The Biometric Imaginary:
Standardization & Objectivity in the Post-Apartheid Welfare State

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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works, of other people has been attributed, and has been cited and referenced.

Signature: Signature removed Date: 18 October 2013

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Abstract

Starting in March 2012, the South African government engaged in a massive effort of citizen registration that continued for more than a year. Twenty-one million social welfare beneficiaries enrolled in a novel biometric identification scheme that uses fingerprints and voice recognition to authenticate social grant recipients. This dissertation seeks to understand the meaning of biometric identification in post-apartheid South African welfare through a study of the bureaucratic and policy elite's motivation for this undertaking. It suggests that biometric technology was conceived of and implemented as the most recent in a series of institutional, policymaking, and infrastructural reforms that seek to deliver welfare in a standardized and objective manner.

At the time of the political transition, South Africa's bureaucracy was fragmented with uneven capacity. I trace the broader emergence of a will to standardize and a pursuit of objectivity, animating commitments that influence the adoption of biometric technology. I suggest that the adoption of a nationally centralized biometric welfare database has been the result of 'the biometric imaginary', a belief that biometric technology is a necessary, suitable, and effective means of enacting a uniform and impartial welfare state. Although it is too early to judge the effectiveness of this new system, the transformations in welfare administration more broadly have largely been a success. It would be, however, a mistake to assume they are an unalloyed good, without trade-offs. Their most recent result – the new biometric payment system – serves to highlight some of those shortcomings, including often ignored technical failures and a more subtle distancing of the state from the citizen.

I. Introduction

Beginning in March 2012 and continuing for a little more than a year, 21 million predominantly low-income South African residents queued at government facilities to be photographed and submit their personal details, including a full set of fingerprints and a voice recording. From rural towns to major cities, old and young alike were required to present themselves for this massive registration drive. States make records of their citizens for various reasons, and depending on the age of those queued, chances were they had been similarly registered in the past, perhaps for racial labor control during apartheid, perhaps for South Africa's democratic election in 1994.

The episode in question, though, was the result of a bureaucratic decision by welfare policymakers to implement a new administrative infrastructure for South Africa's extensive program of social grants. Designated primarily for the elderly, poor caregivers, and the disabled, these monthly government-to-citizen transfers are perhaps the most significant means of poverty alleviation in contemporary South Africa. Those 21 million residents – around 40 percent of the country's entire population – provided their personal details in order to receive their grants through a new payment system. For the recipients, the new system offered increased convenience through the provision of a payment card accepted at a large cash distribution network throughout the country. For the government, the system promised a reliable means of delivering millions of rand per month. As the Minister of Social Development Bathabile Dlamini (2013) would explain, the goal was "to improve the integrity of our social security system, and to eliminate all forms of fraud and corruption." Prominent civil society organizations like the Black Sash, too, "welcomed [the] move to a biometric system" (Nyembezi 2012).

The cornerstone of this new system is biometric identification, the use of technologies to recognize specific bodily features. Most important is the use of fingerprint scanners, but the system also aims to use voice recognition software for when fingerprinting is infeasible and only a phone call can occur. This is not the first time biometric identification has been used widely in South Africa. Both before and during apartheid, government officials have been enamored of the potential for using analog fingerprinting to identify individuals, most commonly in schemes of racial labor control.

In the post-apartheid era, digital biometric technology has been central to the identification programs of the Department of Home Affairs, as well as used extensively in previous welfare systems.

Yet rarely have these systems functioned as promised, whether for good or ill. Without ignoring the very real human cost of authoritarianism, Evans (1997: 99) suggests that "the collective impact of recent scholarship on the labor bureau system has steadily destroyed the structure's reputation for omnipotence and doctrinaire imperiousness." Breckenridge (2005a) suggests the biometric obsession even undermined the apartheid state's ability to act. In the post-apartheid era, too, despite significant investment, large-scale biometric identification schemes have stalled or proven ineffective (Breckenridge 2008).

Therefore, the continuing salience of biometric identification amongst the bureaucratic and policy elite seems curious. This dissertation seeks to explore the meaning of biometric identification within post-apartheid South Africa through an investigation of the way in which it is conceptualized and the reasons for which it is adopted by policymakers and members of government, especially those within the welfare administration.

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Historians have suggested that states and societies tend to cohere particular systems for registering and identifying individuals. "Viewed globally," write Szreter and Breckenridge (2012: 3), "societies, and the individuals within them, seem to be very variably shaped by what we might call cultures of registration". Similarly, Caplan (2001: 51) suggests that a "culture of identification" – "essentially unruly" but comparatively distinct – can be said to exist in a given society. These cultures are the historically contingent results of evolving politics, economics, technology, and more. Their distinctions help to enact novel relations between government and citizen, yet as Strathern (2000) notes in her discussion of the related notion of "audit cultures" they are "always in the making".

In the chapters that follow, I aim to explicate some of the dynamics behind a post-apartheid culture of registration and identification. I argue that a relatively stable and collective understanding exists among the bureaucratic and policy elite about how to enact the relationship between the welfare state and beneficiary. In brief, this collective

understanding – that I propose to call 'the biometric imaginary' – posits biometric technology as a necessary, suitable, and effective means of enacting a standardized and objective welfare state. Following the gestures to culture mention by the scholars above, I seek to provide an interpretive account, concerned with understanding the richness and ambiguity of the experiences rather than a linear, causal narrative. As Rabinow and Sullivan (1979: 6) note, "Culture, the shared meanings, practices, and symbols that constitute the human world, does not present itself neutrally or with one voice." As such, my account is focused (and thus limited) in three meaningful ways. Temporally, it is primarily confined to the post-apartheid period and does not discuss the important transformations in the culture of identification and registration symbolized by 1994. Secondly, its scope is particularly focused on the social grants program, rather than, say, national security (where surveillance has recently become controversial through the so-called 'Secrecy Bill'). While I suspect the analysis applies more broadly, recent popular resistance to biometric technology in schools (e.g. Mawson 2013) suggests important differences from the welfare experience, where little opposition exists. And, finally, I have considered primarily bureaucratic and policy elites, especially government but also civil society and academia; insofar as the shared significance of biometric identification within that community is distinct from the beneficiaries, this work excludes what might be called the popular culture of grant identification.

For many individuals involved in post-apartheid welfare policy reform and implementation, the manner in which biometric identification is conceived and implemented is driven by two interlinked commitments of the era: a will to standardize and a pursuit of objectivity. The emphasis on standardization has arisen as a means of uniting and improving the fragmented and weak bureaucracy inherited from the apartheid regime. South Africa has endeavored to create equality of citizenship through enacting uniformity. This has included bureaucratic centralization (first through the establishment of a unitary, national Department of Social Development (DSD) in 1994, and after through the creation of the South African Social Security Agency (SASSA) in 2005) as well as technological reform (such as through the linking of various databases and implementation of new payment infrastructures).

In parallel, an egalitarian ethos has militated against subjectivity, in favor of rule-bound – and thus objective – practices. As De Tocqueville and Weber elaborated long ago, in a democratic setting, subjective discretion is viewed with suspicion. In post-apartheid social protection, two forms of discretion have proven particularly troubling: illicit access to grants and bureaucratic error. The preference for objectivity has affected the types of knowledge deemed legitimate for policymaking, with quantified evidence growing significantly. It has also deeply influenced the delivery of social grants, with biometric identification offering an impersonal and presumptively neutral means of grant administration.

