causing increases or decreases in the number of new infections. As this research is interested in how politics interacts with the epidemic more generally, both measures are examined. Data for both HIV incidence (hiv_i) and HIV prevalence (hiv_p) were collected from the Millennium Development Goals Indicators (UNSTATS 2014).

2.4.2 Contextual variables

In terms of the epidemic, these models also include the estimated number of AIDS-related deaths (aids_deaths). Data for AIDS-related deaths were collected from UNAIDS statistical service (UNAIDS 2013b). In terms of demographic indicators, the percentage of the population that is female (female_pct) and the percentage of the population that resides in an urban centre (population_urban_pct) are included. The percentage of the population residing in an urban centre not only captures the increased risk associated with urban dwellers, but also (as the model includes the change from the previous year) serves as a loose proxy for internal migration.

On the socio-economic front, absolute economic levels are accounted for by including the country's per-capita GDP PPP (gdp_ppp) and the logged value of national GDP (gdp_log). Relative wealth and inequality are crucial indicators, and are captured by the country's Gini coefficient (gini). Finally, measures of educational attainment are measured with the proportion of pupils who start grade one and reach the last year of primary school, collected

from the Millennium Development Goals Indicators (UNSTATS 2014).

2.4.3 Political variables

For this investigation, three categories of political variables were selected as a way to begin examining the potential role of political factors: political and civil rights, political commitment, and political accountability. Political and civil rights capture a population's ability to express preferences, political commitment reflects the priority that a government places on health, and political accountability captures whether or not preferences may have an impact on commitment.

For political and civil rights, Freedom House (2013) index scores were collected. This paper includes the political liberties index (freedom_political) and the civil liberties index (freedom_civil). Freedom House scores are inverted in this model in order to facilitate interpretation of the results. In this model, as Freedom House indicators increase in value, they go from less free to more free. As data on HIV spending is not available longitudinally, in order to capture government commitment, the model includes a measure of health spending as a percentage of Gross Domestic Product (GDP) (health_pct_gov). Again, while not an ideal measure for commitment to HIV, in general it is expected that investment in health would translate into a better ability to address HIV. Finally, political accountability is assessed following Justesen (2012), who includes the measures for legislative and executive competitiveness in his model. Both measures are taken from

the Database of Political Institutions (Beck et al. 2001).

2.5 Results

Six random effects models were run and their results are presented below. The first set of three examines HIV prevalence, the second set looks at HIV incidence. Models 1 & 4 include only demographic and epidemic-related variables, while Models 2 & 5 expand on this model by adding HIV-relevant contextual variables. Finally, Models 3 & 6 expand on both by including political variables.

The first HIV-prevalence model does not explain much of the variation in the dataset (r-squared of 0.08), however the addition of the socio-economic variables improves the model significantly. With an r-squared of 0.39, Model 2 provides a very good explanation of variation across countries and time. Of interest, the change in the percentage of the population that lives in urban centres has a significant and substantial negative effect on HIV prevalence, while both the lagged percentage of the population that is female, and lagged logged GDP have significant and substantial positive effects. The Gini co-efficient has a small, but statistically positive effect on changes in HIV prevalence. The addition of political variables in Model 3 improves the model's fit significantly (r-squared of 0.63), but only health spending as a percentage of government spending is significant. The large increase of the model's fit with the addition of political variables is of the most interest here,

Table 2.1: HIV prevalence models

	(1)	(2)	(3)
	D.hiv_p2	D.hiv_p2	D.hiv_p2
	b/se	b/se	b/se
L.hiv_p2	-0.02***	-0.01	0.00
	(0.004)	(0.007)	(0.004)
L.aidsdeaths2	-0.00***	-0.00***	-0.00***
	(0.000)	(0.000)	(0.000)
D.aidsdeaths2	0.00	0.00***	0.00***
	(0.000)	(0.000)	(0.000)
L.female_pct	0.16***	0.16*	0.13***
	(0.041)	(0.065)	(0.029)
D.female_pct	-0.00	0.19	-0.96*
	(0.444)	(0.749)	(0.392)
L.population_urban_pct	0.00	0.00	-0.00*
	(0.002)	(0.004)	(0.002)
D.population_urban_pct	-0.00	-0.20*	-0.25***
	(0.086)	(0.090)	(0.068)
L.gdp_ppp		-0.00*	-0.00
		(0.000)	(0.000)
D.gdp_ppp		-0.00**	-0.00*
		(0.000)	(0.000)
L.gdp_log		0.15***	0.22***
		(0.035)	(0.040)
D.gdp_log		0.04	0.12
		(0.088)	(0.133)
L.gini2		0.01**	0.01***
		(0.004)	(0.003)
D.gini2		0.02	0.02
		(0.008)	(0.012)
L.primary2		0.00	0.00
		(0.001)	(0.001)
D.primary2		0.00	0.00
		(0.001)	(0.002)
L.freedompr2			0.01
			(0.018)
D.freedompr2			0.01
			(0.028)
L.freedomcl2			0.02
			(0.025)
D.freedomcl2			-0.00
			(0.032)
L.health_pct_gov2			-0.02***
			(0.004)
D.health_pct_gov2			-0.02**
			(0.006)
L.eiec			-0.00
			(0.014)
D.eiec			0.01
			(0.021)
L.liec			0.00
			(0.020)
D.liec			-0.00
			(0.024)
_cons	-8.08***	-11.02**	-10.50***
	(2.072)	(3.421)	(1.702)
r^2	0.08	0.39	0.63
N	412	166	166

* p <0.05, ** p <0.01, *** p <0.001

Table 2.2: HIV incidence models

	(1)	(2)	(3)
	D.hiv_i	D.hiv_i	D.hiv_i
	b/se	b/se	b/se
L.hiv_i	-0.08***	-0.07***	-0.05***
	(0.006)	(0.013)	(0.008)
L.aidsdeaths2	0.00**	-0.00	-0.00**
	(0.000)	(0.000)	(0.000)
D.aidsdeaths2	-0.00	0.00	0.00
	(0.000)	(0.000)	(0.000)
L.female_pct	0.01	-0.00	-0.01
	(0.008)	(0.017)	(0.008)
D.female_pct	-0.24*	-0.66**	-0.16
	(0.109)	(0.213)	(0.110)
L.population_urban_pct	-0.00	0.00	0.00
	(0.000)	(0.001)	(0.001)
D.population_urban_pct	-0.01	-0.02	-0.08***
	(0.020)	(0.030)	(0.021)
L.gdp_ppp		-0.00	-0.00**
		(0.000)	(0.000)
D.gdp_ppp		0.00	-0.00
		(0.000)	(0.000)
L.gdp_log		0.01	0.03**
		(0.011)	(0.011)
D.gdp_log		0.04	0.05
		(0.034)	(0.043)
L.gini2		-0.00	-0.00
		(0.001)	(0.001)
D.gini2		-0.00	0.00
		(0.003)	(0.003)
L.primary2		-0.00	-0.00
		(0.000)	(0.000)
D.primary2		0.00	0.00
		(0.000)	(0.001)
L.freedompr2			-0.02**
			(0.006)
D.freedompr2			-0.00
			(0.009)
L.freedomcl2			0.02**
			(0.008)
D.freedomcl2			0.02
			(0.009)
L.health_pct_gov2			0.00
			(0.001)
D.health_pct_gov2			-0.00
			(0.002)
L.eiec			-0.01
			(0.004)
D.eiec			-0.01
			(0.011)
L.liec			-0.01*
			(0.006)
D.liec			0.01
			(0.012)
_cons	-0.70	0.17	0.27
	(0.405)	(0.938)	(0.467)
r^2	0.44	0.58	0.71
N	362	149	149

* p <0.05, ** p <0.01, *** p <0.001

as it suggests that something about political factors is extremely important for explaining changes in HIV prevalence.

Turning to HIV incidence, Model 4 does an excellent job at explaining changes in HIV incidence (r-squared of 0.44), yet the addition of socioeconomic variables adds considerable explanatory power. Model 5 has an r-squared of 0.58, and indicates the importance of changes in the percentage of the population that is female to incidence rates. Interestingly, none of the economic variables are statistically significant in Model 4. As in the prevalence models, the addition of the political variables has a substantial effect on the model's explanatory power (r-squared of 0.71). Unlike with prevalence, however, in the HIV incidence models, political variables are statistically significant, though substantively weak. Freedom of the press has a negative influence on HIV incidence, while civil liberties has a positive impact. The competitiveness of the legislature also has a statistically significant negative impact on changes in HIV incidence rates. In all three models the previous year's incidence rate has a negative effect on changes in HIV incidence.

2.6 Discussion

The models presented above provide preliminary evidence for the importance of political factors in contributing to changes in a country's epidemic, and suggest the need for better measurements of epidemic. As all of the models improve significantly upon the addition of the political variables, there is

much work to be done in order to better identify and measure what these variables are, especially in light of the fact that where these variables are significant, they are not particularly strong.

The difference between the two sets of models is worthy of further discussion. Changes in HIV prevalence are much more affected by demographic and economic variables. As noted earlier, changes in HIV prevalence are a difficult phenomenon to discuss, as changes in HIV prevalence can be seen as good or bad, depending on the context. If HIV prevalence is going down because many people are dying from AIDS-related illnesses,[12] then this reduction in prevalence does not indicate an improvement in treating and preventing the disease. However, if prevalence is going down because new infections are less than the number of AIDS-related deaths, then this may be a good thing - provided that the absolute number of new infections and AIDS-related deaths are not too high. In fact, in a lot of cases one would want to see HIV prevalence going up, as more people get on treatment and live longer lives. But one would not want to see an increase in prevalence if it is due to a large number of new infections. These models do suggest the importance of logged GDP on increasing HIV prevalence, which likely captures both increased prevalence due to access to treatment and increased prevalence due to new infections associated with increased inequality and poverty. This claim is strengthened by the significance of increases in the Gini coefficient on increases in preva-

[12]While this model does account for deaths attributed to AIDS, it does not capture those deaths that were due to AIDS but reported as death due to TB or other opportunistic infections.

lence. While it is difficult to untangle *how* each variable in these models is contributing to the change in prevalence rates, based on existing theory of what determines changes in an epidemic, there are plausible explanations for the sign and significance of each variable. The presented HIV prevalence models are doing a good job of capturing the variation in what contributes to change in HIV prevalence in the region over time.

The HIV incidence models are more straightforward, and again do not deviate from the established theory of what may determine changes in an HIV epidemic. Of note is the fact that the previous year's incidence rate has a negative impact on new infections. The higher the rate of infection the previous year, the lower the rate in the current year. This may be a phenomenon of the epidemic, where high risk individuals get infected and thus reduce the number of high risk individuals to be infected in future years, or it could be a result of knowledge on the part of the population: the higher the infection rate is, the less likely you may be to engage in risky sexual behaviour. A higher level of press freedom is negatively related to changes in HIV incidence, suggesting the possible role of media in controlling HIV epidemics. The fact that increased civil liberties is related to higher changes in HIV incidence is worthy of further investigation. Previous research has noted a protective effect of Islam and conservative societies in terms of HIV transmission (see Gray 2004), but it may also be the case that more free societies are at a higher risk of HIV infection more generally.

While these models are not exhaustive, and deserve to be developed fur-

ther, they have established a few preliminary points of interest. First, it is possible to accurately model HIV epidemics across time and place, and simply looking at the demographic and epidemiological variables is insufficient. For both HIV prevalence and incidence, the fit of the first model is improved substantially through the addition of contextual variables that the HIV literature suggests are important. This suggests that in large part, the epidemics in the region are very similar and interact with various factors in a similar fashion.

Second, of particular interest to this study is the fact that political variables matter at all. Whether for HIV prevalence or incidence, there is considerable value in including political variables in the models. However, while the fit of the models increase significantly with the addition of the political variables, when significant, these variables have a rather weak effect. This suggests that the variables being used are likely related to other political factors that may be of more relevance. Research should focus on identifying, measuring, and including additional political variables.

This analysis is limited by several factors. First, many of the variables that are included in other models are not available longitudinally over this time period, and thus it is difficult to include many variables that may be important. For example, there is no good longitudinal data on ARV coverage or circumcision rates, and these two measures will likely account for a sizeable amount of variation between cases. Second, the data on HIV incidence and HIV prevalence is highly correlated as incidence is included within prevalence,

and incidence rates are modelled using HIV prevalence estimates.[13] Without independent and accurate measures of HIV incidence and HIV prevalence, it is not possible to model the effects of (for example) the size of the epidemic on increases in HIV incidence.

Future research will include variables from other cross-sectional and time series analyses into the model. Many other relevant variables, such as ethnic fractionalization (Lieberman 2009) and the dominant strain of HIV in the country, were not included at this point due to time and data constraints. These variables will likely change the dynamics of the models. Of considerable interest will be the inclusion of additional political variables into the model. Research should be directed towards what is important about these political factors, including civil liberties, press freedom, and regime competitiveness, that may account for their impact on the model. For example, it may not be a free press that is important, but rather how that press covers the epidemic. Research should be directed towards identifying and developing measures for these and additional political variables for inclusion in future studies. The remainder of this dissertation takes preliminary steps to making this contribution, through an investigation of the politics of HIV/AIDS in Uganda and South Africa.

[13] "[D]irectly measuring HIV incidence is a complex process, therefore national, regional and global estimates of HIV incidence are usually produced by computer models and are based on estimates of HIV prevalence" (United Nations Statistics Division 2014).

Chapter 3

The Political Context of Epidemics: The Cases of South Africa & Uganda

3.1 Introduction

In Chapter 2, the longitudinal analysis of HIV determinants in sub-Saharan Africa suggested the importance of including political variables in the analysis.[1] That chapter demonstrated that political variables matter but left many questions unanswered. For example, if legislative competitiveness reduces the number of new infections, what is the mechanism at work? Strand (2012) argues that democratic leaders often face governance dilemmas when

[1]Portions of this chapter were previously published in Daku (2013).

faced with HIV epidemics, while Dionne (2011) demonstrates that executives with shorter time horizons (i.e. those who face more competition) propose better policies, but do not necessarily enact better programs. The mechanism for how legislative competitiveness is effective remains opaque. The same is true of increased civil liberties or freedom of the press. Why would increased civil liberties *increase* incidence rates, while more freedom for the press contributes to their reduction? Identifying the potential importance of particular political variables is only the first step.

As suggested in Chapter 1, political epidemiological analyses should strive for an iterative, mixed methods approach to understanding the interaction between politics and epidemics. Having identified that political variables do matter, this dissertation turns to a closer examination of two cases whose epidemics were highly politicized: South Africa and Uganda.

South Africa and Uganda were selected as they had exceptionally different experiences with the disease, following Lieberman's suggestion that cases should be selected according to their outlier status in regards to the variables of interest (Lieberman 2005). In terms of HIV prevalence, and HIV incidence rates over time, these countries' experiences could not have been more different. South Africa's early low incidence rates grew tremendously before declining, while Uganda exhibited extremely high early incidence rates which then quickly declined. Today, Uganda's HIV rates are rising again (Uganda Ministry of Health 2012). Furthermore, in terms of HIV prevalence, both countries demonstrate very different experiences. South Africa's prevalence

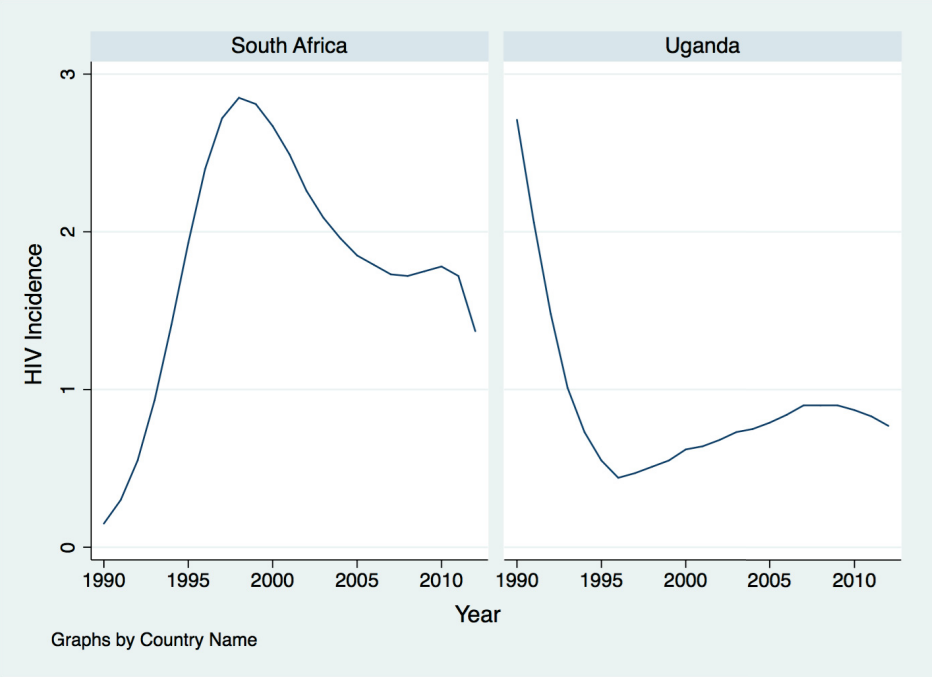

Figure 3.1: HIV incidence in South Africa & Uganda

rates soared between 1990 and 2000, stabilizing around 18%. Uganda, on the other hand, witnessed a dramatic decrease in HIV prevalence between 1990 and 2000, followed by a levelling off and upward trend in 2005. Figures 3.1 & 3.2 highlight these differences.

It should be noted that this chapter is not meant to be a comparison of the cases of Uganda and South Africa, and thus is not faced with the classic comparative problem of too few cases with too many variables (Collier 1993). While South Africa and Uganda do share similarities in terms of their experience with HIV/AIDS,[2] the purpose in this chapter is not to compare the

[2]Both countries confronted the epidemic after emerging from an oppressive past and were tasked with combating a society-wide epidemic during a transition period. Also,

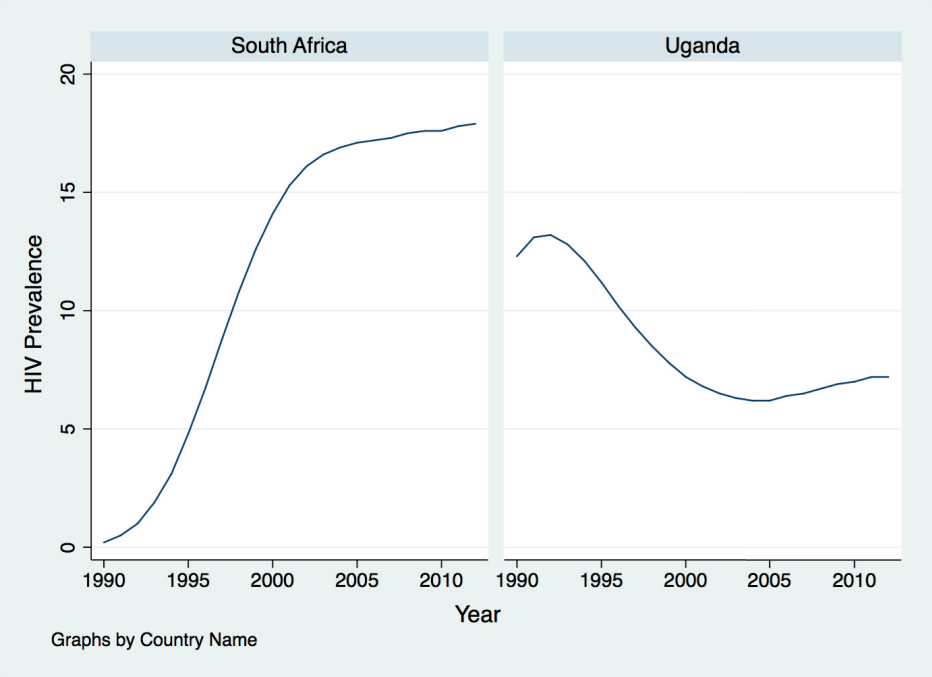

Figure 3.2: HIV prevalence in South Africa & Uganda

two countries, but rather to provide an exploratory analysis of how political factors impacted country-level epidemics.

Seawright and Gerring suggest that fruitful exploratory analyses can be performed by selecting cases that "by reference to some general understanding of a topic (either a specific theory or common sense), demonstrates a surprising value" (Seawright and Gerring 2008, p. 302). In addition to the surprisingly different trajectories of HIV infections in both countries, South Africa and Uganda are also deviant cases insofar as expectations of how they

both countries were prepared with policies at the end of the transition period to combat HIV/AIDS. Most importantly, as will be discussed in the remainder of this chapter, both countries' experiences were highly politicized.

should have performed did not match reality: South Africa was richer, had a more developed health care system, and as a democratic state was expected to be accountable to the citizenry. The opposite held for Uganda. Instead, until recently, Uganda was seen as a world-leader in controlling the epidemic, while South Africa was seen as a failure.

As outlined in Chapter 1, the need to investigate the role of the state is critical for political epidemiology. This chapter demonstrates that the trajectory of the epidemics in both countries was heavily influenced by their political history, and this history created the conditions that ultimately led to their divergence in experience. This discussion frames the importance of the role of political leadership in South Africa and political messaging in Uganda emerge that will be examined in Chapters 4 & 5.

3.2 South Africa

According to most measures, South Africa was extremely well situated to deal with an HIV epidemic, especially given the amount of time that officials were aware of the problem. However, with a prevalence rate of 19.9% and over 6.2 million PLWHA (2013 estimates), the impact of the disease in South Africa has been one of the worst in the world (UNAIDS 2013b). The strength of their economy and state institutions poses the biggest question concerning South Africa's experience: their wealth and their relatively effective health bureaucracy should have provided them with the opportunity to "provide

a universally accessible 'package' of HIV prevention" (Schneider and Stein 2001, p. 724). South Africa was not constrained by a lack of health infrastructure, they were not handcuffed by the high cost of ARVS, and they were not constrained by the need to get donors to fund their programs. Regardless of the opportunity, what was consistently observed was an underspending of provincial HIV/AIDS budgets (Butler 2005; Johnson 2004). According to one expert, the South African government's initial AIDS policies were a "sorry tale of missed opportunities, inadequate analysis, bureaucratic failure and political mismanagement" (Nattrass 2004, p. 41).

In 1990, the first annual national survey of antenatal clinics was conducted, showing a prevalence rate of 0.8%, by 1991 this figure was at 1.5%, and by 1998 it had skyrocketed to 22.8% (Schneider and Stein 2001; Benatar 2001). In the province of KwaZulu-Natal, the hardest hit area of the country, seroprevalence rates had reached 36.2% by the year 2000 (Fassin and Schneider 2003). Well over twenty per cent of the population was HIV-positive, and over 200 HIV-positive children were being born daily due to MTCT rates of nearly fifty per cent (Benatar 2001). In 2000, AIDS accounted for a full twenty-five per cent of all deaths and had contributed to more than doubling (in some cases near quadrupling) the mortality rate for all socio-demographic groups. South Africa saw the AIDS problem coming, and had the means to prevent it from growing to such high numbers. Instead, various political barriers stood in the way of a successful HIV prevention program.

3.2.1 Legacies of apartheid

As with many things in contemporary South Africa, the legacies of apartheid affected how the South African state was going to address the epidemic. As in Uganda, HIV was first seen in the early 1980s, though the capability and political will to develop a response to the disease did not emerge until after the fall of apartheid (Schneider and Stein 2001). While aware of the growing number of cases of HIV, the apartheid-era South African government was not particularly interested in controlling a disease that seemed to be (on the African continent at least) primarily targeting those on "the fringes of society" (Fourie and Meyer 2010, p. 35). As Fourie and Meyer (2010) note,

> South African governments' early failure to respond adequately to the epidemic meant that infection spread almost exponentially since the first cases of AIDS were reported in 1982. And yet it was really only once ARVs became an affordable treatment option in the mid-1990s that government inaction became an obvious concern (Fourie and Meyer 2010, p. 36).

To clarify, the root cause of the overwhelmingly large size of South Africa's epidemic can be traced back to politically motivated inaction on the part of the apartheid-era government. In terms of HIV/AIDS, the negative impacts of apartheid do not stop there. The behaviour of South African politicians in the post-apartheid era can also be explained in part by the legacies of white rule. In particular, the struggle against apartheid solidified a particular political culture within the ANC which went on to win the first (and to date, all subsequent) democratically held elections in 1994. This culture must be

contrasted with the vibrant participatory democratic culture that developed on the ground in South Africa by various domestic groups. As Schneider and Stein point out, this culture was far reaching, resulting from the "internal mobilisation in every facet of life, from worker, to youth, civic, religious and professional sectors" (Schneider and Stein 2001, p. 724).

The political culture within the ANC was the antithesis of the domestic participatory culture. Due to a history in exile and a subscription to a philosophy of liberation, the ANC depended on a hierarchical, top-down, and disciplined style of leadership (Butler 2005). When the ANC was allowed to return to South Africa in 1990, the domestic movement and the movement-in-exile were combined, as were their two very different styles of leadership (Schneider and Stein 2001). These two styles of leadership were incommensurable, and that fact became apparent during the hand-over of power. As the ANC was the public and political voice of the movement, ultimately the leadership style of the ANC was preserved at the expense of the participatory-democratic tradition. As one observer notes, "[t]he effect of [the hand-over of power] was that power gradually slipped out of the hands of grass-roots structures such as street committees, civic organizations, local union structures, women's organizations, and youth bodies and became centralized in the hands of those who were close to, or part of, the political negotiations process" (Buhlungu 2005, p. 58).

The exiled leadership had little experience with participatory organizational structures, so they continued as they were, with the long-term result

being an organizational structure within the ANC that left little room for participation (Buhlungu 2005). As a result of the successful liberation struggle against apartheid and the subsequent dominance of the ANC-style of leadership over a participatory model, the activities of the government are highly centralized with little desire or motivation to become more open to citizen participation.

Forced to organize and co-ordinate outside of South Africa during the lead up to the dismantling of the apartheid state, the ANC's leadership style and the way in which it interacts with civil society is decidedly less democratic and participatory than it may have been, had the ANC been allowed to freely operate as a domestic movement during apartheid. As will be discussed in greater detail in Chapter 4, this style of rule effectively silenced dissent within the ANC ranks, allowing Mbeki's ill-advised policies to cause tremendous damage to efforts to control the spread of the epidemic.

Furthermore, the apartheid state created the legal and social conditions for extreme levels of inequality, worker mobility, and violence - all factors that contribute to the spread of HIV within a population (Fassin and Schneider 2003). While subsequent governments have done a significant amount of work to dismantle these legacies (Black Economic Empowerment and the desegregation of the South African education system, for example), the effects of forced segregation still persist in South Africa, which remains one of the most economically unequal countries on the planet.

3.2.2 The transition to democracy

The transition to a democratic state in 1994 brought with it many positive changes for South Africans, but it was also marked by political decisions that would prove to have an important impact on the epidemic. Importantly, the demise of apartheid was not the overthrow of one group by another, but rather a slow negotiated process that culminated in democratic elections.[3]

Two key arrangements that emerged from this negotiation process are worth noting in the context of HIV/AIDS. The first arrangement was that the jobs of civil servants were protected for five years after the transfer of power, effectively pitting old and new bureaucrats against each other. The old guard was committed to showing that they were indispensable, and thus was not particularly interested in helping their replacements. Conversely, the new bureaucrats were determined to prove their worth without the help of the old bureaucrats. The effect of these interactions was, to be blunt, a dysfunctional state bureaucracy (Butler 2005; Parkhurst and Lush 2004). As such, the new ANC government inherited the apartheid administration pretty much intact, and the dynamic of the administration forced it to focus more on a political strategy of divide and rule than on the provision and delivery of social goods (Schneider and Stein 2001). The career aspirations of bureaucrats, specifically their desire to remain within the bureaucracy and prove their worth, would later contribute to creating the conditions for

[3]It is for this reason that both Nelson Mandela and F.W. de Klerk shared the Nobel Peace Prize in 1993.

Mbeki's policies to move forward with little opposition from within the state (see Chapter 4).

The second arrangement was that, in order to satisfy minority interests, a quasi-federal political system was put into place. This system was comprised of a central government and nine separate provinces that are quite autonomous vis-à-vis the central authority (Butler 2005; Parkhurst and Lush 2004). The result of this was that the National government was not in direct control of the health care systems. This mandate, amongst others, fell under the authority of the individual provinces, and thus limited the central government's control over how money was spent on public health plans. Indeed, the quasi-federal structure not only left the management of AIDS to the provinces, but it also resulted in enormous variation between provinces in the amount of money committed to fighting AIDS (Johnson 2004). On measure, the government's power over the implementation of policies was severely reduced due to these factors (Schneider 2002).

While the South African state could develop National Strategic Plans or National Agencies (as were begun under Mandela's Presidency), the ability for the National government to affect the implementation of plans or the spending on particular issues was dramatically curtailed. The 2012 South African National HIV Survey highlights this fact, showing discrepancies between the provinces on a variety of key indicators[4] (Shisana et al. 2014).

[4]Not only on HIV incidence or prevalence, which may be explained by other aspects of the epidemic, but more importantly on other issues such as knowledge of HIV status or perceived risk of infection, factors that are more related to particular implementation of

These two institutional conditions created a path of least resistance for the bureaucracy and the government as a whole. Butler identifies two competing schools of policy thought that were present during the transition: a 'mobilization/biomedical' paradigm, focused on ARV treatments, society-wide mobilization and political will; and a 'nationalist/ameliorative' paradigm, focused on nutrition, combating poverty, palliative care and the responsibility of the individual (Butler 2005). While both were strong and involved in the debates concerning AIDS policy in the mid-nineties, it was the ameliorative/nationalist paradigm that became the prominent, and pursued, model.[5] This paradigm did not include the distribution of ARVs and instead concentrated on things such as Sexually Transmitted Infection (STI) treatment, education, condom marketing - essentially, the focus was on behaviour change as opposed to treatment through ARVs (Butler 2005). The ascendancy of the nationalist/ameliorative paradigm was a product of the particular institutional context within which the debate was taking place. As Butler notes, "[t]he hierarchical state bureaucracy and poor relations with the voluntary sector increased the viability of syndromic STI approaches and palliative care, but militated against wider community-based prevention and treatment interventions," the net effect being that the institutional context "predisposed" many policy-makers to prefer one paradigm over the other"[6] (Butler 2005,

policies.

[5]Indeed, such a problem can emerge in any country, and arguably the reason why the correct paradigm was pursued in Uganda, and not South Africa, can be explained by which side the President supported.

[6]Again, the same could have been said about Uganda had Museveni not have taken an

p. 602).

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As will be discussed in Chapter 4, the legacies of apartheid, the history of the ANC in exile, and the details of the power-sharing arrangement, created a context where there was little room to challenge the President from within government. The legacies of apartheid also provided justification for the position that Mbeki took. While South Africa is a democratic state, the ANC's dominance at the time permitted the President, as party leader, to pursue an agenda that was at odds with what many South Africans desired. The political context shaped the environment under which policies and programs were pursued and how, ultimately providing the conditions under which Thabo Mbeki's ineffective policies were implemented. In large part due to its history, in South Africa, it makes sense to speak of an increased *political susceptibility* to HIV infection. This increased political susceptibility of disease will be explored in further detail in Chapter 4 through an investigation of the role of political leadership in South Africa's response.

3.3 Uganda

Yoweri Museveni became President of Uganda on January 29, 1986 after leading a successful rebellion to overthrow Milton Obote. Later that year,

active role in handling the epidemic.

Museveni sent 60 military officers to Cuba to undergo training. Within days, Museveni had received word from Fidel Castro. "You know," he was told, "there's a big problem in your country..." As a part of standard Cuban medical practice at the time, they were tested for HIV, and 18 of them were found to be HIV positive (Tumushabe 2006). Specifically, this singular event marked a (self-admitted) shift in Museveni's thinking about HIV/AIDS, resulting in one of the most dramatic reversals of a government's actions on HIV/AIDS epidemic the world has seen in any country. As Tumushabe (2006, p. 9) notes, "[I]t was perhaps this threat to his power base, more than anything else, that provided the overwhelming motive for Museveni's personal effort."

Indeed, unlike in South Africa, where leadership has been at times absent, questionable, or misguided, political leadership on HIV/AIDS in Uganda was from the beginning focused on preventing the spread of the epidemic. Much of this is likely due to Museveni's tenuous position as a new President. With a fragmented society and authority gained through armed rebellion, Museveni's continued existence as President rested firmly in his ability to control a strong military. With such a high infection rate amongst his military officers, it is little wonder that Museveni acted so decisively. Importantly, because there was no availability of drugs, vaccines, or other measures that could be targeted at the elites, Museveni was unable to restrict his efforts only to the military. HIV's generalized status in Uganda meant that to address it for one group was to address it for all.

3.3.1 Centralization of the response

Unlike South Africa, Uganda is not a federal state. Instead, Uganda is structured around Resistance Councils (RC), decentralized governance units that exist from the national and district (R5) level all the way down to the village level (R1). Importantly, district level councils have a staff, a budget, and a Presidentially-appointed director. In other words, while on the surface the RC system appears to be a great tool for participatory democracy, in reality it is an excellent way to divide groups, empower others, and create opportunities for patronage[7] (Green 2010).

Having political dependents at lower levels of government is undoubtedly useful in any regime, but in the context of HIV/AIDS, it meant that Museveni's political leadership was not going to meet any resistance at the district level. When Museveni decided to make HIV a priority, the districts quickly followed suit. Due to the RC structure and the fact that the epidemic was expanding in the midst of the transition from Obote's regime, Museveni was in a unique position to address and influence the Ugandan population. Parkhurst notes that Museveni "took advantage of this timing, whereby a transition phase of the country coincided with the initial epidemic growth of AIDS, thereby allowing his statements to have a more profound impact on

[7]Between 1990 and 2010, the number of districts in Uganda increased from 34 to 111 (plus Kampala), scheduled to be increased to 136 in 2015 (Odyek et al. 2012). For Museveni, increasing the number of districts in Uganda carries measurable electoral benefits (Grossman and Lewis 2014). By expanding the number of districts, Museveni has not only fulfilled the desires of particular constituencies, but he has also expanded the number of political appointees that are beholden to him for access to power and resources.

the people of Uganda" (Parkhurst 2001). This is not to say that Museveni preached what he politicized. He has often called HIV a 'self-inflicted' disease, he has promoted the full public disclosure of HIV-status (much to the chagrin of international donors) and he has been quoted as saying

> [t]here is no reason why [p]eople living with HIV/AIDS should be offered opportunity in the army. Because training officers who later die not from bullets in combat but from AIDS is so frustrating. It is like fetching water in a basket with holes (Museveni in The Monitor 2000: 1-2 quoted in Tumushabe (2006)).