Both standardization and objectivity are widespread and productive commitments that shape the understanding of biometric registration and identification. The particular confluence of the will to standardize, the pursuit of objectivity, and the use of social grants have given rise to the belief that biometric identification is necessary, suitable, and effective. As in Appadurai's (1996: 31) discussions of social imaginaries, the biometric imaginary is "a constructed landscape of collective aspirations" that serves as a "staging ground for action". These imaginaries are productive social forces with real-world implications, but they do not always accurately correspond to reality, exhibiting varying degrees of interpretive flexibility. As I will contend, the dominant understanding of biometrics as necessary, suitable, and effective are each, in part, fantasy and reality.

However, the biometric imaginary is not merely relevant at the level of ideas. Drawing on Hecht's (2009 [1998]) notion of technopolitics – and the insights of science and technology studies (STS) more broadly – I emphasize the materiality of South Africa's social grants initiative. As Jasanoff (2004) argues, society and technology co-produce, with both elements capable of (surprising) influence on the other. Technopolitics is the "strategic practice of designing or using technology to constitute, embody, or enact political goals" (Hecht 2009 [1998]: 15). The term serves to remind us that "technologies cannot be reduced to politics… [and that] the effectiveness of these technologies as objects designed to accomplish real material purposes… matters." Biometric grant schemes are material means of enabling the poor to purchase more than they could otherwise; as such, they resemble what Callon *et al.* (2007) call "market devices", "material and discursive assemblages that intervene in the constitution of markets" (see

also MacKenzie 2009). But perhaps more importantly, they are what might be called 'citizenship devices,' the material enablers of constitutional rights, in this case the right to social security. For many South Africans, the grant is the most obvious way in which the state appears in their lives, and it is a relationship mediated by biometric technology.

The chapters that follow will show how the will to standardize and the pursuit of objectivity have driven a series of technopolitical programs within the post-apartheid welfare sector. Chapter two serves to introduce briefly three issues: the global diversity of state identification practices, the tumultuous South African history of identification, and the contemporary political contests about the social grants program.

Chapter three turns specifically to standardization, analyzing the emergence of an influential elite discourse. This framing points to a 'crisis' in grant delivery, caused by a fragmented bureaucracy and exhibited by the prevalence of fraud, corruption, and failures in delivery. The government reports, Parliamentary hearings, and media discussion that promulgated this discourse offered standardization – of institutions, infrastructures, and policies – as the solution to the crisis. As a result, the post-apartheid welfare elite have been consumed with a will to standardize the fractured and incompatible processes, institutions, and infrastructures.

Chapter four illustrates the broader importance of objectivity through a discussion of the rise of quantified evidence in welfare policymaking. The pursuit of objectivity is an ethos and program of reducing discretion in favor of rule-bound, even mechanical, processes, including those of statistical analysis. As apartheid came to a close, academic and government surveys began to generate previously missing baseline statistical data about the extent of poverty and the state of service delivery. In the years since, academics, civil society, and government stakeholders have resorted to quantification, with numerical evidence becoming an important means of testimony and advocacy.

Chapter five directly confronts the use of biometric identification in South African social grants, illustrating the forms of inconsistency and discretion that have bedeviled the social grants program, particularly unequal quality of service delivery, improper bureaucratic behavior, and illicit access to grants through fraud and corruption. In the realm of grant delivery, biometric identification has been conceived and implemented as a means of instituting standardization and objectivity to combat these troubles, including

the new system instituted in 2012-2013, about which SASSA declared the intention "is to have all the Beneficiaries, irrespective of the method through which they receive their Grants, to be Biometrically identified [*sic*]" (SASSA 2011).

The final substantive chapter adopts a more reflective tone, critically assessing the weaknesses and shortcomings in the biometric imaginary. As a means of accurately identifying individuals, biometric technology often falls short, failing in persistent manners that undermine claims to equal treatment; however, biometric identification can be a productive failure, securing profits, deterring fraud, and demonstrating seriousness even if the technology is oversold. Finally, I discuss the consensus around biometric identification and the ways in which it assists in the creation of a centralized, national welfare program that comes with subtle trade-offs. In particular it has created a structure that may distance the citizen from the state, even while being the most prominent form of state-assistance to citizens in post-apartheid South Africa.

It is too soon to tell if the new biometric registration and payment system will prove to be another troubled use of the technology by the South African state; however the emulation of both South Africa's system of social grants (Hanlon *et al.* 2010) and biometric methodologies (Gelb and Clark 2011) suggests the need for an understanding of the conceptualization, meaning, and drivers of biometric welfare in South Africa.

II. An Introduction to the Politics & History of Biometric Identification & Welfare

ABSTRACT: The purpose of this chapter is to introduce in three sections the broad historical and political context of inquiry. The first provides an overview of biometric state identification, emphasizing the divergent political drivers and palatability of biometric identification across the globe; while in some cases it is considered relatively innocuous, in others it evokes significant controversy and opposition. Secondly, I present a brief history of biometric state identification in South Africa that not only serves to demonstrate the technology's "momentum" (Hughes 1994) but also the novelty of today's lack of resistance to biometrics. Finally, I outline the contested politics of welfare in post-apartheid South Africa, a series of struggles over the proper redistributive role of the state that have deeply influenced the use of biometric identification for grant recipients.

Biometric State Identification

Identity documents have historically been key means of materially fixing "the state-society boundary", a frontier that Mitchell (2006: 170) and others have shown to be fluid. Various theorists link the creation of identity infrastructures closely to the bundle of transformations that constitute 'modernity', however understood (Foucault 1975; Giddens 1990; Bauman 2004; Lyon 2009), but it has also occurred in places and times not usually considered 'modern', such as imperial China (von Glahn 2012). Indeed, registration and identification has unfolded globally with divergent results and using disparate means.

The tasks for which registration and identification have been enrolled vary from conscription and taxation to education and welfare. The coercive nature of state-based identification has often received the most scholarly attention, with influential theoretical contributions from Weber, Foucault, and, more recently, Scott (1999). However, as Setel *et al.* (2007) and Szreter and Breckenridge (2012) recently argue, the act of identification often implies beneficial, even life-saving, results, through the provision and protection of rights.

These debates about effects are intertwined with the methods through which individuals are initially registered and subsequently identified. Not all methods of identification imply equal effects. To pick an obvious example, the historical practice of tattooing criminals and slaves has radically different implications than a system of identity

documents, and an identity card noting ethnicity shapes the practice of identification in a way that one without ethnicity does not (for this diversity, see the contributions to Caplan and Torpey 2001).

The growth of biometric identification, therefore, implies certain biases and affordances that will unfold in relation to particular contexts. In its contemporary sense, biometric identification is typically understood as the use of bodily characteristics for recognition. It has traditionally been done manually, but is increasingly conducted digitally, through the algorithmic matching of precisely measured features. While the geography of fingerprints is the most common method, today it is possible (with varying degrees of accuracy) to use many other bodily features for identification purposes. Fingerprints are appealing identifying features because no two humans have ever been shown to have the same pattern and they are easily retrievable (unlike, say, DNA).