Museveni's personal views on HIV did not, however, get in the way of a successful approach, lending support to Tumushabe's thesis that Museveni was only interested in the disease insofar as it affected his power base.

Between 1982 and 1986, HIV/AIDS was handled in Uganda like any other epidemic, with the response coming primarily from the health sector, and the way in which it was originally addressed was primarily through the lens of a health problem (UAC 1993, 2002). The belief held by other sectors was that AIDS was 'not their problem.' That changed after Museveni's conversation with Castro. Museveni recognized that HIV was not only a health problem, but a disaster that required the actions and attention of every government department (UAC 2002). Museveni himself highlighted this by asserting that "[a]ll ministers, RCs , Senior Government officials must inform the people how to stop the spread of AIDS, at all meetings without exception" (Putzel 2004). The decentralized political structure of Uganda facilitated the quick application of this dictate at every level of government, and Museveni's shift

towards a multi-sectoral approach to handling HIV/AIDS afforded Museveni the opportunity to bring the HIV response directly under the control of the executive.

In 1992, under the office of the President,[8] the Ugandan AIDS Commission (UAC) was launched, its purpose being to "act as a co-ordinating body for AIDS activities in the country" (Parkhurst 2001). AIDS Control Programs, modelled on the one that had been in existence in the Ministry of Health, were implemented in other ministries, and the National AIDS Policy was adopted, committing all government ministries and employees to do everything "within their capacity and mandates to fight HIV/AIDS" (UAC 2002). The strong language of the policy is worth replicating in its entirety:

> All Ugandans have individual and collective responsibility to be actively involved in AIDS control activities in a coordinated way at the various administrative and political levels down to the grassroots level. The fight against AIDS is not only directed at the prevention of the spread of HIV but also addresses the active response to, and management of, all perceived consequences of the epidemic. The process of preventing HIV infection, and controlling its consequences by the various organisations and individuals in the country, should be comprehensive, and sensitive to all aspects of the epidemic and emphasize capacity building for sustainable activities among sectors and individuals (UAC 1993).

The National AIDS Policy recognized the multi-faceted nature of the disease, and encouraged not only institutions, but individuals to be 'actively

[8]This body was under the direct control of the office of the President, instead of being housed in (perhaps more appropriately) the Ministry of Health, as previous initiatives were.

involved in AIDS control activities.' It also emphasized the need for action from various different sectors and actors. This multi-sectoral approach had multiple aims. In all, there were five objectives for the strategy: to stop the spread of HIV, to mitigate the health and socio-economic impact of the disease, to strengthen national capacity to respond to the epidemic, to establish a national information base, and to strengthen the national capacity to undertake HIV related research (UAC 1993). Many of the strategies suggested to reach these goals were community focused - be it strengthening their ability to cope with the crisis, strengthening local capacities for implementation of policies, or reducing the community level impact of the epidemic (UAC 1993). The approach also recognized the role to be played by religious groups, civic organizations, and other members of the associational sector (Allen and Heald 2004). Furthermore, while the rhetoric of the Ugandan response clearly encouraged organizations to participate in addressing the epidemic, the Ugandan government also assisted in the creation of new organizations for this purpose (Putzel 2004).

The reduction of new HIV-infections was the most important of the goals, and the UAC approached this task primarily through strategic Behaviour Change Communication (BCC).[9] The AIDS Control Programme (ACP) in the Ministry of Health had been engaged in this kind of activity since its inception, promoting grass-roots involvement in combating HIV through a

[9]It is worth noting that a strategy that relies on messaging is much less expensive than one that focuses on treatment or service provision.

variety of media (Green et al. 2002). What was different about the UAC's approach was not just the messaging (ABC), but it was also the engagement of the newly encouraged and created organizations in the BCC project. Ultimately, BCC in Uganda was primarily face-to-face and community-based, instead of relying on print or radio campaigns (Green et al. 2002). The importance of the community groups in the BCC campaigns cannot be overlooked. A 1997 inventory of Community Based Organizations (CBO) and NGOs found that nearly 70 per cent of the close to 1500 agencies were involved in information, education and communication activities (UAC 2000). This count does not include informal organizations, associations and networks, which suggests that the extent of the community's participation in BCC is underrepresented in this inventory.

In essence, what Museveni had done was to centralize the response under the control of the National government, and then outsource its execution to lower levels of government and community organizations. Starting in the late-nineties, the trend in sub-Saharan Africa in handling HIV was marked by a shift from prevention to a focus on access to treatment, a result of shifting priorities within the international community, cheaper drugs, and increased funding for treatment from organizations such as The President's Emergency Plan For AIDS Relief (PEPFAR) and the Global Fund (Crane 2013; Hardon 2005). Uganda did not follow the trend, instead maintaining that AIDS was a broader development issue (UAC 2002). While access to treatment did increase, due to the path that Uganda had pursued, their response remained

multi-sectoral and decentralized.

3.3.2 Unintended consequences

The crux of the formal Ugandan response was clear. Address the epidemic on a broad scale, work to bring new infections down through strategic behaviour change, and engage as many sectors and participants as possible. However, there was more to the response then these official prescriptions. As Parkhurst (2001) observes, there were two key consequences that emerged from the government's response which had an impact on the success of the overall strategy: a reduction in the stigma surrounding HIV/AIDS; and the emergence of a diverse set of approaches.

The broad engagement of HIV/AIDS coupled with an aggressive BCC campaign had the positive, if unwitting, effect of reducing the stigma attached to the disease. In America, AIDS carried a strong social stigma, with a belief that it was a disease only of homosexuals and the sexually promiscuous (Putzel 2004). The Museveni government did much to reduce this stigma: HIV education was ingrained in the educational curriculum, key cultural, religious and governmental figures came out to speak of their own experiences with HIV, and the general policy of 'openness' by the Ugandan government[10] all contributed to normalizing the epidemic (Allen and Heald

[10]Museveni's commitment to a policy of open discussion of HIV was ultimately successful, even more so when examined within the context of the fear of stigmatization at the international level. Leaders across Africa feared the expected stigmatization and racism against their infected continent and dreaded the prospects of a reduction in tourism (Patel 2001). The openness that Museveni expressed domestically translated into an open

2004; Green et al. 2002; Low-Beer and Stoneburner 2004).

Importantly, the BCC that emerged was diverse and tailored to different communities. It also resulted in similar messaging coming from a multitude of sources. As little is known about why a particular individual may change their behaviour (a religious message may work for one while a government broadcast may carry more weight for another), the importance of multiple messages becomes manifest. The more messages, the more of a chance there is for the content to get through and create individual change (Parkhurst 2001). This diversity in approaches can be seen as an offshoot of the government's commitment to the engagement and fostering of community level responses. The government made it relatively easy for NGOs to work on HIV-related issues, and they have also been less interested in *how* private groups address HIV, and more interested in *if* they do (Parkhurst 2001; Putzel 2004). While neither stigma reduction nor a diverse approach to BCC were officially enshrined in the documents emerging from the UAC, both were integral to the success of the implemented policies.

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Uganda's particular political structure and Museveni's need to maintain control over the response led to a response that was centrally articulated but executed by lower level actors. These actors were encouraged to follow

dialogue with the international community - not to the stigmatization that was so widely anticipated.

the government's lead, but were left to tailor the messages to their own constituencies. As noted above, Museveni did not really care what these actors were doing, provided that what they were doing was effective. The reliance on BCC meant that at the heart of Uganda's response was the importance of ideas, and the need to install these ideas in the population. These ideas and priorities coming from the Ugandan government were not immune to political pressures, and were altered at the behest of international donors. Ultimately, Uganda's success hinged on a particular kind of messaging that resonated with the population. The Ugandan government's strong involvement in efforts to control the spread of HIV through a BCC approach altered the *political context of behaviour*. This will be discussed in further detail in Chapter 5 through a discussion of Uganda's history with ABC, and a media analysis of the current discourse surrounding HIV in Uganda.

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South Africa and Uganda both provide excellent examples into how political history and political context are crucially important for understanding epidemics. In the South African case, institutional, social, and ideological legacies of apartheid contributed to creating the conditions where Mbeki's AIDS denialism could start to take root. In Uganda, the decentralized administrative RC structure combined with the centralization of power within the neo-patrimonial regime led to a response that was centrally articulated (BCC) yet could immediately reach all corners of Uganda, and, it bears men-

tioning, was much less expensive than the alternatives. The unique timing of the epidemic and the way in which it was brought to Museveni's attention also contributed to ensuring solid and focused political commitment to controlling the spread of the disease that has been absent in many other cases. This dissertation now turns to examining two of the important political factors highlighted in the above discussion. Chapter 4 examines the role of political leadership in South Africa's epidemic, while Chapter 5 turns to the messaging that was crucial to Uganda's response.

Chapter 4

Political Leadership & HIV/AIDS in South Africa

It's political will. Political leadership. But no one says what that [pause]. What does that mean?
(South African Interviewee #7 2011)

4.1 Introduction

As discussed in Chapter 3, the political context of the HIV epidemic in South Africa created the conditions where political leadership was particularly important for the trajectory of the epidemic. Apartheid-era governments failed to lead on the issue, Nelson Mandela did so quietly, Thabo Mbeki led in the wrong direction, and Jacob Zuma now appears to be leading by omission. However, as the role of high-level political leadership in the development of

health and social policies is a complex one, it is difficult to simply ascribe the success or failure of 'leadership' in any of these cases. On the one hand, when policies are successful and progress is made, high-level leaders are the first to step up and take credit for the actions that produced the positive results. On the other hand, high-level political leaders are nothing more than individuals, operating within a system that includes a state bureaucracy, civil society, individual actors and international organizations. Whether or not the success or failure of a country's policies can be attributed to a particular leader or a particular kind of leadership requires a close examination of leadership and how it interacts with other factors.

In this chapter, the role of political leadership in the development of South Africa's HIV/AIDS policies is examined in more detail, demonstrating that current conceptions of political leadership are insufficient to explain HIV/AIDS policy outcomes in South Africa. At the core of the issue is that while it is electorally desirable and analytically parsimonious to attribute the success or failure of policies to particular leaders, such as Museveni in Uganda (Allen and Heald 2004; Bor 2007; Parkhurst and Lush 2004) or Mbeki in South Africa (Cullinan and Thom 2009; Heywood 2010; Nattrass 2007), such an approach tends to equate good leadership with success and poor leadership with poor outcomes, and does not result in 'political leadership' being a useful analytical tool.

Leadership is generally accepted to be an important element in the formation of policies, with the question being "not *whether* but *how much* such

leadership makes a difference" (Edinger 1990, emphasis added). Anecdotal accounts of the importance of leadership in HIV/AIDS policies abound, and the experiences of Thailand (Phoolcharoen 1998), Brazil (Oliveira-Cruz et al. 2004; Teixeira et al. 2003), Senegal (Meda et al. 1999), Swaziland (Mbabane Interviewee #1 2011; Mbabane Interviewee #2 2011) and Rwanda (Geneva Interviewee #1 2011; Geneva Interviewee #2 2011; Geneva Interviewee #3 2011) all further support the perceived importance of leadership.

Research on political leadership tends to take an institutionalist perspective, examining why particular outcomes emerge out of certain institutional arrangements (Jones 2001; Tsebelis 1990). Furthermore, these institutions are often conceived of as distinct entities from the actors that operate within and through them (Hall and Taylor 1996; Immergut 1998; March and Olsen 1996). Regarding HIV/AIDS, leadership, the very characteristic that is being lauded as being an important explanatory factor, is often seen as a product of and reliant on the institutions from which it arises. By emphasizing structure at the expense of agency, institutionalist approaches can overlook the importance of individual actors and actions. The reverse is true of agent and context-specific analyses. What is needed is an analysis of political leadership that combines the insights of an institutionalist approach while allowing for the importance of agency that is simultaneously influence by yet not solely dependent upon the constraints of institutions.

This chapter examines political leadership more closely, building on the evident consensus that it is a crucial component for policy formation while at-

tempting to place it in its appropriate context. First, it presents an overview of political leadership in South Africa as it relates to HIV/AIDS policies. Based on that overview, I then develop a typology of leadership that should allow for a more nuanced and analytically fruitful examination of the phenomenon in future studies.

4.2 Political leadership and HIV/AIDS

Political leadership is a difficult phenomenon to define, let alone assess. In the literature on effective HIV/AIDS policies, political leadership comes up time and again as the important explanatory variable. This variable raises three key issues: one of definition, another of level of analysis, and a third concerning counterfactual tests (Jones 2001). For this analysis, I follow Bor's definition of 'political commitment' which "refers to the extent to which top-level government leaders (viz. heads of state and their appointees) support AIDS as a priority on the national agenda" (Bor 2007). The analysis focuses primarily on national level leadership. Counterfactual claims are handled by contrasting the actions of Thabo Mbeki and Jacob Zuma, as institutional and contextual factors remained relatively stable between the two presidencies. This provides a useful starting point to examine leadership, but it must be stressed that it is only a starting point, as the research undertaken here suggests that the concept of political leadership requires further disaggregation along other dimensions in order to be more analytically useful.

Most analyses of the politics surrounding HIV/AIDS policy formation in South Africa focus on the poor leadership of Thabo Mbeki and his outspoken Minister of Health, Manto Tshabalala-Msimang (Cullinan and Thom 2009; Nattrass 2007; Parkhurst and Lush 2004). The blame for poor policy agendas, so the literature claims, can be mostly attributed to the way in which high-level political leaders framed and pursued the issue. In 'The Virus, Vitamins and Vegetables,' Cullinan and Thom (2009) present a collection of accounts of Mbeki's time in office and the mismanagement of HIV/AIDS by the South African government. The chapters range from stories of collusion between government and private drug developers to the obstructive behaviour of then Health Minister Manto Tshabalala-Msimang, but the common theme is that political leadership at the highest levels was a roadblock to effective management of HIV/AIDS in South Africa.

As Nattrass (2007) argues, ideas matter when it comes to HIV/AIDS; these ideas can entrench themselves into systems and shape public policy in negative ways, as was the case during the period of 'AIDS denialism' under Thabo Mbeki. Highlighting the importance of individual leadership and ideas is the fact that, as Nattrass notes, "there were no obvious electoral forces pushing [Mbeki] towards an AIDS denialist stance, and the financial interests that benefited from AIDS denialist attacks on ARVs (that is, the purveyors of alternative remedies) were relatively small scale" (Nattrass 2007, p. 13). In other words, standard political explanations for why a leader might act in a particular way (i.e. electoral or budgetary considerations) do not

explain Mbeki's position, yet as discussed in Chapter 3, the political context permitted his position to permeate through the South African government's bureaucracy and be wedged solidly in policy and practice.

However important Mbeki's stance was, political leadership alone cannot account for the poor response that South Africans witnessed from their government. Indeed, recent literature has begun to unpack other important explanatory factors beyond leadership in South Africa's response. Pieter Fourie and Melissa Meyer (2010) present a more detailed perspective. Basing their analysis on Cohen's (2001) typology of denialism, they contend that denial was present at all levels of government, and within successive governments. For Fourie and Meyer, AIDS denialism began under the apartheid regime, was maintained under Mandela and was continued with Mbeki. The difference between the regimes came less from the government's stance regarding the disease, and more with the reaction of others. As in the discussion in Chapter 3, Fourie and Meyer maintain that denialism had its roots in political structures and history, and thus it makes less sense to peg the blame for the response to the epidemic on an individual, or a collection of individuals, as has been the common trend in the literature. Likewise, Butler (2005) argues that the particular responses that were pursued by both Mandela and Mbeki's regimes were premised on the structural and organizational realities in which the governments found themselves. Due to political institutions and relations between state and society, the South African government was in a position where the pursuit of one approach to the epidemic was more likely

than another.[1] Certain options, such as a focus on poverty, nutrition and traditional medicine represented the path of least resistance, one that was determined more due to structure than who was in power.

Finally, Jacob Bor's research points to the importance of political leadership, but examines other factors in an effort to determine where this leadership comes from (Bor 2007). Through an analysis of the AIDS Programme Effort Index, Bor concludes that political leadership is affected heavily by press freedom, HIV prevalence, and income inequality within the country of question. In sum, leadership can be seen as being important in and of itself, and also highly determined by structural and organizational constraints. The problem is that general explanations tend to focus on leadership divorced from structure, while the context of an actor's behaviour is integral to understanding the role and the limits of political leadership. What is missing is a theory of leadership that allows for generalizability without sacrificing accuracy.

4.3 Political leadership in context

In order to unpack the idea of political leadership, I use an exploratory case study approach, contrasting the policies and politics of Nelson Mandela, Thabo Mbeki and Jacob Zuma in South Africa. Such an approach holds many variables constant, particularly at the macro and meso levels of

[1] See Chapter 3 for a more detailed discussion.

analysis. In the case of South Africa, the shift from Mbeki to Zuma represented a large shift in policies as well, while many of the structures and personnel within government remained the same.