However, the actual act of matching fingerprints is far more difficult than that may imply, and can therefore easily be mistaken (Cole 2006). To begin, a meaningful portion of the population is unable to be recognized by biometric technology, for reasons such as missing or damaged fingers. The act of registering biometric features is often error prone, leading to databases that include poor samples. Furthermore, the humans or algorithms tasked with comparing biometric samples are imperfect. As the National Academies of Science concluded, "biometric recognition is an inherently probabilistic endeavour" where complexity and uncertainty undermine sought-after certitude (Pato and Millett 2010: viii).

In recent years, biometric identification has been used in a variety of fields, ranging from policing and border control to welfare and voting. Gelb and Clark (2013) estimate more than one billion people have been biometrically registered around the world. In a growing number of cases, governments have adopted biometric identification as the standard for national identification systems. As of December 2007, Lyon and Bennett (2008: 6-8) estimate that 43 countries have a national biometric identification program; these range from Argentina's mandatory system that captures just the right thumbprint to Mexico's voluntary system of fingerprinting. A number of countries have proposed biometric identification regimes, while others – like Greece – have removed

fingerprinting from their identity cards. In others – such as the UK, Australia, Japan, and France – biometric identification systems have been defeated by vociferous opposition.

As Martin *et al.* (2009) detail, the resistance arises from numerous sources, beyond simply those to be biometrically identified, including commercial entities, trade unions, civil society, international actors, and even artists (see also Marx 2003). The reasons for resisting biometric identification have been manifold (see Pato and Millett 2010). Some technologists are quick to point out the fallibility of the systems (including high rates of failures to enroll people or accurately match within the database). Others worry about the expansion of government surveillance and the reduction of individual autonomy. This is often compounded by uncertainty about the security or secondary uses of data collected for a specific purpose. The notion of consent is often troubled, with populations least able to find alternatives being typical subjects of biometric identification (e.g. prisoners, welfare recipients, and refugees). This leads to worries about discrimination, both in what types of people do or do not get included in biometric databases, as well as the suspicion of those excluded. Finally, the costs of biometric identification have often been too high to justify their benefits. Resistance to biometric identification is particularly motivated by the concern that biometrics exacerbate the risks due to their uniqueness: by capturing immutable, life-long characteristics like fingerprints, the surveillance infrastructure is considerably more durable, raising questions about the ability to contain security breaches or data creep (see also Ball 2005; Martin and Whitley 2013).

Biometric identification is a component of a larger administrative and technological regime that raises complex questions about social and political relations. As such, biometric identification has been met with varying levels of support and resistance. Bennett and Lyon (2008: 10-17) identify a variety of factors influencing the common drivers and social acceptability of such schemes. At a basic level, the availability of technical expertise (either domestic or imported) is essential. Certain policy issues (notably national security or immigration concerns, but also social welfare schemes) tend to drive government adoption of biometric identification. The authors also suggest that aspects of a political culture (such as higher levels of trust in the state) and historical legacies (such as familiarity with identification technology or collective memory of trauma) have been relevant in many cases. Finally, Lyon and Bennett suggest that a state's institutional

structure will influence how registration and identification are "defined, debated, and resolved", with strong, centralized states – as well as those "permeable to private sector influence" – perhaps proving more amenable to more significant identification regimes.

As explained in the subsequent chapters, these factors have, to varying degrees, influenced the centrality of biometric identification within post-apartheid South African social security. However, before turning to those specifics, this chapter next introduces the South African history of state registration before turning to the post-apartheid politics of welfare.

Biometric Identification in South African History

South Africa's infamous history of state registration has its roots in the 18th century Cape Colony but its structure and intensity has waxed and waned through the decades. Pass laws, which varied between provinces and towns, were a means of controlling laborers. Commonly, these written records detailed the employer, laborer, and terms of employment (most crucially its duration). In practice, these served to tie underpaid workers to a particular location, curtailing mobility. With the discovery of minerals in the late 19th century, pass laws were revived and extended to prevent black farm workers from flocking to the mines. As a method of labor control, passes did not apply to women prior to the 1890s, and only unevenly after that (Wells 1993: 4-6).

At the start of the 20th century, fingerprinting began to be incorporated in the pass systems, most prominently in the case of the Asian population. Mohandas Gandhi, who spent more than two decades in South Africa as a lawyer, was a major organizer of popular resistance to these early biometric registration schemes (Power 1969; Bhana and Vahed 2005). In addition to opposing segregation, part of the resistance from Gandhi and other Indians stemmed from the particularities of the biometric plan: the proposed law called for capturing ten fingerprints, an act that was seen as degrading and tinged with an accusation of criminality. At the time, in the contexts in which Gandhi knew fingerprinting, ten fingers were only used to identify criminals. Instead, Gandhi was willing to accede, a single *thumb*print was all that was needed for legitimate administration of the Indian population who, as honest citizens, were willing to be identified. "Gandhi insisted that, because the Indian traders in the Transvaal wanted to be recognized, ten-

print finger registration was unnecessarily degrading and wasteful" (Breckenridge 2011: 340).

The government proponents, though, were able to convince Gandhi that full fingerprinting was necessary through a discursive appeal to science: Smuts's government argued that "statistical certainty" required the full fingerprinting effort (Breckenridge 2011: 340). It was this appeal to the science of classification that eventually swayed Gandhi in 1908, and he began exhorting his audience to accept fingerprinting, with "the scientific, modernizing character of fingerprinting provid[ing] the core of his new advocacy" (343). Ultimately, however, Gandhi was disillusioned in his compact with the government, but his resulting last-ditch effort to resist again the biometric scheme failed in the face of "a barrage of penalties and punishments" (344) from the state.

As the industrial sector grew around the time of the First World War and after, so too did its political desire for a more fluid labor market. This conflict with the mining and agricultural sectors led to years of indeterminacy where strict pass laws were less effectively enforced. During the Second World War, the pass laws were even "experimentally suspended" (Wells 1993: 8), a change that is often attributed to the demands of the industrial sector, the reduced internal policing capacity during the war, and the fear of African disloyalty at a vulnerable moment. Shear (2013) argues that the latter is the most likely, and that the subsequent return to pass laws was the result of the National Party's gradual mobilization of white hostility to black urbanization.

The lull in pass enforcement changed with the election of the apartheid regime that began applying and enforcing pass requirements far more vigorously. In the 1950s and 1960s, Hendrik Verwoerd's system issued to every African adult an identity document that served as the everyday manifestation of an enormous, centralized bureaucracy that captured personal information (Evans 1997). As Posel (2001) has shown, the national population register was the regime's cornerstone but the repressive infrastructure "hinged on the efficacy of the fingerprinting systems" (Breckenridge 2005a: 86).

Then (as now) fingerprinting was chosen because it was felt to be the only reliable way of identifying a population that was often illiterate, mobile, and had reason to misrepresent itself. The capabilities of biometric identification, though, were greatly

overestimated. Although the passbooks were instrumental in a "dramatic rise in prosecutions over the period 1960-68" (Savage 1986), within another decade, it would be clear that the system was incapable of reliably monitoring the African population. The logic of the passbooks was simply too contradictory: on the one hand, the system had to facilitate inclusion of the labor needed by the white population, but it was also used to exclude most Africans from everywhere but the "Bantustans that [were] already grossly overcrowded and poverty stricken" (Savage 1986: 205). The incentive to subvert the system was enormous, overwhelming the centralized bureaucracy (Breckenridge 2005a). Even an effort to upgrade the technical means of surveillance proved infeasible (Edwards and Hecht 2010; cf. Beniger 1986). By the 1980s, even President P.W. Botha admitted that "On the question of influx control, I can only say it is outdated and too costly" (quoted in Savage 1986: 182).

As the political transition emerged, while a national system of identity documents and databases did not disappear, the capricious and violent use of them by the state did. With this political change, the incentive for identification changed. For the bureaucratic and policy elite, the task of identifying individuals was now directed at a process of democratic state-building and, particularly, poverty alleviating redistribution. For the citizens, in turn, state registration and identification was less the blunt tool of a coercive state and more an instrument of a "caring society" (see Friedman 1999; cf. Sevenhuijsen *et al.* 2003) engaged in a significant redistributive project.[1] However, given the administrative and technical weaknesses of the database, this process of conversion has been anything but straightforward, necessitating significant institutional and technological reform (see, respectively, chapters three and five).

The Politics of Welfare in South Africa

The current political context is essential to understanding the role of biometric identification in South Africa's social protection programs. These programs have deep roots, with formal welfare beginning in the 1920s as an effort to curtail poverty within the white population (Seekings 2007). It expanded in the decades that followed, including to the African, Asian, and coloured populations (though service remained best for the white

[1] It would be a mistake to ignore the elements of identification which remain coercive, including the use of biometric identification in policing, immigration control and elsewhere.

population). By the end of apartheid, the pillars of the system were a universal old age pension, support for poor parents and the disabled, and a small contributory unemployment scheme (Seekings 2002). This inheritance serves as a key component of the democratic government's poverty alleviation strategy, with much of the structure continuing today. The most significant programmatic change has been the replacement of the State Maintenance Grant with the Child Support Grant in 1998. The CSG was a smaller monthly grant of R100 at first, but designed to be much more broadly accessible than the SMG whose administrative structure limited its adoption (Lund 2008). The grants have grown from about 2 to 3.5 percent of GDP in the first twelve years after apartheid, with more than 12 million grants paid monthly in 2007 (Seekings 2008b), a figure that today stands closer to 16 million due to continued parametric expansion (e.g. expanding the qualifying age for children).

The social grants are widely viewed as an effective means of poverty alleviation in the post-apartheid era, central to the promises of the democratic era. Despite this growth, the politics of welfare in democratic South Africa are, to say the least, complicated. Almost every stakeholder - from trade unions and industry to government ministries and civil society - find themselves on a knife's edge, negotiating between contradictory and evolving positions. As such, there has been nothing given about the expansion of the programs in the post-apartheid era; indeed the grants have faced considerable opposition, with the value of an individual grant even declining in real terms from 1996 to 2001 (Seekings and Matisonn 2012).

As Everatt (2008: 301) notes, it is difficult to discuss this complexity without "broad brush strokes," but he delineates between social grant proponents (usually represented by "COSATU and the SACP, the churches, and some elements of civil society") and opponents ("including senior government officials, business and much of the media [who emphasize] 'the dignity of work'" as the preeminent poverty alleviation intervention).

Although they are marked by heterogeneity, within these camps the proponents of social grant expansion tend to be motivated by apartheid's legacy of poverty and

inequality.[2] They draw on a discourse of a 'caring society' and the protections of the Constitution. While it is largely an effort of the left, there is an interesting strand of support that emanates from a belief that grants permit an escape from a 'poverty trap,' allowing the poor to enter the market as entrepreneurial risk-takers (Ferguson 2009).[3] That the substantial expansion of social grant programs was even thinkable owed, in large part, to the fact that it was institutionalized long before the 1990s (Seekings 2002). It is the joint inheritance of poverty and institutionalized welfare that has positioned South African proponents not only to defend welfare in the face of opposition, but to campaign actively for its expansion, an exceptional status that is beginning to be noticed more broadly as a challenge to the dominant narrative about neoliberalism (e.g. Hilgers 2012; Collier 2012; Ferguson 2009; Ferguson 2011).

On the other side is a vocal opposition to the scope of the social grants. Although they often speak of similar poverty and inequality alleviation imperatives, opponents of welfare tend to be prompted by a very different set of commitments, a set of interlinked ideologies and discourses that Barchiesi (2011: 94) says are extreme enough to constitute a Foucauldian *episteme*. There are at least three foundational commitments, the first of which is the centrality of wage labor. Employment is seen as the pathway out of poverty and largely the responsibility of the individual. This informs a belief – echoed in high-level ANC documents (e.g. ANC 2007) and elsewhere – that social protection or other 'government handouts' create 'dependency.' Barchiesi (2011: 98) asserts that, "Virulent opposition to welfare "dependency" has become a distinctive characteristic of the ANC government." This discourse extends beyond government, as well, pervading society, where rumours and theories about recipients using the money to buy drugs or avoid work are prevalent. It is also proposed that grants create perverse incentives, encouraging teenage pregnancies and non-treatment of HIV/AIDS (see also Everatt 2008; Meth 2004). These beliefs are all the more troubling to adherents of this discourse because of worries about the affordability of the grants. Post-apartheid South Africa has placed

[2] In the case of COSATU, whose members stand to gain through the defense of high wages, a relaxed need to support poor dependents, and an expansion of state administration, there is also a measure of self-interest (Seekings & Matisonn 2003)

[3] This anti-paternalism (that posits that the poor know best how to spend their money) has also militated against the type of intrusive and ongoing surveillance that characterizes the American system (see Gilliom 2001).

considerable emphasis on being viewed positively by global financial markets, and profligate spending on welfare would trouble this image. As such, the ANC has offered a vision of "developmental social welfare" (RSA 1997) where grants are framed as a path to sustained economic activity.

These opposing poles have conflicted during the post-apartheid period, with policy often being pulled in contradictory directions as a result. The ANC's 1994 election manifesto, the Reconstruction and Development Programme, included a commitment to "attacking poverty and deprivation" but it was ambivalent on social grants, noting that "Although a much stronger welfare system is needed to support all the vulnerable, the old, the disabled and the sick who currently live in poverty, a system of "handouts" for the unemployed should be avoided" (ANC 1994). The different positions led to a lack of clarity in foundational documents. The Constitutional definition of "appropriate social assistance" for those unable to support themselves or dependents was vague, as was the government's 1997 White Paper for Social Welfare which set out the concept of "developmental welfare" which favored of linking welfare to employment, rather than 'handouts' (RSA 1997).

Beginning in the late 1990s, the RDP was supplanted by the conservative macroeconomic approach of the Growth, Employment and Redistribution (GEAR) strategy. GEAR was eventually condemned for both its policies and the centralized means through which it was designed and implemented. It was closely associated with (then vice-president) Thabo Mbeki whose technocratic approach to governance consolidated considerable authority in the presidency. The first major social policy implemented during this era was the Child Support Grant proposed by the Lund Committee in 1996, which was also condemned for limited consultation and not challenging the fiscal conservatism of the government (Johnson 2000).