Research[2] was carried out in KwaZulu-Natal, which is the province impacted most heavily by the HIV/AIDS epidemic, with an HIV prevalence rate of 39.5 percent among women attending antenatal clinics (Department of Health South Africa 2010). HIV/AIDS disproportionately affects KwaZulu-Natal, and as a result the province has attracted a significant number of researchers, research institutions, and non-governmental organizations whose aims are to contribute to prevention and treatment efforts.

The quotes below are drawn from a total of 14 key-informant interviews performed in KwaZulu-Natal, South Africa between October and November 2011. Interviews were semi-structured, focusing on the role of political leadership, media coverage and regime characteristics on determining policy outcomes. Interviewees consisted of academics, researchers, representatives of international organizations, government officials and members of civil soci-

[2]Ethical approval was granted by McGill University's *Research Ethics Board*, which determined that the proposed research did not present any risk to human subjects. Interviewees were identified and approached in their roles as public actors regarding the epidemic, roles that normally include discussion of these kinds of issues in the public sphere. All formal interviews involved the reading and signing of a consent form informing the interviewees of the project's scope, as well as the fact that the interviews would be recorded for transcription purposes. In the case of informal or telephone interviews, interviewees were informed of the purpose of the research and verbal consent was obtained; these interviews were not recorded. Research was funded by *The Centre for International Governance Innovation (CIGI)*, and was based out of the *The Health Economics and HIV/AIDS Research Division (HEARD)* at the University of KwaZulu-Natal in Durban, South Africa. Neither institution had any input into the research design or analysis of the results of this study.

ety who had experience with the policy formation process, and were identified through snowball sampling facilitated through my affiliation with HEARD. Interviews ranged in length from thirty minutes to an hour and were conducted at a location of the interviewee's choosing. Interviews also ranged from formal, recorded interviews to informal discussions. Interview data was analyzed using thematic network analysis, with the main questions from the semi-structured interview guide constituting the global themes (Attride-Stirling 2001).

4.3.1 President Nelson Mandela (1994-1999)

South Africa's experience with HIV/AIDS has been a tale of poor political leadership from the beginning. In reality, the denialism that Fourie and Meyer (2010) identified in the apartheid regime existed under Nelson Mandela's rule as well.[3] As South African Supreme Court Justice Edwin Cameron once said of Nelson Mandela, "[i]n 199 ways he was our country's saviour. In the 200th way he was not" (Cameron quoted in Fourie and Meyer 2010, p. 77). The truth of the matter is that at the end of Mandela's presidency, very little had been publicly done to combat the growing epidemic. Mandela did not act in publicly significant ways, however, under his Presidency the South African government started two key initiatives: the South African National AIDS Commission (SANAC) and the rolling out of ARVs to pregnant

[3]Fourie and Meyer use a very particular definition of 'denial' in their work, which captures "instances of AIDS denialism as well as other attempts at disavowing issues relating to the epidemic" (2010: 46).

mothers. But while steps were made, it was clear that Mandela had distanced himself from publicly addressing the epidemic, and was later quoted saying that while he was aware of the growing epidemic, he chose not to speak on it: "I wanted to win [the 1994 election] and I didn't talk about AIDS" (Mandela quoted in Fourie and Meyer 2010, p. 77). It was not until Mandela was out of the presidency, and safe from the opinion of the electorate, that Mandela spoke out about HIV/AIDS, remarking that he had a son who suffered from the disease (who later died).[4]

4.3.2 President Thabo Mbeki (1999-2008)

It is within this context that Thabo Mbeki began his presidency. Thabo Mbeki came into power at a point in South Africa's history where HIV/AIDS was a crucial issue, one that would necessarily impact the future of the country, and which would heavily influence many public policy decisions that were to made by his government. Mbeki's response to the epidemic was unprecedented in its rejection of science and its failure to ultimately curb the number of new infections and the number of people who were dying from AIDS related diseases. While much poorer countries in the region, such as Uganda and Rwanda, demonstrated that these epidemics could be brought under

[4]Regardless, when it came to criticizing Mbeki's performance on the issue, Mandela erred on the side of caution, refusing to enter deeply into the debate. Indeed, one of the strongest statements he issued on the subject included the line "the President of this country is a man of great intellect who takes scientific thinking very seriously and he leads a government that I know to be committed to those principles of science and reason" (Mandela 2000).

control, even in resource-limited settings, South Africa's response illustrated that mismanagement and inappropriate policies could make the epidemic worse. It has been the failure of President Thabo Mbeki's response that has garnered the lion's share of attention concerning South Africa's ineffective AIDS policies. By embracing the position of the 'AIDS denialists,' Mbeki has been accused of contributing to the premature deaths of 365,000 South Africans (Chigwedere et al. 2008). In the view of many scholars, the main (if not sole) reason that South Africa's epidemic is as bad as it is today is due to the actions of President Thabo Mbeki and his Minister of Health, Manto Tshabalala-Msimang (Cullinan and Thom 2009; Nattrass 2007; Parkhurst and Lush 2004; Schneider and Stein 2001).

During his presidency, Mbeki and Tshabalala-Msimang pursued four major positions that proved detrimental to controlling the epidemic in South Africa. The first was the rejection of the science behind HIV and AIDS. Importantly, Mbeki never denied the existence of AIDS or its need to be combatted, however, he did - with the urging of a small group of dissident AIDS scientists[5] - question the relationship between HIV and AIDS, claiming that AIDS, because it was a syndrome could not be caused by a virus. Beyond the damage done by not providing access to ARVs, taking this kind of public position created doubt and perpetuated a debate that lead to a lack of focus in pursuit of a solution. Mbeki's insistence that HIV did not cause

[5]This term is used loosely, as the most prominent AIDS denialists have no experience working with HIV and AIDS directly.

AIDS delayed the execution of an appropriate response by obfuscating what the problem was. Furthermore, Mbeki continuously and publicly stressed the toxicity of ARV treatment, using the drugs' toxicity as a reason to prevent roll out of drugs to people suffering from HIV.[6]

The second was a heavily top-down, centralized approach, especially within the Ministry of Health. Nothing was done without the express permission of Tshabalala-Msimang, and if something was done without her consent, officials paid for the subordination with their jobs (Keeton 2009; von Mollendorff 2009). This approach amplified the importance of leadership in the South African context, as the norms within the bureaucracy empowered the leadership. This was made even more evident when Tshabalala-Msimang took medical leave for a liver transplant in 2007. The culture within the Ministry of Health was one where staff were visibly afraid of the minister, and challenging her was not possible (Keeton 2009). This changed when Tshabalala-Msimang took leave, and Jeff Radabe became acting Health Minister. Under this new leadership, Tshabalala-Msimang's Deputy, Nozizwe Madlala-Routledge, was finally given the space to operate effectively. Madlala-Routledge later revealed that she felt that "the odds were stacked against her, from the top down" and that she was "on borrowed time" in her position (Keeton 2009). Madlala-Routledge had always been critical of the

[6]Mbeki was not wrong about the toxicity. At the time, the drug regimen caused severe side effects that needed to be carefully managed by skilled health practitioners, experts who were not accessible to many South Africans who were infected with HIV. That being said, Mbeki made the decision to withhold treatment that was 'poisonous' in lieu of certain death for those afflicted.

government's approach to handling the epidemic, and her activities within the Ministry (publicly testing for HIV, declaring South Africa's stance as an 'international embarrassment,' bringing attention to public health failures) eventually cost her her job. Less than two months after Tshabala-Msimang returned to her post in June of 2007, Madlala-Routledge had been sacked from her position by Thabo Mbeki for "an inability to work as part of the collective" (Keeton 2009). There was no room within the ANC to challenge the positions of political superiors without putting one's career at risk.

The third was that Thabo Mbeki used the HIV/AIDS epidemic as a way of attempting to jumpstart an African Renaissance. Examples abound, from the Virodene scandal[7] (Nattrass 2007; Parkhurst and Lush 2004) and the Sarafina II scandal[8] (Nattrass 2007; Parkhurst and Lush 2004) to the practices of Dr. Rath who promoted the use of untested and ultimately toxic combinations of vitamins (Thom 2009), and the promotion of garlic, beetroot and other natural remedies for HIV/AIDS promoted by Tine and Nelly van

[7]'Virodene' was an AIDS cure that was championed by its creators as "safe, well tolerated, and efficacious in immune compromised (HIV/AIDS) volunteers," but regardless of the claims made by its creators, there was much controversy surrounding the treatment (Virodene ND). The Medicines Control Council (MCC) initially refused to allow the Virodene trials to go forward, citing ethical and scientific concerns. And with good cause, as the key ingredient in Virodene was later recognized as being nothing more than an industrial solvent (Johnson 2004). Regardless, the political position was clear, both the Minister of Health and then Deputy President Mbeki turned their criticism towards the medical establishment for preventing access to life saving drugs (Schneider 2002).

[8]Sarafina II was the government commissioned follow up to 'Sarafina,' a highly successful musical. The writer was asked to create a sequel that dealt with HIV/AIDS in order to promote positive behaviour change, however when details of the $3 million (USD) contract were made public, the reaction forced the government to abandon the project (Schneider and Stein 2001).

der Mas (McGregor 2009), and later enthusiastically embraced by Manto Tshabalala-Msimang. Virodene was an important case, and highlights many of the dynamics at play. First, Virodene was not an anti-retroviral, which lent credibility to the government's position that HIV is only one of the causes of AIDS. Second, it was a homegrown solution, which permitted the government to fight back against the believed threat of a Western conspiracy (discussed below). Both factors are important, but the need to assert the independence and the ability of African science seems to be of particular relevance. As Schneider notes, "[t]he openness to considering Virodene can be read as championing African initiated science in the context of the agenda for an African Renaissance" (Schneider 2002, p. 151).

Finally, Mbeki held tight to the belief that HIV/AIDS was, if not a Western plot against Africans, at least was something that the West was benefitting from at the expense of African populations. This is seen clearly in the document 'Castro Hlongwane, Caravans, Cats, Geese, Foot & Mouth and Statistics.' Among its 132 pages are references to Sun Tzu, Fanon, Marcuse and the rejection of the call to transform the state into an "omnipotent apparatus that must even police the sexual activities of every individual South African" (Anonymous 2002, p. 8). While drawing on radical thinkers is hardly a sin, the language of the entire document serves to demonstrate the intense ideological positions that were dominant inside the ANC. Consider the following example:

> [**This monograph**] **accepts** that the HIV/AIDS thesis as it has affected and affects Africans and black people in general, is also informed by deeply entrenched and centuries-old white racist beliefs and concepts about Africans and black people. At the same time as this thesis is based on these racist beliefs and concepts, it makes a powerful contribution to the further entrenchment and popularisation of racism (Anonymous 2002, p. 5, emphasis in original).

This document, if not penned directly by Mbeki, in his own words 'accurately reflects his views' (Anonymous 2002; Cullinan 2009; Gevisser 2007).

These four positions reinforced each other. The rhetoric of a western plot provided justification for pursuing African made solutions to the epidemic. It also provided ample reason to, if not completely reject, at least to question the science behind HIV/AIDS. Placed under the umbrella of a strong, centralized leader, the result was a collection of policies that were designed to combat the epidemic, but approached this objective within a particular paradigm of understanding about science, the motivations of drug companies and foreign governments, and Africa's reputation in the wider world.

4.3.3 President Jacob Zuma (2009-Present)

HIV/AIDS policies under Jacob Zuma are characterized by a remarkable shift away from the denialism and the feet dragging of the Mbeki years towards a package of policies that are much more in line with international standards and norms. Sheila Tlou, UNAIDS' regional director for Eastern and Southern Africa, has recently predicted that South Africa will witness a

massive reduction in the number of new infections in the coming years, due primarily to the leadership exhibited by Jacob Zuma (SAPA 2012). However, while some see the leadership of Jacob Zuma as effective, his approach seems to be more distinct from the likes of Mandela or Mbeki. While Mandela was quiet on HIV, and Mbeki was publicly at odds with the prevalent scientific discourse of the time, Zuma's public persona regarding HIV/AIDS has been negative to say the least. For one, Zuma famously announced that he was not concerned about having had unprotected sex with someone who was HIV positive because he took a shower afterwards. Furthermore, Zuma is polygamous, and at the time of writing, had three wives and a fiance (Zeitzen 2010). Topping this off, there have been accusations of rape and sexual assault levelled against Jacob Zuma in the early days of his presidency.[9]

It came as somewhat of a surprise to many observers of South Africa that Zuma's presidency has made such great achievements regarding HIV/AIDS. While there have been moments of active and positive public leadership on HIV/AIDS, such as Zuma's public HIV test and his disclosure of the results (SAPA 2010), Zuma's effective public engagement with HIV/AIDS appears to be minimal while his government's performance has been laudable, suggesting that Zuma has given his government the space and freedom to address the epidemic as they see fit. Dr Pakishe Aaron Motsoaledi, the Minister of Health appointed by Zuma, is a prime example. Instead of appointing a Min-

[9]While Mandela may have been largely silent on HIV/AIDS, the example set by his personal affairs, notably his faithfulness to his wife, Winnie, is in stark contrast to that set by Zuma.

ister of Health based primarily on loyalty, as was the case with Tshabalala-Msimang, Zuma appointed a competent and effective individual,[10] and it would seem, has allowed him the political space to operate without undue political pressure. While Zuma's leadership on the issue may be characterized as 'getting out of the way' of competent individuals and institutions, this is not to belittle it. Zuma's lack of participation in South Africa's current HIV policies and programs has been much more effective than Mbeki's active involvement turned out to be.

4.4 The importance of leadership

For many practitioners and researchers, leadership is a crucial component to the success and failure of policies regarding HIV/AIDS globally. A high-level advisor to UNAIDS remarked to me that policies were not working "until there was appropriate political leadership" (Geneva Interviewee #3 2011). They continued, observing that Zuma is a pragmatic man with close ties with UNAIDS and ultimately "does not want this on his watch" (Geneva Interviewee #3 2011). This perception of the importance of leadership throughout the government was also seen by participants in South Africa. For example, one respondent at a South African AIDS organization put it succinctly:

> I think [leadership] is very, very important. I think what has happened at the National Level, is you get a lot of leadership

[10] According to interviewees, see below.

> at the national level from the Deputy President ... and a lot of leadership from the Minister of Health ... There's an intention to get this right (South African Interviewee #2 2011).

As expected, the importance of leadership was a common thread with all respondents, though why it was important differed. Perceived poor leadership was seen as a key explanatory factor for why South Africa's policies lagged behind the rest of the world for so many years:

> In South Africa, there's no shortage of a scientific base... So there was no excuse for the President not to consult... Unfortunately, he did not call upon the people who had a scientific understanding or even a lay understanding of the science. To illustrate that, when he continued to question the relevance of the virus as the cause of AIDS and was casting doubt on the drugs that had been proven, like nevirapine, more or less implying they were poisonous, we had written him a letter... there was myself, Edwin Cameron who himself was HIV positive, an archbishop from Cape Town, and there was another women who herself was HIV infected... and we wrote him a very brief letter, a personal letter - "You know us" which is true, he knows us, "You know us and you can't accuse us as being racists or reactionaries or disloyal to the country." In fact we fought for the freedom of this country ... we were a part of that struggle, for a long time ... In the back of my mind I thought "you have no higher right to these decisions than anyone of us who had been in the struggle in this country" (South African Interviewee #3 2011).

> ... Mbeki was a leader, you know for all his faults, he did have a position, he defended it, my god did he defend it, he had autonomous ideas and he led, he was an idea... leadership entrepreneur in terms of HIV and AIDS, in terms of policy making, and thinking about it. Flawed as it was. Genocidal as it was... (South African Interviewee #7 2011).

It was also suggested that leadership was important through what it did not do, namely that leaders did not get in the way of competent bureaucrats and technocrats doing their jobs. This applied largely to Zuma's leadership, but also emerged in discussions about provincial leaders

> ... so then we get to the Zuma era, and you should see Zuma as giving space for things to change... you have the normalization of the epidemic, it's become part of what we do. It's a major problem, it's a major issue, but people aren't dying in the same way that they used to. So, I think Zuma sees AIDS as one of many issues that he needs to deal with, he's given space to the Minister of Health, and we're getting on with it (South African Interviewee #5 2011).

This idea of "giving space" was a common theme in both formal and informal discussions about Jacob Zuma's leadership style, and suggests that leadership must be examined in terms of both performative action as well as in respect to what a leader does not do in order to achieve a particular goal.

> ... [Zuma] doesn't have any views to discuss. And therefore he relies inevitably on other opinions... And he relies on some good opinions. He astonishingly makes better appointments than Thabo does... he appoints a wonderful Minister of Health called Aaron Motsoaledi, and compared to the previous Minister of Health who was a total dodo, and dangerous, and a liar, and not even a good doctor, was replaced by this wonderful guy. So that's his strength, by accident or by design, he's got three or four people in the right places, you know? And it makes a world of difference (South African Interviewee #3 2011).