In this *fin de siècle* setting, as promises of democracy were frustratingly slow to emerge, the reaction within the social security sector was broad. A variety of civil society organizations prominently resisted the changes, including through the Speak Out on Poverty campaign which held hearings and marches to emphasize the lack of progress – perhaps even regress – since the end of apartheid. A government appointed Committee of Inquiry into a Comprehensive System of Social Security for South Africa (the 'Taylor

Committee') joined them in calling for improvements to the social safety net which many had found to have "a very loose weave" (Samson 2002). Remarkably, this included a proposed universal basic income grant of R100 monthly, which they recommended be phased-in because "there is a need to first put in place appropriate capacity and institutional arrangements to ensure effective implementation" (RSA 2002).

Ideologically, key policymakers including Thabo Mbeki and Trevor Manuel, who controlled the purse strings for much of the period under discussion, have expressed skepticism about the expansion of social grants, especially to all residents. Mbeki spoke of the need "to cultivate the spirit of self-reliance among our people" (quoted in Marais 2011: 252). Manuel (2007) has repeatedly stressed, as he did at a World Economic Forum event, that "The human condition does not allow people to live off handouts." After much discussion around the radical expansion of social grants to include everyone, the government spokesman finally summed up the high-level opposition to the basic income grant by pointing to a different "philosophy" that denigrated "handouts" in favor of the "the opportunity, dignity and the rewards of work" (cited in Makino 2004).

This ideological discord is supported (perhaps even reflected) in worries about the administrative practicality of expanding welfare. Already in the early 1990s, the grants were the subject of extensive exploitation by government bureaucrats and members of the public. The prevalence of such activity is notoriously difficult to ascertain reliably, but there is general consensus that corruption and fraud are major problems, perhaps even "the greatest problem" (FinMark 2012a) facing the social grant program. Frequent reports of grant fraud in the media have been corroborated by major government and civil society reports (e.g. Reddy and Sokomani 2008). The problem has led to multiple failed audits of the administrating agencies and failures of service delivery, such as a dramatic example in the Eastern Cape when numerous grants went unpaid and the government had to take-over from its contractor.

These troubles influence policymaking. For example, the welfare minister Zola Skweyiya, who was broadly sympathetic to expanding the programs, claimed "that financing a BIG is less of an obstacle than administering it":

> "The system is not there, we need to create the system. I am not talking about the money part of it all, but the ability to be able to manage, that is not a small thing...We have problems now distributing pensions to the

> elderly only and children. The system is not up to date at the present moment. Can you imagine if we have to give this (Basic Income Grant) to almost everybody? Will it ever be able to administer and manage that within two months? Do we have a civil service that is able to do that?" (quoted in Seekings and Matisonn 2003).

The South African Social Security Agency was largely established in response to these concerns, to eliminate loopholes and inequity by unifying delivery procedures. Furthermore, the widespread perceptions that the grants are the subject of crookedness and administrative incompetence have been a crucial motivating factor in the adoption of biometric identification. As I will trace in the next two chapters, these problems that enliven the political disputes about welfare are understood to be the result of a lack of standards and objectivity. Biometric identification has been conceived as a means of instituting impersonal and accurate means of delivering grants, free from human fraud or error. It is to the ascendance of these durable worldviews, and their material performance, that the next chapters turn.

III. The Will to Standardize: Discourse and Institutional Reform

ABSTRACT: This chapter traces the emergence of a particularly productive and durable discourse about the social grants. During the 1990s, unifying the fragmented bureaucracy inherited from the previous regime became a pressing concern. The motivation for doing so arose from the belief that the social security system was 'in crisis' due to administrative weakness that failed to deliver grants and created the opportunity for widespread illicit access. Elite discourse – typified by government commissions and reflected in the media, Parliament, and elsewhere – has brought attention to these issues and successfully advocated for increased standardization through institutional centralization.

Introduction

As apartheid came to a close, some observers worried that the country would fracture as conflicts between Inkatha, the ANC, and Afrikaner nationalists reached a violent crescendo. While the negotiated settlement and subsequent unifying effort of the Mandela era have been widely discussed, a more insidious danger lurked in the governing structure of post-apartheid South Africa. The National Party's ideology of separate development had led to the creation of quasi-independent 'homelands' in the 1970s. To a significant degree, these entities lacked competent bureaucracies and were riddled with corruption. Furthermore, the provinces displayed a high degree of variability in their processes, technologies, and adeptness. As such, the post-apartheid state faced significant challenges to even basic governance.[4] It was, write Seekings and Matisonn (2003), "organizational chaos."

One of the areas in which this was most evident was that of population registries. Despite the panoptic ambitions of the apartheid government, the basic task of registration was split between more than "a dozen discrete yet overlapping and duplicated population registers" (Breckenridge 2005b: 276). The story was similar within welfare, where the sector had been designated an "own affair" in 1984 for the respective racial houses of the tricameral parliament. The peculiar result was "the creation of costly and duplicated administrative structures, with 13 'national' and 4 provincial head offices, plus another 3

[4] For one analysis of South African bureaucracy, see Picard (2005).

coordinating departments" (Lund 2008: 10-11). None of the ten 'self-governing' or 'independent' entities were geographically whole, but had instead been spatially splintered (Lund 1996: 123). In the confusion of the 1980s, some of these administrative entities moved forward with distinct welfare reform efforts while, at the same time, the Pretoria government took steps toward harmonization.

At the time, it was not obvious how the new South Africa should administer the welfare sector it had adopted and would subsequently expand. In the 1997 White Paper on Social Welfare (RSA 1997) the new government defined a policy approach it deemed "developmental welfare" which sought to reduce inequality and discrimination while linking welfare to opportunities for wage income. However, the on-the-ground reality began to emerge as a significant impediment to this vision. As the government began in earnest to address the situation, it convened a series of national commissions of inquiry. As Ashforth (1990) has shown, this form of official knowledge has influentially shaped the politics of South Africa, and it has continued in the post-apartheid era (even if the results differ from the pre-1994 era that is his focus). Beginning with the 1992 Mouton Committee of Investigation into a Retirement Provision System in South Africa, no less than four more major national commissions were convened between 1996 and 2000.[5]

Reflecting the politics of welfare, these were primarily concerned with improving the delivery of social protection while reducing fraud and corruption in the system. Although alternatives (such as significant delegation to the provinces) were at least considered, these initiatives rather quickly coalesced around an understanding of the problem as fragmentation that impeded service delivery and created the opportunity for mischief. Increased uniformity required a process of standardization that, with time, was enacted through the administrative centralization of social protection. In order to illuminate the will to standardize that animates the biometric imaginary this chapter traces the emergence of the standardization discourse. As we shall see, the issue of identifying the recipients was at the forefront of these processes.

[5] These were the 1996 Chikane Committee for the Restructuring of Social Security, the 1996 Lund Committee on Child and Family Support, the 1998 Public Service Commission Investigation into Social Security Services, and the 2002 Taylor Committee on Comprehensive Social Security for South Africa.

Chikane Committee

In early 1996, Frank Chikane, a special advisor to vice-president Thabo Mbeki, was appointed to lead the *Committee for Restructuring of Social Security* which was tasked with investigating integration and improvements of the public welfare system. The report is motivated by the disarray of governance in the 1990s and opens by stating that "the delivery of social security is in crisis" (CRSS 1996: 5). Fragmentation into fourteen separate systems, each with particular management, rules, and procedures, created the opportunity for loopholes "which could easily be exploited by unscrupulous officials and members of the public." Of the R11.5 billion paid out to 2.8 million beneficiaries in 1995-1996, it is estimated that about ten percent is lost to fraud and corruption. As it reports, "fraud and corruption are rampant as a consequence of a lack of systems, proper internal controls, unduly complex legislation and department rules governing internal disciplinary proceedings." This malfeasance is said to "represent the greatest threat to the programme" of welfare, requiring a "complete re-engineering" (23). While it mentioned the possibility that some tasks could be decentralized, this potential was not the subject of further detail; instead, the Committee focused on unifying and standardizing a national system in which, as a result, it is believed that the detection of fraud would be easier. The report also emphasized the need for "linkages with other systems be established such as the Home Affairs, Population Registration System, other pension insurance funds, South African Police Services (SAPS), Deeds Registry, the provincial financial control systems, and post offices and banks" (6).[6] Specific recommendations for the social security system are offered, including a nationally organized system, a national human resources strategy, a standardized and integrated management system, a "national transverse information system," and regulatory simplifications. Thus, standardization was a task both within social security and between other government programs.

The Chikane Committee was particularly concerned about the means of identifying beneficiaries. Recall that at the end of apartheid, there existed various and incomplete population registers; in many cases, individuals lacked identification documents, especially those former citizens of the 'independent' territories. The will to standardize deeply influenced how the Committee approached the issue of identification,

[6] This interoperability between previously distinct databases is indicative of Garfinkel's (2000) thesis in *Database Nation: The Death of Privacy in the 21st Century.*

particularly biometrics: "The benefits of a biometric system can only be reaped if there is a uniform system for the country as a whole used by the Social Welfare and Home Affairs departments" (44). They were deeply concerned that the Eastern Cape, Gauteng, Northern Province, KwaZulu Natal and Mpumalanga were in various stages of issuing biometric contracts, enrolling beneficiaries, and using the different proprietary systems for delivery. They argued that a uniform system would allow duplicates to be identified, such as individuals receiving grants in more than one province. "Without a national fingerprint data-base [*sic*] this gives no assurance that the person is who they claim to be." That is, the Committee's opposition to biometrics was not in principle – as some privacy advocates would be – but rather in practice. It was concerned with the difficulty of a creating a functioning system, noting that inaccuracies in the database would be difficult to ferret out, and the amalgamation of different systems may compound the data integrity problem. It noted that costs were likely to come down, so that rushed approaches would undermine the goal of administrative affordability.

Furthermore, given the evidence available about the effectiveness of biometric identification, the Chikane Committee expressed skepticism about their promised benefits with regard to fraud and corruption. As early as 1993, welfare administrators in the Cape Province had tested biometric identification to root out individuals receiving multiple grants; yet, of the 190,000 recipients enrolled, the biometric system only highlighted 1,040 potential duplicates (those fingerprints deemed close enough to warrant suspicion). When they further investigated 254 of those potential 'double dippers,' only 32 were found to be actual duplicates—the rest were simply similar fingerprints. The problem was compounded by the cost of biometric identification: in the provinces where biometric identification was being used, the cost was reportedly between R15 and R20 per month per beneficiary, with "the biometric features costing at least half of that total." In contrast, the non-biometric identification system in Mpumalanga cost R6.50. In the Western Cape, the biometric system was said to cost R1.9 million per month, compared to the R16,500 per month savings from identifying 32 duplicates.[7] According to the Committee, "Biometric testing would have to identify and stop fraudulent payment in excess of 2

[7] The general lack of objective cost and benefit analysis for biometrics has continued to this day (and been noted globally by scholars [e.g. Magnet 2011; Gelb and Clark 2013]), even as the technology is more widely adopted.

percent of all claims to justify this high cost. Preliminary evidence in the Western Cape suggests that only 0.015 percent of applications were found to be duplicates." Given the lack of interoperability between the provincial identification systems, the Committee matter-of-factly noted "a photograph could also fulfill" the goal of making sure a recipient is who they say they are. As they conclude, "The [Committee] is gravely concerned that the outsourcing of biometric identification is premature, costly and will not necessarily eliminate fraud."

This concern was exacerbated by indications of corruption in the tendering process. As early as 1992, the Cape Provincial Administration (predominantly responsible for what is today the Western, Eastern and Northern Cape provinces) had been approached by an entrepreneurial firm offering "a solution for the fraud that was rampant with welfare payments" and had "received considerable coverage in the press" (Cameron and Brand 2006: 57). This firm, 3D-ID, was able to convince the CPA that an automated fingerprint technology it had exclusively imported from California offered a means to solve this problem. 3D-ID not only demonstrated their technology to the CPA officials but even assisted "with the compilation of the tender documents" (Hartzenberg 1999) which required that "[a]ll recipients of social pensions and other welfare grants must be enrolled on software capable of registering fingerprints and such software must be able to positively identify and verify recipients" (quoted in Cameron and Brand 2006: 31). Thus, it came as quite a surprise when a previously unknown company, Nisec, was awarded the contract in 1994—a development that cast the suspicion reflected in the Chikane Committee (CRSS 1996: 37). It was only years later, however, that a sufficient investigation by the Office for Serious Economic Offenses (OSEO) demonstrated that two government officials had accepted lucrative positions in the Nisec firm in return for awarding them the tender. The corruption would eventually ensnarl the NP's senior welfare official, Abe Williams (who went to jail in 2000 after the OSEO investigation uncovered his unscrupulous dealings) and lead to the cancellation of the Nisec contract, unable as it was to deliver grants reliably.

The Investigation into the Delivery of Social Security Services

In the years following the Chikane Committee the depiction of the problem and solution solidified into a relatively consensual view that (a) a crisis existed and (b) standardization

was the necessary response. The archive yields few dissenting voices, especially among the representations of the elite. The 1997 White Paper on Social Welfare declared "social assistance programmes will be made more efficient through the rationalization of the system" (RSA 1997: 19). Fragmentation had, it asserted, led to "gross inefficiencies" and "loopholes… which could be exploited by officials and the public" (51). The "manual system" for accounting and "the lack of an integrated national ID system" were specifically cited as problems. "A uniform social grants system", it reasoned, required "the rationalization of computer systems and the development of a National Social Grants Register and automated fingerprint technology" (54). To do so, it called for a national re-registration process for grant beneficiaries, in order to produce an accurate database.

The sense of calamity was exacerbated by a prominent 1997 revelation from the *Mail & Guardian* newspaper that estimated R1 billion was being lost to pension fraud from an annual budget of R14.3 billion (see Reddy and Sokomani 2008: 19). A major report in the following year from a government watchdog, the Public Service Commission (PSC), detailed the state of service delivery and proposed a variety of institutional and technical reforms. The PSC's *Investigation into the Delivery of Social Security Services* argued, like its predecessors, that the troubles of the social security program were the result of a lack of standards, in the data captured from applicants, the complexity of regulations, the "varying interpretations of eligibility," and the methods of payment. It recommended the "development of a national policy to standardise" paperwork, bureaucratic procedures, and identity documents (PSC 1998: ix).