> Zuma is not a modern leader, he's a traditionalist, a populist. He will say to audiences what they want to hear, he's a cultural

> traditionalist and as HIV is not a popular issue for the populace, or in affecting votes, there is no 'good news story there' for any political leader, so why would he go there as a populist? The sounds that he's been making around HIV have been neglectful rather than well thought through - it's reactive. The little autonomous thinking that has come from Zuma has been neglectful and reactive ... AIDS is not on his radar ... the Zuma administration is simply defaulting to whatever is best practice in Geneva and New York ... and of course he's hailed for that ... and all things considered, maybe that's for the best because things have improved under Zuma, he's been hands-off, he's left it to very capable Ministers of Health, and although they are flawed people, they are implementing what the PEPFAR folk, in particular, want them to implement (South African Interviewee #7 2011).

Of particular interest was the fact that few of the respondents mentioned that success was due to leadership, it was always seen as an important factor, but statements such as "this would not have happened if the President did not take up the challenge" were absent from responses. Respondents also consistently remarked that *strong* leadership was critical, suggesting the importance of both focused and committed leadership on the issue. In short, interviewees felt that leadership was a necessary but not a sufficient condition for successful approaches.

4.5 The importance of non-Presidential leadership

While leadership was seen as being an important element in South Africa's response, of particular interest was that many respondents reflected on the

importance of leadership coming from other places than the President. During the Mbeki era many initiatives came from private hospitals, previously excluded researchers, and civil society (South African Interviewee #6 2011; South African Interviewee #5 2011). While The Treatment Action Campaign (TAC) was actively, and vocally, demanding change from government, many individuals and non-governmental organizations were starting their own programs.

> At that point we were seen as oppositional to the government, but that didn't mean that work didn't go on. It's the time when HEARD was set up, it's the time when Centre for the AIDS Programme of Research in South Africa (CAPRISA) was set up, and a lot of people who hadn't been listened to who were quietly building organizations and ideas below the big political radar ... (South African Interviewee #5 2011).

The effectiveness of these programs and organizations was significantly curtailed by the South African government's position at the time. Due to Mbeki's strong leadership in the other direction, organizations that were making serious inroads into controlling the epidemic were often forced to operate without the national government's support, even to the point of actively hiding programs from the national government. For example, one hospital began a staff testing and treatment program that proved to be quite successful; the hospital went from losing four staff members in one month to not having a single HIV/AIDS-related death in a span of five years (South African Interviewee #6 2011). Though incredibly successful, the program did not receive

any government support or funding at the time.[11] Throughout the country there have been instances of provincial governments and non-governmental agencies partnering to provide services where the national government has failed. One particularly successful program of this kind was a pilot program coordinated by Médecins Sans Frontières in Khayelitsha, a large township in the Western Cape, to provide ART for pregnant women to prevent mother-to-child transmission. The program was launched in 1999 under a national government that opposed the provision of ART; provincial officials were forced to form non-governmental partnerships and raise external funds for the program (Hodes and Naimak 2011). This program was only possible due to the Western Cape's autonomy from the ANC[12] and active efforts to keep knowledge of the program away from the national government (Hodes and Naimak 2011). Under different leadership, these non-governmental and provincial programs would have likely flourished.

In KwaZulu-Natal in 2011, long after Mbeki had left office, the promise of non-presidential leadership in a different national context was clear. Remarkable leadership was coming from the current Premier, Dr. Zweli Mkhize, and his staff who took an active role in the provincial AIDS institutions. As one interviewee remarked:

> [T]he only reason why the Provincial AIDS Council (PAC) is ac-

[11] Although the South African government launched the Government Employees Medical Scheme (GEMS) soon after in an effort to provide accessible health care (including HIV treatment) to public sector employees (South African Interviewee #6 2011; GEMS 2011).

[12] The Western Cape was, and at the time of writing is, the only province under Democratic Alliance (DA) and not ANC rule.

> tive and sitting is because the premier makes sure he attends each and every PAC and he chairs it himself. And if there's someone who's not there he makes sure that they account and makes sure they say why they weren't there ... if the same leadership could be transferred to local and district levels, that would make a huge difference (South African Interviewee #2 2011).

Another example of this leadership was evident in the PSP workshop that took place in Pietermaritzburg on November 10, 2011, mentioned in Chapter 1. These provincial planning sessions bring together all of the various stakeholders - government departments, universities, international organizations and civil society - to facilitate information and priority sharing, ensuring that all stakeholders are involved and informed. Multi-sectoral coordination and civil society participation has made its way into the best practices of all HIV/AIDS policy strategies, but it is often remarked that these policies merely exist on paper to placate donors and observers. This was not the case in KwaZulu-Natal; it was clear that the commitment to these principles came from the provincial authorities, especially from the deputy manager, Thobile Yengwa. Yengwa spoke to her colleagues in government directly, in a jam-packed auditorium publicly dishing out praise and shame to the departments that exceeded or failed to live up to the expectations of the premier's office (Yengwa 2011).

What was evident from the PSP meeting was clarified in later interviews with government officals. A tremendous amount of personal leadership was coming from the Premier himself, especially in regards to Operation Sukuma Sahme - the Premier's unique multi-sectoral approach to social development

in which HIV/AIDS was incorporated into every aspect. Leadership for Premier Mkhize means going beyond formal plans and public support. He demonstrates his commitment through a hands-on approach, to the point of spending evenings telephoning people who were supposed to have attended meetings to ensure that they did attend and that they understood what needed to be done (South African Interviewee #8 2011; South African Interviewee #9 2011).

The importance of leadership, and the ability for provincial and city-level leaders to make significant contributions to policy agenda and implementation is not just being sung from the staff of the local leadership, as one interviewee remarked:

> I think low levels of government are absolutely crucial, because that's where it really happens, and I think if you have a capable and uncorrupted mayor - mayor more than premier I'd say - then that is absolutely crucial. The fact is that in South Africa the Mayoral, Provincial and National levels of government aren't always from the same political party, and then it just breaks down. There's no conversation *really*, there's obstruction. But if there's a line - then it happens, I think *leadership* often, and *all too often* boils down to personality and individual passion. KwaZulu-Natal, despite evidence to the contrary, is quite a brilliant province in terms of transportation, enforcing legislation, because the previous Member of the Executive Council (MEC) for transportation lost a son recently to speeding, and he just went berserk in terms of enforcing speeding rules and so on. But it's that individual passion, if it's not it will drift ... If it's not that official passion, the issue just will not attain agency - it will disappear (South African Interviewee #7 2011).

Provincial responses vary, and have varied, throughout the course of the epidemic. While each province and region faces a different burden of HIV, it is likely that differences in leadership at the provincial level explain more of the variation in response and outcomes[13] between South Africa's provinces.

4.6 The importance of non-governmental leadership

The role of TAC in forcing the South African government to change their positions on ARVs is well documented, and was exceptionally important in moving South Africa (however grudgingly) away from an era of AIDS denialism (Fourie and Meyer 2010; Heywood 2010; Nattrass 2006; Stephen 2009; Treatment Action Campaign 2010). Civil society has been a crucially important factor in how policies are designed and implemented, however it is worth noting that pressure coming from civil society is only really successful if they translate into change on the part of the government. The case of Mbeki is illustrative here. TAC pressured the government to supply ART to pregnant mothers for the prevention of mother to child transmission, however the result was foot-dragging and delays, even after the constitutional courts had been involved and instructed the government that they were constitutionally required to supply the drugs (Heywood 2010).

[13]These variations can be quite large. For example, ART coverage in 2008 was a mere 25.8% in the Free State while the Western Cape had 71.7% coverage; KwaZulu-Natal was at 39.4% (Adam and Johnson 2009).

The important point here is that government did not change until they were constrained by the courts, and, even then, they did so slowly. Perhaps due to the fact that the ANC was the dominant party, and will be for the foreseeable future, there is little threat of electoral damage that will emerge from ignoring civil society or special interest groups; electoral accountability is low. Presidential leadership remained crucially important however, there were still other avenues for civil society to lead on the issue that went around a non-responsive administration. TAC's decision to engage directly with the courts as a strategy of change was not only politically savvy, but it was also likely the only strategy that had any chance of success.[14] One respondent, speaking about the fact that many members of civil society, epidemiologists, and policy makers could see the epidemic "coming down the valley like a wave of water" noted that

> ... for various reasons we weren't able to gain access to the political leadership, which includes people like President Mandela... I think one of the main reasons was that 1994 was such a time of cathartic change that nobody wanted people raining on their parade, particularly around discomforting issues of sex and sexuality. So essentially what happened is we failed to reach the political leadership, and they failed to take notice of that (South African Interviewee #5 2011).

For these outside actors to have a voice in policy formation, the conditions

[14]The recent sentencing of four men for the killing of Zoliswa Nkonyana, a lesbian living openly in Khayelitsha followed the same pattern. The case dragged on for five years, with multiple postponements and delays, and its conclusion was largely due to the constant efforts of civil society groups such as TAC, Free Gender and the Triangle Project (Phaliso et al. 2012).

must be right for it. The political and social contexts of Mandela and Mbeki's governments were not conducive to participation from outside actors

South Africa is not as heavily influenced by international organizations as other countries in the region, such as Swaziland.[15] In South Africa international organizations are seen as other NGOs, free to participate in the process of policy development, but they do not wield the same amount of power or influence over the process (South African Interviewee #9 2011). While Zuma's government has fallen lock-step in line with the international community, this would appear to be out of convenience instead of coercion (South African Interviewee #7 2011).

4.7 A typology of leadership

Leadership would seem to be an important aspect of the success or failure of HIV/AIDS policies in South Africa, however, while this fact is acknowledged, leadership itself still remains an ambiguous and difficult concept to work with. What is of large concern is the tautological equation of 'good leadership' with effective outcomes. To be a useful concept, the idea of leadership must be defined distinct from the outcomes under examination; furthermore, it requires articulation beyond simple dichotomies such as good/bad and weak/strong. This research suggests that political leadership may be fruit-

[15]Since 2003, the Global Fund has invested $246.9 million USD in South Africa and $76.2 million USD in Swaziland, representing Global Fund spending of approximately $5 per person and $55 per person respectively (USAID 2010).

fully disaggregated along the following dimensions: performativity, normativity, and politicization.

Performative leadership simply addresses the question of what was done. It is measurable, and it tends to be articulated in terms of strength - a strong leader does a lot, a weak leader does little. It is important to keep performative leadership separate from other aspects of leadership, as it is possible for a leader to do a lot, but to do the 'wrong' things.[16] The creation of an agency whose mandate is to address the epidemic, the public denial of the link between HIV and AIDS, publicly getting an HIV test, and participating in meetings of the National AIDS Council all fall into the category of performative actions which form an important - but not the only - element of leadership.

The quantity of actions is often less important than their quality, thus another crucial element of leadership involves the answer to the question of was what was done the right thing to do? This normative[17] element of leadership can be assessed in many ways, depending on the issue at hand, however in the case of political leadership on HIV/AIDS policies a useful assessment can be made by contrasting the official positions of politicians with the global consensus surrounding effective policy prescriptions as articulated

[16]Mbeki would be a good example of this, whereas Zuma may be an example of a weaker leader whose very weakness created the space for a better approach.

[17]The term 'normative' is being used to a refer to a standard or ideal in a broad sense. Specifically the norms and standards of the international scientific establishment. Clearly, for Mbeki this was a normative issue, which led him to puruse a different agenda, but the norms referred to here are those of the international community.

by UNAIDS.

The final element of leadership, 'politicization,' is tied closely with effectiveness, but still must be kept distinct from it. For one, leadership must be distinguished from power or authority (Jacobs, 1970), as the ability to accomplish a goal through the use of one's official position and the powers attributed to it is much different than leadership, which transcends mere power and authority. It is closer to what Nye would call 'soft-power,' "the ability to affect others to obtain the outcomes one wants through attraction rather than coercion or payment" (Nye 2008). In a slightly different take, Burns (1978) makes the distinction between transactional and transformational leadership. Transactional leadership is exchange-based, when an individual initiates a relationship that is beneficial for both parties (Burns 1978). For example, a politician promising to lower taxes in exchange for an individual's vote. Transformational leadership, in contrast, has a moral core to it. It is leadership that is in tune with the moral character of the followers, it occurs "when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns 1978, p. 20). The problem with examining leadership in this light, however, is that it is still measured in terms of outcomes. Does one count a leader who seeks to engage in transformational leadership but fails as a 'transformational leader?' Does a leader exercise 'soft-power' if they are unsuccessful in achieving their desired goal?

Mandela was clearly a transformational leader, however not in the realm

of HIV/AIDS. Mbeki attempted such transformational leadership, but was unsuccessful, as his method for handling the HIV epidemic ultimately contributed to its growth. Zuma tends to shy away from such active attempts at 'raising others to higher levels of motivation and morality,' but has arguably been much more successful in doing so. Thus, the difference between these leaders cannot simply be attributed to the product of the leadership, but instead, the research herein suggests that the motivation behind the style of leadership must be taken into account. Namely, did the leader seek to politicize HIV as an issue by transforming it into something beyond a technocratic policy matter, or was the issue considered just another portfolio that the government needed to address?

It is this politicization that distinguishes leadership proper from political leadership. It is not simply that leadership is coming from a political figure. Rather the relevant question here is did the leader transform, or attempted to transform, a previously non-political issue into one with political salience? Afrobarometer surveys in sub-Saharan Africa suggest that HIV/AIDS is not a large concern for most of the population, even in those countries, such as Uganda and South Africa, where HIV prevalence is quite high (Afrobarometer 2008). This has clearly not precluded the politicization of the issue.[18] In sum, Mbeki transformed a public health matter into a political issue, one that was meant to spark an African Renaissance, reshape notions of 'African

[18]The politicization of HIV/AIDS in South Africa should be evident from this and other research. For good arguments for the politicization of Uganda's HIV/AIDS environment, see de Waal (2006) and Parkhurst (2002).

masculinity,' and bring attention to the social drivers of the disease. Mandela, focusing on other issues, actively avoided politicization of HIV/AIDS, whereas Zuma has treated HIV/AIDS as any other issue facing the country.

Politicization of an issue also encompasses the role of non-governmental organizations. In a non-politicized issue environment,[19] civil society is often included in the process of policy formation. The relationship between the state and civil society is markedly different in a politicized issue environment, where civil society is likely to be divided. It may manifest itself as antagonism, as was the case with the TAC, or co-option, which seems to have happened in Uganda. Regardless, in a politicized issue environment such as HIV under Mbeki, who in civil society is granted resources and access to the state will be determined by shared agendas.[20] In a politicized issue environment, civil society is either a tool or a foil for the achievement of a particular policy objective instead of a partner in achieving a broader goal.

These three elements form a typology of leadership that is useful in assessing what style of leadership, in which context, is best suited to achieving particular results. While such a typology cannot be used alone[21] it provides a useful tool for more detailed analyses of different kinds of leadership and how and when they are appropriate for achieving particular ends.

[19]It should be noted that governments have many priority issue areas, and the politicization of one does not imply the politicization of others.

[20]A good example of this (which will be discussed in more detail in Chapter 5) is how Ugandan civil society shifted their priorities to gain more access to PEPFAR funding.

[21]In particular, especially in light of the South African case, political party structure, regime structure and the actions of civil society are all likely extremely important factors in contextualizing the role of leadership.

Table 4.1 captures the differences in leadership around HIV/AIDS, but requires some explanation. Mandela was normatively in line with international standards, as evidenced by the few things that were done under his leadership. Because he did not do much, he cannot be considered 'performative' by this typology. Politicization is more difficult, as Mandela did not actively seek to transform a non-political issue into a political one, he is coded as not engaging in politicization of the issue. However, he followed this route for political reasons (to win the election). The coding of Mbeki's and Zuma's responses should be clear.

Table 4.1: A typology of leadership

President	Performative	Normative	Politicization	Effective
Mandela	No	Yes	No	No
Mbeki	Yes	No	Yes	No
Zuma	No	Yes	No	Yes

This typology does not immediately explain why Zuma was successful, and Mandela and Mbeki were not, but by disaggregating leadership along these lines, it is possible to speak more clearly about the kinds of leadership and the elements of leadership that are important for achieving particular objectives in particular contexts. This typology helps to break down the phenomenon of leadership, but this still needs to be placed in the proper institutional and historical context. For example, Mandela likely would have not done any better at controlling the epidemic if he had chosen to make HIV a political issue. There were simply too many other high-profile priorities that

his administration was coping with as the first post-apartheid government. Instead, Mandela could likely have had a larger impact had he been more performative. Mandela was able to bring a racially divided country together after years of violent oppression. Speaking openly and often about HIV, or publicly getting an HIV test, could have done wonders to reduce the stigma surrounding the disease.

Mbeki on the other hand failed to make a positive impact on the HIV epidemic simply because he was wrong. As Mbeki was not aligned with the prevailing scientific consensus, his performativity and the politicization of the issue worked to make the epidemic worse. Had Mbeki been normatively aligned with the international community[22] it is likely that his active leadership and the fact that he had politicized the issue would have contributed to a successful effort at controlling the epidemic.

Finally, Zuma's success did not require politicization or performance. Simply being in line with the scientific community's consensus and not standing in the way of its implementation seems to have been enough. Importantly, this was *not* enough under Mandela's regime. As one interviewee pointed out, it is also worth noting that great strides have been made in improving the South African health care system between Mbeki and Zuma's presidencies. What is possible under Zuma might not have been possible under Mbeki[23]

[22]Or perhaps, had Mbeki been correct in his belief that HIV did not cause AIDS, and that it was ultimately a product of poverty.

[23]The interviewee elaborated, stating that Mbeki's position can be seen as rational if it was known at the time that an attempt to implement a massive rollout of antiretroviral drugs was destined to fail due to the state of South Africa's health care system. Instead

(South African Interviewee #11 2013).

***

Leadership matters but its role is still ambiguous and requires an understanding of the institutional and historical context in which it occurs. This chapter provided a typology for assessing political leadership, and suggested that leadership is not only a presidential phenomenon. Strong national leadership may work in some situations, in others it depends on the will of provincial and local leaders. Non-governmental actors can help shape the environment that leaders operate in, like the TAC did, and the role of these actors should be further explored. Furthermore, regime characteristics such as the structure of the ruling party, whether or not the country is a federal state, and design elements of the parliamentary structure are likely to play a large role in determining the extent to which a leader can act autonomously, no matter what their policy agenda is. Future research should seek to incorporate contextual and regime characteristics into an analysis of leadership with a goal of refining a general theory leadership, determining when certain aspects of leadership matter most.

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of failing at distributing ARVs and highlighting the weaknesses of the South African state less than a decade after the transition to democracy, better to shift the focus to something that *will* have a positive effect on PLWHA: improved nutrition (South African Interviewee #11 2013).

Chapter 5

The Political Context of Behaviour: Messaging and HIV/AIDS in Uganda

Newspapers are only a poor shadow of reality; their information is important to a freedom fighter not because it reveals the truth, but because it discloses the biases and perceptions of both those who produce the paper and those who read it.
Nelson Mandela (1995)

Even for those who do not buy papers, at least they see the headlines.
Ugandan Interviewee #15 (2012)

5.1 Introduction

It was late afternoon in Kampala, and I was sitting across from a high-ranking official of a Ugandan HIV/AIDS organization, about a half an hour into our interview. I took a sip of coffee and pressed on. "How do you use the media?" I asked, "Do you engage with them, do you use them to try to influence?" The official responded slowly. "Yes, we have a media strategy as an organization, but if you look at that, the partnership arrangement under the Ugandan AIDS Commission, there are about twelve, what we call self-coordinating entities." He proceeded to name these organizations and continued: "We've been working much (sic) closely with the media self-coordinating entity to raise a lot of issues, to do research, to do investigative journalism, and most of these issues that I'm talking about have been raised by media - Global Fund scandals, other issues, also education, key issues, safe male circumcision, home interventions, have been taken over by media."[1] In Uganda, news media was exceptionally important for getting information about the epidemic to individuals, including recommended approaches for preventing the spread of the disease.

My questions on media were motivated by an interest in the possible

[1]The quotes in this chapter are drawn from a total of 19 key-informant interviews performed in Kampala, Uganda between July and August 2012. The same approach as the South African interviews was followed (see Chapter 4), and in addition to clearance from McGill's *Research Ethics Board*, the research was approved by the Uganda National Council for Science and Technology (*Reference #SS 2856*). The research was not funded or influenced by any outside institution, but was facilitated through an affiliation with The African Medical Research Foundation (AMREF) Uganda.

role of media in the Ugandan context as a tool for government to affect individual behaviour. Importantly, one of the two major news dailies, *The New Vision*, is state-owned, opening up the possibility for information to reach the general public that was straight from the government. I asked the official who they were trying to influence through media, the public, or the policy makers, and his response strengthened my belief that media was an integral part of any country's response. "The media shapes both," he answered, "it shapes public opinion but also it has a big influence on the policy making process. So maybe, first off it does three roles: it educates, it informs, and there's a third. The public gets information, but also the policy makers get to understand people's concerns and be able to address them" (Ugandan Interviewee #9 2012). The role of media is complex. However, in the Ugandan case, it not only has the ability to shape public opinion, but given a context of general unfreedom of the press and the existence of a major state-run daily newspaper, it is likely that media will reflect government positions and priorities[2] (see Strand 2013).

Historically, how ideas spread surrounding HIV/AIDS in Uganda was exceptionally important to their epidemic. As will be discussed below, much of the success of Uganda's early programs on HIV/AIDS prevention relied

[2]Through interviews it became clear that the state-owned newspaper occupied a unique position. Being state-owned they were not at risk of being shut down by the state if they printed something that the state did not approve of, as is the case for *The Daily Monitor*. While internal editorial decisions likely severely curbed the degree to which *The New Vision* could criticize the government, in general I found that reporters at *The New Vision* were more critical of the government, and more willing to push boundaries in what they investigated and printed.

heavily on BCC, specifically on the ABC program implemented by Museveni early on in his tenure as President. Instead of providing condoms, ARTs, or testing, the ABC program provided ideas, and the widespread distribution of those ideas required the collaboration of politicians, religious and local leaders, media institutions, and everyday Ugandans.

But it is not simply the spread of information that is important. How that information is framed for the public is of crucial interest. A news story on an HIV-positive individual has the potential to contribute to acceptance or promote stigma surrounding the disease, depending on the angle. As will be discussed below, Museveni understood the importance of framing ideas in a particular way, and did so actively in his public addresses that discussed HIV/AIDS. This framing changed over time, from an initial focus on all three aspects of the ABC approach, to one where abstinence was dominant, and finally in recent years, towards one where condoms and biomedical solutions to the epidemic dominate the discourse.

Through an examination of the discourse around ABC, this chapter demonstrates that the way in which ABC was presented to the public changed over time as Museveni disengaged with HIV prevention efforts and international organizations started playing a larger role. The chapter concludes with an analysis of contemporary messaging surrounding HIV/AIDS through an investigation of recent news coverage of the epidemic, showing that while discussion around ABC has increased in recent years, the emphasis has shifted away from a focus on abstinence and faithfulness towards condoms and other

'solutions' to the epidemic.

5.2 ABC in Uganda

As discussed in Chapter 3, from the beginning of the epidemic, Museveni was directly involved in the country's HIV efforts, and importantly, spoke about the epidemic at every opportunity in a very specific way with a very specific message. The government's line was "[f]irst, abstain from sex. If you cannot abstain, stick to one partner. If you can't stick to one partner then you have to use a condom. But be sure that condoms are not 100 percent effective" (Green 2003a, p. 153-154). It is well understood that President Museveni "strongly believes that abstinence and being faithful are the pivotal approaches" to controlling HIV, and has not been an active supporter of condom use as an HIV prevention strategy (Ugandan Interviewee #6 2012). Regardless, as will be discussed below, condoms had become a much larger part of the discussion by 2013.

5.2.1 Early messaging: Abstinence and faithfulness for all, condoms for some

While the Ugandan government employed many strategies for controlling the epidemic, at the heart of the effort was a focus on education to bring about sexual behaviour change. In 1986, the Ugandan government embraced the problem and began to speak openly about the disease and about ways in

which to address it (Uganda AIDS Commission Secretariat 2001). President Museveni is widely credited with doing much of the work in creating an open environment for discussion about HIV. It probably helped that many of Museveni's messages were delivered with a wink and a nudge, or in vague and ambiguous language:

> You can greet somebody with AIDS, it will not catch you. You can sit next to somebody with AIDS, it will not catch you. You will only get AIDS if you go and look for it where it is hiding itself (Museveni quoted in Simone 2006).

Museveni's openness, and the fact that he was always talking about HIV in public, is seen as being an extremely important aspect of the success of Uganda's programs. However, such focus is not captured in the policy documents that the Ugandan state followed in addressing the crisis.[3] Indeed, as one respondent noted, these approaches were never officially put into policy, a process that was occurring during 2012 (Ugandan Interviewee #14 2012). What was pursued was an unofficial policy that promoted abstinence, faithfulness and condom use - in that order. A large part of the reason why Uganda's ABC[4] program received so much attention was because it focused so much on A and B, and so little on C (Green 2004). Generally, in cases

[3]For a good discussion of the written and unwritten elements of Uganda's approach, see Parkhurst (2001). Museveni's leadership may also help to explain why ABC programs have failed in other countries. As Feldman (2009) posits, Uganda's success may not have been the message itself, but rather how it was presented to the population.

[4]Contrary to many accounts, ABC did not emerge in Uganda. For a great account of the development of the ideas behind ABC and the history of their implementation see Hardee et al. (2008). Indeed, the WHO had other programs (such as FACT - Fidelity, Abstinence, Condoms, Training). ABC may have been chosen more due to ease of marketing than effectiveness (Monico 2003).

where ABC (or something similar) has been implemented, the recipe has been small A, small B and capital C - the reverse of what ultimately proved successful in Uganda (Carter 2003).

At the beginning of the epidemic, Museveni did not talk much about condoms. At every opportunity, he urged people to "[s]top having multiple partners. Be Faithful. Teenagers, wait until you are married before you begin sex" (Green 2003b). Museveni stressed the importance of ideas such as 'loving faithfully,' 'living faithfully' and on the need to practice 'zero-grazing.' This language and the idea of 'zero-grazing' became the core of Uganda's approach to controlling HIV, and appeared to have been "hugely important and carried huge weight" (Ugandan Interviewee #10 2012). It was only in very specific cases or for particular sub groups that Museveni would discuss condoms. For example, in 1990 the government sponsored a campaign, targeted at 'sugar daddies,' which reminded them not to forget to carry their 'coat' (condoms) and encouraged them to practice 'zero grazing'[5] (Hardee 2004). Generally, discussions about 'coats' were side-lined. While the Ugandan government had been promoting condoms since at least 1986, it has done so quietly and without much fanfare; from the beginning it was clear that condom use as an overall strategy was not Museveni's preferred approach (Green 2004; Ministry of Health Uganda et al. 2001).

[5] 'Zero grazing' was Museveni's term for being faithful. Drawing on the example of not letting your cattle graze in a neighbours yard, Museveni encouraged people not to 'graze' in other people's 'yards.'

Museveni recognized that different approaches were going to be relevant for different people, depending on their situation. While not one to support condoms as an overall strategy, Museveni was cognizant that they would be important for some, and generally left those who were promoting condoms alone. His big concern was not the method of HIV reduction, but rather the result:

> Initially no one argued over whether abstinence was the better thing or condoms or if it's just, you see everyone thought what worked - if it was abstinence, you campaign for abstinence, the condom promoters promoted condoms [...]
>
> But see the President doesn't like them, but he could not use his presidential powers to [inaudible] because the policies that look, whoever has anything at that works. So he's like okay I will encourage the young men to abstain from sex and anyone else thinks, or anyone else believes in condoms, let them encourage I will not (Ugandan Interviewee #14 2012).

Though never promoted outright, condoms were always a 'fallback' position for Museveni, a safety net for when other strategies failed (Kaiser Health News 2004). In his own words, Museveni said,

> 'I look at condoms as an improvisation, not a solution,' adding that he favors 'optimal relationships based on love and trust instead of institutional mistrust which is what the condom is all about.' ... 'Let the condom be used by people who cannot abstain, cannot be faithful, or are estranged' (Kaiser Health News 2004).

As should be clear, from the beginning, Museveni was actively involved in promoting the ABC approach, and in doing so, he consistently emphasized

abstinence and faithfulness. It is important to note, however, that the Ugandan government quietly provided condoms from the beginning, increasing efforts to do so in 1991. The move to more visible social marketing of condoms brought with it significant criticism, particularly from religious groups (Parkhurst 2001). Museveni remained firm in his position, maintaining that condoms "cannot become the main means of stemming the tide of AIDS," while also promoting them for the limited role that they could play, even in the face of domestic opposition (Green 2004). Condom promotion was done in such a way to create demand for the condoms for the prevention of STIs, HIV included (Okware et al. 2005). Instead of focusing on condoms as a magic bullet, the Ugandan government targeted condoms to those who were most likely to contract STIs - those with multiple partners, commercial sex workers and their clients, and men who have sex with men - in a word, those who knew they were at risk for STIs and wanted to prevent them.[6] Importantly, this was not a deviation from Museveni's original position, but rather was a more vocal acceptance of the possible role that condoms might play. Condom use was an important part of the overall solution, but it was never the *most* important part, and as such, it was never a prominent theme in Museveni's discussions of the epidemic.

[6]It should be noted that while condom use seems to work in higher risk settings, it has been observed that the successful cases are also often accompanied by other behavioural changes (Hearst ND).

5.2.2 Disengagement and the shift in the political context of behaviour

Over time, likely due to the early success of the program, Museveni's involvement in the public discussion of HIV waned. Interviewees confirmed that government interest and participation in confronting the disease had tapered off, not only in terms of what was being discussed, but also in how it resonated with the population:

> Museveni is no longer concerned so much with HIV, I think, he seems to be contented that maybe with the arrival of antiretroviral drugs, maybe people can get treatment when they are HIV positive, they can live longer, they can still remain economically productive, he's no longer very very bold. Museveni, he in the past would use every opportunity to talk about HIV, which he no longer does. He only possibly tries as much as to talk about HIV particularly within the army. The army is one of the institutions which he cherishes. But the national platform, he's not the very person that we used to see (Ugandan Interviewee #12 2012).

There was a considerable amount of discussion around complacency on the part of the population as well as the government, likely a product of how the handling of the epidemic has shifted over time:

> In the beginning it was the alarming message warning people about HIV. Now the messages seemed to have changed now to softer messages that no longer scare people so the shift from the harder messages to the softer messages I think is part one of the factors driving the complacency. So I think we need to get back to the situation in which the politicians speak about HIV all the

> time. Even the President doesn't speak about HIV that much these days (Ugandan Interviewee #14 2012).

Complacency was consistently linked with fear. Respondents noted that a lack of fear on the part of the population, due to the decrease in deaths due to AIDS, and the tendency for deaths not to be reported as AIDS deaths, has resulted in the population changing their behaviour back to what it was before the early days of the epidemic:

> Because the other time they were getting very scared, but now when they see people on drugs, and they could not even tell you who, and they were dying less, there are very few people dying of HIV/AIDS, I think that brought them a sense of conviction that things are not all that bad. That HIV after all can be managed, and that brought about their complacency and thus reverted to their normal behaviours, sexual behaviours, both the positive and the negative (Ugandan Interviewee #6 2012).

> That fear is no longer there, so that's what brought this complacency. And you don't hear, in fact, here if someone dies you don't hear that they died of HIV, they say, TB or they say this or they say that, so all those that lead to the fear, they are not there (Ugandan Interviewee #4 2012).

What had worked in the beginning, strong consistent messaging from the government about a particular approach to controlling the disease, had stopped being practiced.

At the same time that Museveni was becoming less involved in public discussions of HIV, there was an increased availability of funding for HIV prevention efforts. When UNAIDS began operations in 1996, globally there

was only $260-million dollars allocated for addressing HIV/AIDS; totals at the end of 2007 stood at just under $10-billion (UNAIDS 2008). The pool of money is much larger than it was only ten years ago, though in many cases this money comes with strings attached, encouraging governments to shift their policies to be in line with these new sources. A stamp of approval from these donors could bring with it tremendous financial rewards. Starting with the approval of PEPFAR in 2003, Uganda began to receive these new flows of aid. In addition to PEPFAR funding, between 2003 and 2007, the Global Fund distributed over $72-million dollars for AIDS related activities to the Ugandan government (PEPFAR 2008).

What is important to understand about ABC is that only the 'C' requires any significant additional capital investment. Messaging, discussing ideas in public, telling school kids to wait until marriage to have sex - these are all low-cost activities. While messaging and publicity is also important for increasing condom use, the procurement, distribution, and government sponsored promotion of condoms is a much larger investment. According to one interviewee:

> Previously about 90 percent was going to condoms, because abstinence and 'be faithful' were messages that didn't need money; person to person, scare message, you understand (Ugandan Interviewee #15 2012).

However, when PEPFAR came in with funding for HIV/AIDS, among other conditions, they mandated that 33% of their money had to go to abstinence-only programs. The informant summed up the problem nicely:

> So they were just handing money to for abstinence but remember they were sucking money from condoms. Condoms had to fall from around 95 percent to 33 and all this money went to things that were not necessary. So it created a class of people that discovered this money to eat in HIV. So they jumped on 'be faithful', they jumped - the President's wife opened a full department on abstinence and started receiving money. When we performed - well you know about Global Fund? Most of that money went to the state department (Ugandan Interviewee #15 2012).

Due to PEPFAR, money was taken away from condom promotion - the kind of program which needed capital investment - and at the behest of global funding organizations, was earmarked for programs that did not. Nature abhors a vacuum, and the predictable result of this was an increase in NGOs and other organizations that could absorb this money, either into well intentioned programs, or into individuals' pockets. The early successes of the ABC program combined with the increase in funding and its associated conditionality created a perfect environment for the proliferation of organizations and a new problem:

> What went wrong was because of the success stories, while the success stories were coming in, this diversions, now we have more than 11,000 different players, civil society organizations, UN and whatnot, different players, everyone doing, so even the coordination, the management of the response becomes a big challenge. So ... too many cooks. Not that we don't need cooks, we need better coordination (Ugandan Interviewee #4 2012).