It also attended to the techniques of identification, noting that provinces had adopted their own approach to fingerprinting applicants. These differed "from that utilized by the Department of Home Affairs, which is responsible for verifying fingerprints" so the PSC (1998: 29) recommended the Home Affairs standard prevail. Even more, officials were untrained in capturing biometrics, resulting in poor quality prints that would need to be manually checked because Home Affairs had not computerized their database. In response, they recommended that identification forms should ideally be computerized, but at the very least printed forms should be the same. When the report received additional attention at a series of Parliamentary hearings in February and March 1998, many of the findings and arguments were affirmed. For

example, members of the Executive Councils from Free State and the Eastern Cape complained of the identification troubles facing their provinces: in Free State, it was alleged that citizens from Lesotho claimed South African pensions; in the Eastern Cape, former Transkei and Ciskei citizens lacked the new ID books while others had both the new ID books and older identity documents that were still accepted, thus able to benefit twice (Saloojee 1998).

The PSC's report reasoned through the institutional structures most likely able to deliver the social grants in a manner keeping with the various demands of the democratic era. A decentralized model where "each province develops its own social security service" was rejected due to limited accountability and the recognition that "all citizens of South Africa should be treated equally" (PSC 1998: 12). A centralized structure, they noted, would be most agreeable in terms of equity, but they recognized that the goal of equity may need to be balanced against efficiency. The report noted that "the enhancement of efficiency is not only achieved through mechanically designing every transaction of the service and standardizing its structures and processes, but also through empowering people on the service delivery level" (13). As such, it recommended what it called a "hybrid" approach, where policies, regulations, norms, standards, and technical systems are set nationally but provincial departments are responsible for the actual delivery. (In practice, though, this was a significant shift from the provincial approach of the day.)

Standardization through Institutional Centralization

These institutional recommendations received an important boost in early 2002 from the Report of the Committee of Inquiry into a Comprehensive System of Social Security for South Africa (led by Viviene Taylor) which recommended the establishment of the South African Social Security Agency, an entity introduced in the 2004 South African Social Security Agency Act (Act no.9 of 2004). Initial steps had begun earlier within the government, but this was high-profile support that seemed particularly necessary given a spate of high-profile failures on the part of provincial government to deliver grants reliably. Provinces were often incapable of basic administrative activity, with the Eastern Cape receiving particular attention. As Overy and Zuma (2004) summarize, "Between 1994 and 2003, the Eastern Cape provincial government earned itself a reputation for sustained service delivery failure and the weak management of public resources. The

national and provincial media reported widely on instances of maladministration and corruption…" This sensationally came to the fore when the Eastern Cape government had "to suspend social security payments after it had overspent its annual pension budget by 2.4 billion rand barely halfway through the fiscal year" (Dollery and Snowball 2003: 22).

The goal of SASSA is to serve as "the sole agency that will ensure the efficient and effective management, administration, and payment of social assistance" (RSA 2002). As Selwyn Jehoma (2003a), the head of grants for the Department of Social Development, told Parliament in February 2003, in addition to providing clear accountability, integrating social security within a national agency would permit "standardization and uniform business processes" which would "reduce costs of service delivery." Further, "[p]ractices of double dipping into funds would also not be possible with an Agency as the institution would have a better grip on social services." Social Development Minister Skewyiya reiterated this, saying that "financial leaks had necessitated the centralization of control and payment of grants, leading to the formation of a social security agency that would do the job" (Radebe 2006). The creation of SASSA ended the assignment of grant administration to the provinces, a practice instituted by Presidential Proclamation No. R.7 of 1996 (Mandela 1996) that amended the 1992 Social Assistance Act. The new legislation directed SASSA to administer grants and populate a national database for all social assistance beneficiaries. As Mr. Jehoma (2003b) told Parliament a few months later, this was necessary because "it was not possible to give all nine provinces a set of guidelines and expect them to interpret and implement them in the same way, mainly because they had such different working realities to contend with. At present the norms and standards were interpreted differently and a nationally guided process was needed." While few in Parliament advocated otherwise, at least some civil society organizations were skeptical of the centralization; the Black Sash worried that SASSA would merely "replicate the existing dysfunctions of the system" and that "the new system overlooks the political, social and technological nuances in each province" (Robinson 2005). Their protest, though, was ineffectual.

SASSA, then, has been tasked with homogenizing the policy and implementation of grants. While the fragmentation was particularly troubling for the manner in which it

facilitated illicit behavior, it was also at odds with the egalitarian ethos of the newly democratic nation. For instance, not only did quality of service differ wildly, fundamental definitions of, say, what counted as disability meant that applicants may qualify for a grant in one province, but not if they move to another (Reddy and Sokomani 2008). In the context of hard-fought equality, the grants, then, became a means of aspiring to and establishing uniformity of citizenship (cf. Peebles 2008; Ferguson 2002).[8] Some of the concrete ways in which this has been done will be discussed in chapter five.

Conclusion

As Busch (2011: 33) notes, "the emergence of standards is almost invariably the result of conflict or disagreement." In the case of South Africa, the situation inherited from the apartheid government made basic governance supremely difficult, and the Chikane Committee was one of the earliest examples of the will to standardize processes, institutions, and technologies to overcome such conflict and disagreement. In the following years, the belief that grants were in crisis due to a lack of standards that created delivery problems and fraudulent access widened into conventional wisdom. Subsequently, a response that merged institutional and technological innovation was enacted.

Importantly, this turned out to be a process of centralization, though this history also reveals the paths not taken: the PSC's 1998 report considers provincial management, but ultimately rejects it as at odds with the goal of equity. Not all standards require centralization (language, for one, is structured in a more distributive fashion [Grewal 2008]), but in this case, the keywords of the era – standardized, uniform, comprehensive, and integrated – proved convivial with institutional centralization.

Finally, this ethos of standardization has been particularly influential for the issue of identification.[9] As the Chikane Committee clearly elucidated, a national-level

[8] Further indicative of Ferguson's (2002) emphasis on the importance of space is that, in addition to the more technical means of standardizing information infrastructures, SASSA has invested significantly in overcoming and regularizing the *spatial* infrastructure of grants, such as through mounting ATMs on 4x4 trucks and issuing quality standards for the facilities that serve as monthly pay points.

[9] With the emphasis on standardization and centralization, it would be easy to see this effort in terms of James Scott's influential theory of state simplification and high-modernism; however, as is often ignored in invocations of his book, only when combined with an authoritarian state and prostrate civil society does high-modernist simplification become truly dangerous (Scott 1999: 5).

identification system is desirable for the potential to root our duplicates and ensure accuracy. Their pragmatic reasons for rejecting biometric welfare identification at the time – arising from a cost-benefit analysis and investigation into the technical capabilities – were motivated by the same concerns about effective service delivery and fraud that today result in the push for biometric identification. What has changed in the intervening years is exactly what the Committee advocated: national centralization and standardization have been enacted, meaning that the contradictions internal to the biometric imaginary have been considerably smoothed through the technopolitics of standardization. But before turning to that experience in chapter five, the next chapter introduces the second technopolitical motivator of the biometric imaginary: the pursuit of objectivity.