The success of the original ABC program,[7] coupled with funding and funding requirements, created the conditions for an explosion of new AIDS organizations, and an overall shift in the approach to controlling the epidemic. With PEPFAR, Uganda began to alter its successful ABC strategy in order to please US donors and secure larger shares of funding - the focus on condoms dropped out of the picture and the emphasis shifted noticeably to abstinence-only programs (Hardee et al. 2008). Indeed, this shift in attention has been noticed by those on the ground as well. As one teenager in Kampala puts it, "with funding coming in now, for any youth activities, if you talk about abstinence in your proposal, you will get the money. Everybody knows that" (Cohen and Tate 2005).

In 2009, PEPFAR removed the funding restriction concerning abstinence. The thousands of organizations were free to pursue alternative approaches

[7]The more difficult question to answer is why ABC worked. There are several proposed reasons for its success. Some accounts credit the fact that Uganda was able to reach out and connect to young people before they had sex as the crucial component (Green 2003a). Others maintain the importance of faithfulness and partner reduction (Green 2003b; USAID 2003b; Hearst ND; Low-Beer and Stoneburner 2004). As USAID notes in arguing for the increased importance of B, "amid the debate over abstinence versus condoms, partner reduction and fidelity have been an often neglected component of behaviour change efforts" (USAID 2003b). In general, the empirical evidence tends to back up Museveni's intuition about condom use. Condoms simply did not play a large role in bringing down the number of new infections (Green et al. 2002). HIV prevalence rates began to fall in the late 1980s and the early 1990s, well before condoms were available in sufficient quantities; the 'miracle' in the general population occurred without condoms (Okware et al. 2005; Green et al. 2006). Museveni also may have been right about targeting condoms to high-risk populations. Condom promotion for commercial sex-workers and men who have sex with men has been shown to be quite effective (Green 2003a, 2004). Recently, there has recently been increased discussion about the ineffectiveness of abstinence and the importance of condom use (Russell 2005). Historically, however, success has been attributed to the combination of all three elements of ABC, especially to the higher promotion of A and B over C (Green 2003b; USAID 2003b,a; Green et al. 2006).

to controlling the epidemic without fear of losing out on PEPFAR funding (PEPFAR 2009). But even before this shift in PEPFAR policy, public perception of the epidemic and how to control it had shifted. In the mid-2000's, studies in the Rakai district showed that abstinence and faithfulness were declining, while interviews in and around Kampala's found that "most young people had never heard of 'zero grazing' or if they had, they thought of it as a part of the past and condom usage as part of the present" (Green 2004). Despite Museveni's early focus on abstinence, and PEPFAR's structural incentives, discourse surrounding HIV/AIDS in Uganda appears to have moved towards promoting condom use at the expense of other approaches. In the context of newly released HIV prevalence figures, this shift was not lost on President Museveni.

5.2.3 Re-engagement

The way that the epidemic was framed in the beginning was constant, consistent, and while presented in a way that the public was receptive to it, ultimately had the effect of frightening people into avoiding particular kinds of behaviour. That messaging is much different in the present day. According to most informants, how the disease is discussed in the public sphere has shifted, and that change is likely contributing to increases in infection rates in Uganda. If what was originally effective was the government's strong messaging about BCC, then their withdrawal from active participation in promoting ABC may be a proximate cause of the public's complacency and

the subsequent increase in HIV infection. However, that shift in messaging away from ABC may have very recently been reversed. On World AIDS Day in 2012, Museveni made the following statement:

> Uganda was one of the countries with the lowest condom use per capita, we departed from the main message, which was to instill fear to avoid promiscuity. Condom use was meant to be a last resort in circumstances where one could not abstain (Museveni quoted in Lanyero 2012).

In his statement, Museveni noted that "the multiplicity of current messages was encouraging complacency, promiscuity, and resurgence in Uganda's HIV prevalence rate" (Lanyero 2012). In other appearances, he has also squarely put the blame for the rise in HIV rates on NGOs in the country (largely foreign) who are promoting "prostitution, by saying that people should use condoms" (Araali 2012). "Now that the wars which had diverted me are over," he said in October 2012, "I am going to revive my campaign of fighting prostitution and HIV/Aids" (Araali 2012).

Museveni's renewed interest in HIV comes on the heels of the release of the 2011 AIDS indicator survey that indicated that HIV rates in the country were going up (Uganda Ministry of Health 2012). As noted in Chapter 3, Museveni's early engagement with the disease had to do with the fact that his military officers were highly affected by the disease. While the report does not offer any information on the HIV infection rates of the military, given the general trend of the country, Museveni likely has good reason to be concerned once again for his power base. He also risks losing his status as

'the shining star' on HIV on the continent, which likely explains his desire to blame foreign NGOs for going against his wishes.

The remainder of this chapter is dedicated to investigating what the messaging surrounding HIV/AIDS has been in the years surrounding the release of the 2011 AIDS indicator survey. If Museveni is true to his word, it is expected that media coverage of HIV will not only increase, but will also be directed towards Museveni's preferred methods of addressing the disease: abstinence and faithfulness.

5.3 Media as political institution

Important to this chapter is the claim that the examination of one aspect of media (in this case, print media) can provide insights into the entirety of a nation's media environment. Recent scholarship on media highlights the fact that while political in nature, media can also be understood as being a political institution in and of itself (Cook 2006; Sparrow 2006; Ørsten and Allern 2011). This research follows the new institutionalist literature in understanding media as a political institution. In particular, media companies are seen as having their "own internal institutional arrangements and external contexts that shape [their] behavior, decision-making, and (ultimately) [their] content" (Dunaway 2011). The new institutionalist literature allows for a country's news media to be seen as a solitary institution, with established organizational patterns in existence amongst media outlets. This conception

of media as institution helps to explain, amongst other things, homogeneity in news coverage (Entman 2006). The observed pack mentality in reporting ("better to be second and right, than first and wrong") coupled by a reliance on official sources for access, provides a context in which a country's news media is expected to cover the same stories in the same way. In the context of a less free media environment such as Uganda's, the government likely has a strong influence over what those stories are and how they are covered.

In this study, I maintain that the media, as a political institution, both shapes and reflects elite opinion. The impact that media has on public opinion is well established in the literature, with the discussion falling primarily into one of three related categories: issue framing, agenda setting, and priming readers (Iyengar and Kinder 1987; Krosnick and Kinder 1990; MacKuen 1981; McCombs 1981; Palmgreen and Clarke 1977). While distinct, all three reflect the media's ability to affect the biases of individuals towards particular issues in some way (Scheufele 2000).

Its largest role is likely simply agenda setting, putting particular issues on the agenda (or determining when those issues become important). However, importantly for this research, media also shapes how issues are interpreted by the public, through 'framing' (Callaghan and Schnell 2001; Nelson and Oxley 1999; Scheufele 2000; Terkildsen and Schnell 1997). An example comes from Entman about the cold war frame.

> An example is the "cold war" frame that dominated U.S. news of foreign affairs until recently. The cold war frame highlighted cer-

> tain foreign events - say, civil wars - as problems - identified their source (communist rebels), offered moral judgements (atheistic aggression), and commended particular solutions (U.S. support for the other side) (Entman 1993, p. 52).

The lens through which the public sees an issue is going to help shape their opinions about the issue, as well as the boundaries and limits of the issue.

Second, in addition to shaping public opinion regarding issues, media has the ability to shape elite opinion, and this is particularly pronounced in the African context. Elites read newspapers and are influenced heavily by a handful of key publications (Jacobs and Johnson 2007). This kind of agenda setting is of particular interest in less democratic countries, where the democratic lines of accountability may be weak. Where public opinion does not act to influence policy, collective elite opinion (as represented by elite controlled media), may be more predictive of areas of policy focus.

Third, through framing, media shapes how issues should be approached, and can thus demarcate the lines of debate. For example, if media present the threat of a new tuberculosis epidemic as something that will only be addressed by new medications and biomedical solutions (as was the case in South Africa), then other potential solutions - such as community-based treatment and support - will not even be considered (Daku et al. 2012). On a related note, this framing is often not conscious, and journalists do not always know what they are doing or talking about when it comes to complex medical or policy issues - which can lead to additional problems (Daku et al.

2012; Degeling and Kerridge 2013).

For example, one staff reporter at an East African newspaper remarked to me that they were new on the job, had no real experience in their issue area, and were given the entire portfolio to handle by themselves (Ugandan Interviewee #8 2012). Other media staff bemoaned the lack of training in complex issues such as health[8] (Ugandan Interviewee #15 2012).

Journalists may not always be informed enough to report properly on health issues, and are not necessarily in a position (or have the ability) to be critical of numbers, facts and reports coming from government sources regarding health issues. In less-democratic states, pressure to toe a particular line is added to simple inability, and thus the selection, framing and discussion of issues are all done through a particular lens, one which is not necessarily the most conducive for effective health interventions.

Access to newspapers in sub-Saharan Africa can be quite low. For example, in South Africa, it is estimated that 80% of rural South Africans are illiterate, and even in the privileged group of white South Africans, nearly 40% are unable to read above a Standard 5 level. There is a huge discrepancy between the elite and the poor in terms of access and ability to consume print media (Danso and McDonald 2001; Fourie 1994). However there is still considerable value in examining newspaper content in this context. First, the content of other media (including non-English print publications)

[8]Though I was told that workshops on health training for journalists were starting to be offered at Makerere, which is promising.

is likely being shaped heavily by the print media (Danso and McDonald 2001; Strand 2013). Second, elites are more likely to be getting their information and formulating their opinions from newspapers than from other media sources; opinion-makers in Kampala are more likely to be found reading *The Daily Monitor* than listening to radio broadcasts coming out of rural areas (Danso and McDonald 2001). Newspapers can be seen as a uniquely elite form of communication, at least in the sub-Saharan African context: English-language newspapers with national circulation are produced by and for a particular clientele, and likely reflect, reinforce, and reproduce particular ideas, frames and worldviews. As such, examining print media can give insight into elite priorities, especially in a context where elites have considerable influence over the press.

This is not to say that only the elite read these publications. While these papers are initially purchased and consumed by the elite, they find their way into the hands of regular citizens. When people are finished with the papers, they are given to others, re-read, and then passed on again. Measured circulation of newspapers may be relatively low compared to the population size, but multiple people likely read each purchased newspaper. It is estimated that each newspaper sold in Uganda is read by approximately 10 people,[9] and as mentioned, print media is a major source of information

[9]For example, on a nine-hour bus ride across Zambia, my finished newspaper made its way to about twenty different people, zig-zagging its way up to the front of the bus, like an attendance sheet for a field trip. While I cannot speak to the degree to which non-elite citizens absorb and represent the elite-dominated viewpoint, it was clear from my experience logging over 6,000 km on public transit in sub-Saharan Africa, that non-elites

for other media in the country (Strand 2013). The information contained in print media does find its way to the public, one way or another.

Media in Uganda is not completely dominated by the state, and thus strikes a balance between what is permissible within the political context, and what is an accurate reflection of what is being reported. The quantity and tone of media coverage surrounding HIV reflects the societal norms surrounding the epidemic in that country, and an openness and willingness to discuss HIV publicly and honestly is crucial for effective prevention strategies. Not only does it ensure that the public is informed and aware, but it serves the critical task of lowering the stigma surrounding the disease. Stigma is without question one of the largest barriers to individuals getting tested, treated, and disclosing their status to partners. It affects the wealthy, white, upper class (Cameron 2005), the emerging middle class (Steinberg 2011), and the uneducated poor (Campbell et al. 2005). Anecdotally, it is a common reason across the continent for why people are hesitant to get tested or receive treatment. In short, even with the education, means and desire to seek treatment within a health system that is able to provide ARVs, societal stigma against PLWHA can dissuade people from seeking treatment.

Media both shapes and reflects public and elite opinion, it frames issues in particular ways that may or may not be appropriate for effective policy implementation, and it is an important tool for shaping (and metric for assessing) the public's impression of PLWHA, a crucial factor in determining

were highly informed (and opinionated) about current events.

whether or not individuals will seek treatment. While on the surface media may not seem to be the most important political institution regarding HIV policies, it is intricately tied to many other factors which are important determinants of a country's epidemic.

5.4 Content analysis of Ugandan newspapers, 2010-2013

In order to analyze how Ugandan media discusses the HIV epidemic, this chapter utilizes a 'bag-of-words' approach to perform an automated content analysis of newspaper data (Soroka 2012; Young and Soroka 2012). Newspaper data was collected using LexisNexis (LexisNexis Academic 2014). All newspaper articles from the two major Ugandan daily papers (*The New Vision* and *The Daily Monitor*) that contained the words "HIV" or "AIDS" were collected for analysis. Articles were loaded into QDA Miner v4.1.0 and WordStat v.6.1.16 for preliminary analysis and cleaning (Péladeau 2014).

The automated analysis was performed using Lexicoder v2.0 (Daku et al. 2009) using a dictionary-based analysis. As Young and Soroka (2012, p. 208) note, "[w]ith a well-defined and comprehensive dictionary, a basic word count can provide a powerful and reliable analysis of the topical and affective composition of a text." The dictionary for the analysis was developed specifically using terminology associated with various aspects of the epidemic (see Appendix A). The analysis employed here simply counts the number of oc-

currences of words within a text, with the assumption being that texts with similar bundles of words will be about similar things.[10]

Lexicoder counts the occurrence of words broken into dictionary categories, with multiple words per category. For example, a dictionary category for South African politicians would include the terms 'Zuma,' 'Mandela,' 'Zille,' and 'Malema' among many others. Any occurrence of any of these words counts towards the total dictionary category count for the article. In this way, the higher the dictionary category count, the more confident we can be that the article is about a certain topic vis-à-vis another.

As noted earlier, newspaper data was not available for Uganda outside of 2010-2013, and *The Daily Monitor* was only indexed by Lexis Nexis until February 29, 2012. Additional data from Factiva (Factiva 2014) was collected for *The Daily Monitor* for 2013. Data restrictions thus prohibit a broader longitudinal analysis in this case, however the dates available do allow for an investigation of shifts in messaging around the release of the 2011 seroprevalence survey. A total of 3821 newspaper articles were analyzed from between 2010-2013, 2307 from *The New Vision* and 1514 from *The Daily Monitor*. A breakdown of articles by year and by newspaper is presented in Figure 5.1 below. As can be seen, absolute coverage of HIV/AIDS fluctuates over time.

[10]It should be noted that this analysis does not investigate the tone or sentiment of the articles. While a dictionary-based approach can provide insights into topics discussed, without performing a sentiment analysis, it cannot reveal whether or not the discussions of condom use are negative or positive, or whether or not increased mentions of political leaders are critical, laudatory, or neutral.

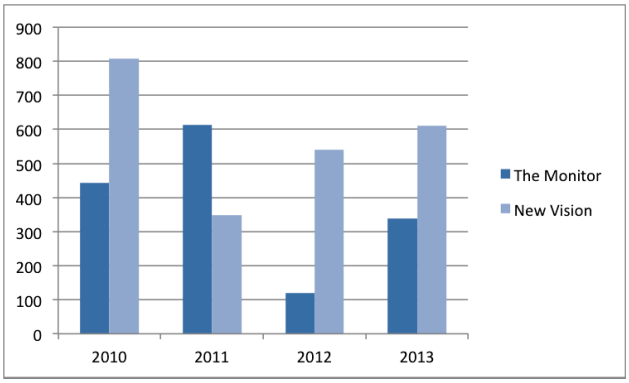

Figure 5.1: Number of Articles Mentioning 'HIV' or 'AIDS' per year, by newspaper

Turning to the dictionary analysis, an interesting result emerges. While the rhetoric of the Ugandan government has consistently been one of promoting abstinence and faithfulness instead of condom use, the media coverage reveals the opposite trend. Figure 5.2 shows the percentage of articles that mention HIV or AIDS that also mention terms associated with abstinence, faithfulness, or condoms.

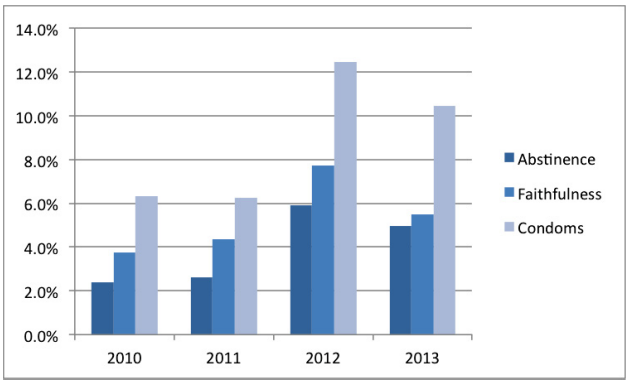

Figure 5.2: ABC topics, per year

As can be seen, coverage of condoms is, in every year, more than double

that of abstinence, and is consistently higher than articles that address faithfulness. Interestingly, this appears not to be product of one newspaper covering the issue in a different way than the other - as Figure 5.3 demonstrates, both newspapers cover issues related to condoms more than abstinence or faithfulness. Furthermore, there is a general increase in discussion of each category over time in all newspapers, except for 'faithfulness' in *The Daily Monitor*.

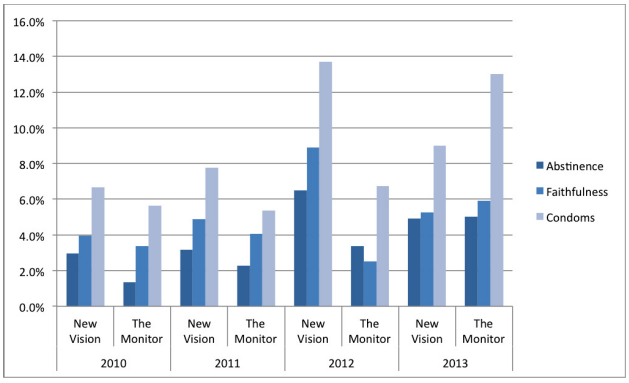

Figure 5.3: ABC topics per year, by newspaper

The messaging surrounding HIV/AIDS seems to be shifting away from abstinence and faithfulness, and towards condoms once again.

Another interesting trend visible in the data is that articles that mention HIV/AIDS are less likely to also mention a high-ranking government official (either the President, the First Lady, or a Minister) in their coverage in 2013 than they were in 2010. Overall, as shown in Figure 5.4, 21% of articles in 2010 that mentioned HIV also mentioned a high-ranking official, whereas by 2013, that number had dropped to 13.2%.

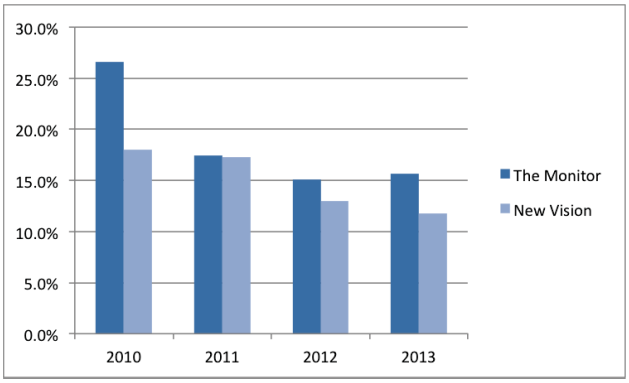

Figure 5.4: High-level leadership mentions per year, by newspaper

Figure 5.5 looks at coverage of circumcision and shows that, overall, circumcision coverage has increased from 2.6% of all articles in 2010, to 5.3% of all articles in 2013. Importantly, that increase is being driven by coverage in the state-run *New Vision* newspaper.

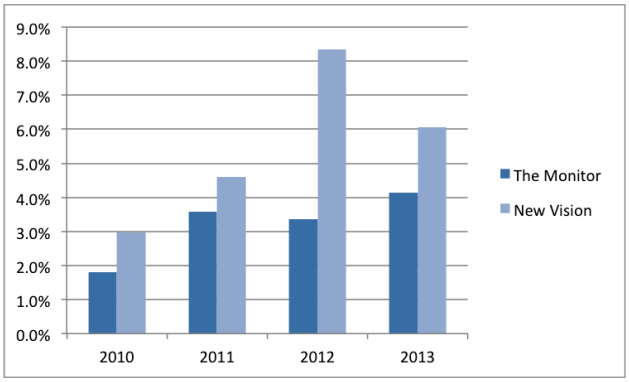

Figure 5.5: Circumcision mentions per year, by newspaper

Of additional interest is the emphasis on various 'solutions' to the epidemic. Figure 5.6 compares the relative frequency of keywords that address ABC (any element), ARV treatment, vaccines, and circumcision.

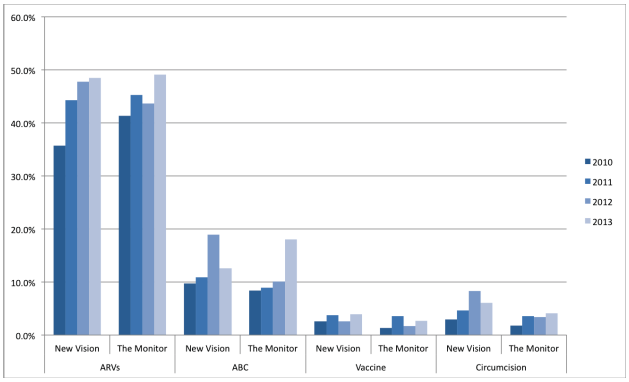

Figure 5.6: Mentions of 'solutions' per year, by newspaper

Interestingly, Figure 5.6 shows a marked increase in the discussion of 'solutions' to manage the epidemic. From 2010-2013, the percentage of articles mentioning HIV that mentions one of these categories increased from 51.7% to 71.4%. Discussions about ARVs are most frequent, with 47% of articles in 2012 mentioning them, versus only 12.3% mentioning ABC options. Regardless, discussion around ABC has increased between 2010-2013, and has done so significantly in *the Daily Monitor* in 2013 (though as Figure 5.2 suggests, a large proportion of the ABC discussion surrounds condoms).

Finally, there emerged some discussion about corruption and funding scandals surrounding HIV in the interview data, and the newspaper data reflects this connection. Figure 5.7 shows coverage of corruption related to HIV. Unsurprisingly, the independent newspaper, *The Daily Monitor*, shows a higher degree of coverage surrounding corrupt activities than the state-run daily, though as of 2013, the gap between the two was quite small.

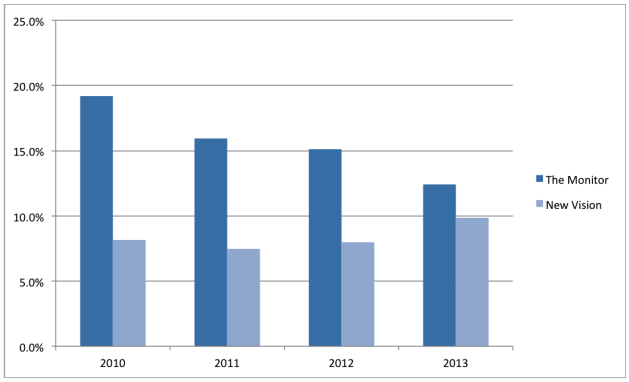

Figure 5.7: Corruption mentions per year, by newspaper

5.5 The political context of behaviour

At the beginning of the epidemic, Museveni actively shaped the context in which HIV/AIDS was going to be addressed. By insisting that government officials speak about the disease at every opportunity, and doing the same himself, the President was able to influence the way in which Ugandans saw the disease and reacted to it. The ABC program was initially rather successful, yet as of 2011, prevalence rates had increased again.

Museveni re-entered the discussion and blamed the way in which international NGOs had shifted the discourse away from abstinence and faithfulness for the increased prevalence rates. He publicly committed to re-establishing the importance of ABC in Uganda, yet it is unclear if Museveni's commitment has translated into a renewed importance of the ABC approach. An examination of the content of print media in Uganda between 2010-2013 reveals a few notable trends. The first is that in this short time period, messaging around the disease does indeed change. There is an increase in discussion

about condoms, and an increase in the overall discussion about 'solutions' to the epidemic. In terms of solutions, it is important to note that nearly fifty-percent of the articles that address HIV/AIDS have some mention of ARVs in 2012. For a country that began managing the epidemic using a behaviour-based approach, this indicates a clear shift in focus.

The second point of interest is the shift in messaging from the state-run newspaper, *The New Vision*. From 2010-2013, *The New Vision* vastly increased its mentions of ABC-related terms, and also began to pay a lot more attention to circumcision. Mentions in *New Vision* articles related to HIV/AIDS that also mentioned circumcision doubled from 3% in 2010 to 6.1% in 2013. The same is true of coverage in *The Daily Monitor*, where articles about circumcision doubled from 1.8% in 2010 to 4.1% in 2013. This is of particular interest as preliminary analyses of media data from the 1990s suggested that there was little difference in the way that the state-run and independent newspapers reported on the epidemic (Daku 2009). This appears to remain true in recent years. Unsurprisingly, Museveni's commitment to reinvigorating ABC seems to have gained traction in the state-run newspaper, and as of 2013, it is being reflected in *The Daily Monitor* as well. While coverage may diverge at points, it appears that media coverage in Uganda around HIV/AIDS tends to converge.

Finally, while in the earlier years of the epidemic high-level leadership was expected and encouraged to play a large role in keeping attention focused on HIV/AIDS, in recent years the co-occurrence of mentions of HIV/AIDS and

mentions of high-level leaders has declined. While still quite high (16.9% percent of all articles that mentioned HIV/AIDS also referred to a high-level leader), the trend is clearly downward for both *The New Vision* and *The Daily Monitor*. Either Museveni is not living up to his commitment to speak more about HIV/AIDS, or if he is, this focus is not being captured in the print media.

The shift away from strictly behavioural approaches to controlling the epidemic to increased attention on condoms, circumcision, and ARVs can be seen as a shift towards a more bio-medical approach to controlling the epidemic. The intangible goods of promoting abstinence and faithfulness gave way to an approach that was more focused on those things that could be measured (e.g. condoms provided, rather than one's personal feelings around being faithful) and addressed through Western science, particularly ARVs and medical male circumcision. As in the South African case (Butler 2005), a confluence of factors emerged that made pursuing a bio-medical approach more likely in the long-run, regardless of the efficacy of the original approach. The increase of available funding tied to condoms (and then later to a refocus on abstinence), combined with the rise of global funding organizations that were looking to put money into providing ARV treatment, and the recent global push to increased circumcision rates, created a set of incentives that have pushed Uganda away from the ABC model and towards a model that focuses on condoms, ARVs, and medical male circumcision.

This preliminary analysis of media in Uganda does carry with it specific

limitations associated with the approach. First, while LexisNexis and Factiva report that they do index all newspaper articles that come from *The New Vision* and *The Daily Monitor* over this time period, there is no way to independently verify this. The reason that overall coverage of HIV/AIDS in 2012 by *The New Vision* is uncharacteristically low may be due to the fact that LexisNexis did not index all of the articles available that year. Second, automated dictionary-based analysis provides only a very specific glance into texts. While it can identify if articles mention the word 'condoms,' it cannot easily tell if the point of the article is to promote condom use or not. Further analysis that looks closer at the content of articles is the next step in this kind of analysis, for example performing a thematic network analysis (Attride-Stirling 2001) of the discussions around condoms. In addition, analyses that span a longer time period would be exceptionally useful in assessing the long-term trend of discourse surrounding HIV in Uganda. Finally, it is possible that the dictionaries employed in the analysis are not capturing the right language. While the dictionaries were developed through reading a sample of the articles, this is always a danger in dictionary-based approaches.

Limitations aside, this chapter does demonstrate that there is a marked change in media coverage of particular themes, solutions, and individuals relating to the HIV/AIDS epidemic. As the spread of a particular kind of information (ABC) was at the heart of Uganda's early successes, the fact that there have been recent changes is of considerable interest, especially the surge in messaging surrounding condoms. As argued earlier, media both reflects

public opinion and shapes it, and it does the same for elites within any given society. How the epidemic is framed, what solutions are being promoted, and which ones are being ignored, will likely have a long-run impact on a country's epidemic. Future research should aim to examine media coverage of individual epidemics and, where possible, bring the measurement of this coverage into cross-national analyses.

Chapter 6

Conclusions

6.1 Summary and key findings

This study began with a question: Why, when scientists agree on the interventions, governments agree on the policies, and international donors are lined up to provide funding, countries in sub-Saharan Africa can have such different outcomes in terms of HIV prevalence and incidence? Part of that answer, which I hope has been made clear throughout this dissertation, is political.

In Chapter 1, I introduce what I call 'political epidemiology,' a mixed methods approach to identifying and examining the political structures, processes, and outputs that affect population health. At its core, it interrogates the *political susceptibility* of health risks, employs a *state-centred* perspective, and focuses on the *political context of behaviour.* I then proceed to perform

a political epidemiology of the HIV/AIDS epidemic in sub-Saharan Africa, simultaneously investigating this critical issue, and demonstrating the value and utility of a political epidemiological approach.

In Chapter 2, I begin this examination through a longitudinal analysis of the epidemic in the region. Drawing on the wide-range of literature that focuses on the determinants of HIV, I construct a set of models to explain changes in HIV prevalence and HIV incidence over time. The basic models prove to be quite successful in explaining HIV prevalence and incidence change over time, but importantly they are improved significantly with the addition of political variables. Politics matter to this epidemic however, the results from the statistical regional analysis do not shed much light into how they matter.

In order to dig deeper into how politics might affect the HIV/AIDS epidemic, in Chapter 3 I turn to the cases of South Africa and Uganda. These two countries had much different experiences in terms of HIV prevalence and incidence change and both demonstrated highly politicized responses to the epidemic. This state-centred analysis reveals the importance of politics more broadly to these two countries' experiences, highlighting in particular the key roles played by political leadership in South Africa and messaging surrounding the epidemic in Uganda.

Chapters 4 & 5 look closer at these two elements drawing on key informant interviews performed in South Africa and Uganda between 2011-2012. In Chapter 4, I examine the role of political leadership in South

Africa. Presidential leadership is identified as crucial, but so too is leadership emerging from other actors, specifically provincial level politicians and non-governmental organizations. Based on a comparison of the presidencies of Nelson Mandela, Thabo Mbeki, and Jacob Zuma, I propose a typology of political leadership that can be usefully employed in future analyses.

Turning to Uganda, Chapter 5 investigates the importance of messaging through an examination of the ABC approach in the early years of the epidemic. President Museveni's initial focus on abstinence and being faithful was shaped several times by influence from the international community. The release of a report in 2011 suggesting that HIV rates had gone up in the country provided a useful critical juncture for an analysis of how the political context of behaviour can change rapidly for political reasons.

These two political factors are by no means the only ones of interest, and the interview data that I collected suggests many other political factors that may be important for determining a country's epidemic (for example, neopatrimonialism and bureaucratic authoritarianism), however they are a first step towards a better understanding of how political factors affect epidemics.

In Chapter 1, I articulate the need for an iterative, mixed-methods approach, in line with Lieberman's (Lieberman 2005) nested analysis. This dissertation performs the first step of this iteration, identifying the variables that are of additional interest to HIV/AIDS epidemics in the region, and articulating ways that they may be measured. The next stage of this research agenda is to collect that data and include these measures in the models de-

tailed in Chapter 2.

6.2 Contributions of the study

6.2.1 Political epidemiology

The key theoretical contribution of this dissertation is the articulation of political epidemiology as an approach. While individual studies regarding HIV/AIDS (for example Dionne (2011), Lieberman (2009), Patterson (2006)) already fit broadly into this approach, I have offered a unified and systematic way to approach the study of epidemics from a political science perspective.

Articulating what is political epidemiology as distinct from social epidemiology, research on political determinants of health, and political science, allows for the development of a more focused research agenda where the tools, theories, and insights of political science can be more fruitfully applied to an understanding of epidemics and population health.

6.2.2 The complexity of political leadership

Furthermore, in Chapter 4, I develop a typology of political leadership that disaggregates leadership along four dimensions: *performativity*, *normativity*, *politicization*, and *effectiveness*. This typology permits a more nuanced analysis of political leadership, allowing for the capture of contextual factors into discussion of leadership without neglecting the role of the leader. This ty-

pology can be incorporated into other efforts to measure political leadership, in order to improve the generalizability of the approach (see Fox et al. 2011; Goldberg et al. 2012).

6.2.3 Shifts in messaging in Uganda

The media analysis performed in Chapter 5 demonstrates that the messaging surrounding HIV/AIDS in Uganda has shifted since the beginning of the epidemic, and has shifted again in light of the recent realization that HIV prevalence rates are again on the rise. Though a simple analysis, the dictionary-based approach clearly demonstrates a shift in focus between 2010-2013 of both the state-owned and independent newspapers. This research also demonstrates the feasibility of performing automated content analysis on media data in sub-Saharan Africa. While sources for previous years are not in abundance, more and more newspapers are being indexed and made available for analysis. As this corpus grows, the value of automated text analysis in the region will become self-evident.

6.2.4 Modelling the epidemic

Finally, each chapter in this dissertation has contributed to a deeper understanding of the HIV/AIDS epidemic in sub-Saharan Africa, yet in vastly different ways. In Chapter 2, I develop models for assessing change in the epidemic over time that can be refined and improved in future research. This

chapter demonstrates the feasibility of modelling changes in the epidemic by drawing on diverse theoretical sources, and importantly for this dissertation, also demonstrated the value of including political variables in the analysis. HIV, it turns out, truly is a political disease.

6.3 Concluding remarks

This dissertation is entitled *A* political epidemiology for a reason. I have barely scratched the surface of the causes or consequences of politics in relation to the HIV/AIDS epidemic, though I hope that I have at the very least convinced the reader that politics are exceptionally important to epidemics and are worthy of more focused study.

As mentioned in Chapter 1, a political epidemiological approach should be iterative and mixed methods. As such the next step for this research is to develop ways to operationalize and measure political leadership and the role of media. These measures should then be incorporated into models such as the ones proposed in Chapter 2 in order to determine their impact on changes in the epidemic.

Ultimately, the goal of political epidemiology is to help understand how political factors contribute to the health or the morbidity of populations. It is hoped that through a political epidemiology, political factors, *factors that can be actively changed or adopted*, can be identified, measured, and if necessary, changed.

Appendices

Appendix A

Lexicoder Dictionary

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<pnode name="first sex"></pnode>
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```

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