Given the anti-paternalistic stand of welfare administration in South Africa, and the 1994 transition, this is largely not a problem, though for some populations (such as refugees and other immigrants) it may remain so.

IV. The Pursuit of Objectivity: The Growth of Quantitative Evidence in Welfare Policymaking

ABSTRACT: This chapter turns to the second underlying dynamic of the biometric imaginary: the pursuit of objectivity. The pursuit of objectivity has been an effort to remove subjective and discretionary practices in favor of a rule-bound egalitarianism. As shown in the next chapter, this drive has influenced grant delivery, but it has also shaped the types of knowledge deemed legitimate. In order to demonstrate the broader importance of objectivity within post-apartheid social policy I discuss the rise of quantitative evidence within policymaking, showing how a profusion of statistical information was employed in the debates around the social grants.

Introduction

Closely related to the will to standardize has been a pursuit of objectivity. The democratic era has been premised on an end to the formalities of discrimination that characterized apartheid; this has meant a suspicion of arbitrary power and an openness to challenging authority. The Weberian affinity exhibited by liberal political orders for rule-bound structures has pervaded post-apartheid social protection. The next chapter argues that biometric identification is a result of this drive, but before doing so, this chapter illustrates the broader trend through a discussion of the types of knowledge used in social policymaking.

As Porter (1996) has argued, disputes within a liberal political order tend to gravitate toward 'objective' evidence because subjective claims are debased as personal, discretionary, and unrepresentative. As Daston and Galison (2007: 199) emphasize, 'objective' should not be defined as synonymous with 'truth,' but rather as the inverse of 'subjective.' Subjectivity, they say, is "the yin to objectivity's yang," meaning one cannot be defined but in absence of the other. This dynamic has swayed the types of evidence that is brought to bear on disputes around the social grants. Quantitative evidence – where impartial statistical rules reduce subjective bias – has grown in importance, and both government and civil society have increased their use of numerical testimony. The contested politics of social grants – particularly debates over affordability and effectiveness – have functioned in the democratic ethos to produce what Redfield (2013: 113) calls "motivated facts".

Newfound Facts

Critics on both the left and right have often presented "the quantitative mentality as morally indefensible, an obstacle to utopia" (Porter 1996: 73). The apartheid government's "mania for measurement" (Posel 2000: 116) would seem to support the view that quantification is an instrument of totalitarian power. As Posel writes, "aspirations of totalizing modes of racialised knowledge" led bureaucrats to engage in "rituals of often absurdly detailed quantitative measurements", yet, despite their role in enabling and perpetuating the apartheid regime, statistics often failed to provide reliable measures in practice and perhaps even undermined the state's capacity. On the ground, bureaucrats often ignored official figures, and the limited interests of the apartheid government meant that key data was ignored, such as poverty and inequality. For example, "between 1976 and 1994, official statistics excluded the TBVC countries – the former 'homelands' of Transkei, Bophuthatswana, Venda and Ciskei – on the ground that these were 'independent states', thus automatically excluding a large portion of the poor from official statistics" (May, Woolard, and Klasen 2000). Similarly, while there existed a vibrant private research sector and strong opinion polling by the state, "both were usually prevented by a range of political and technical factors from surveying the majority of black South Africans" (Mattes 2012: 175).

As with the drive for standardization in post-apartheid South Africa, the use of quantification in social policy was driven initially by efforts at administrative reform. The paucity of available information was a considerable handicap for policymakers in post-1994 South Africa, perhaps most a hindrance in social policy where the ANC government needed to address the stark realities of apartheid with haste. Cognizant of this knowledge gap, a variety of stakeholders from government and academia have contributed to a sea change, because of which the country is now "awash with statistics" (Seekings 2006: 1). Part of this was facilitated by the removal of obstructions that existed under the previous regime that was hostile to independent inquiry - a statistical permissiveness that accompanied other such collapses of authoritarian political systems in the 1990s (Mattes 2007: 113). In addition, the ANC partnered with the World Bank and the University of Cape Town to implement the 1993 Project for Statistics on Living Standards and Development (PSLSD). As Seekings (2006: 2) recounts, the official

statistical agency ("Stats SA") has since invested in a multitude of surveys, often with a priority on the conditions of the poor:

> "Besides collecting standard economic statistics and a five-yearly Population Census (in 1996 and 2001), Stats SA has conducted an annual household survey (the October Household Survey or OHS from 1994 to 1999, and the General Household Survey or GHS from 2002), a bi-annual Labour Force Survey (LFS, since 2000), and a five-yearly Income and Expenditure Survey (IES, in 1995, 2000 and 2005). Unlike its counterparts in some other countries, Stats SA does an excellent job in putting its data into the public domain. Universities as well as the parastatal Human Sciences Research Council (HSRC) have also undertaken many cross-sectional and panel surveys… Most recently, the Presidency has commissioned a National Income Dynamics Study, which is to be a household panel study."

In other cases, the enumeration was more purposeful. As Pundy Pillay, formerly head of Policy Co-ordination and Advisory Services in the Presidency, relates, in the post-apartheid era "one of the obstacles to setting up a national anti-poverty programme was the lack of information on the poor – who they are, where they live, why they are poor, and what would be the best way to overcome the twin problem of poverty and inequality" (Pillay 2000).

For example, the team behind the Child Support Grant needed to develop an early childhood development initiative that would reliably reach and positively impact low-income families, but the paucity of data hampered their efforts. The head of that effort recounts that "we did not know about the cost of universal provision; we also didn't know about what services were being delivered in the fragmented bits of states which had been created over the past forty years" (Lund 1996: 122). As such, they had to raise money for 17 baseline studies of welfare administration. As Lund (1996) relates, welfare reformers embarked upon the Herculean task to "count everything. Count people… Count facilities… Count equipment." Still, in some cases, they were reliant on information from the 1985 Carnegie Conference on Poverty – at that point more than ten years old (Lund 2008: 36). They also later found that their projections at the time were based on inaccurate demographic data, leading to erroneous consensus. Even as late as the mid-2000s, data quality was "far from perfect" (Budlender *et al.* 2008: 52), though the new sources of national statistics have considerably reduced this void.

Quantification as Defense

As the numerical lacuna began to fill by the turn of the century, quantitative evidence became a key modality of technopolitics around the social grants. While the 1990s were characterized by an initial flourishing of data collection due to the removal of authoritarian barriers and the need for data to inform novel policy arenas, these motivations have shifted as the grants have become the subject of the contested politics discussed in chapter two. Under fire from critics as profligate and unaffordable spending and the cause of dependency and perverse incentives, supporters of the grants have sought to defend them through the creation of a massive body of quantitative data about the effectiveness and affordability of the grants, even using it to justify a proposed radical expansion, in the form of the universal basic income grant.

Parts of the government have played an important role in cultivating and using numbers for social protection advocacy. One of the most notable ways in which this has been done is through a sizeable, sophisticated, and sustained commitment to impact assessment by the Department of Social Development (DSD) and others. In 2004, DSD released a report (Samson *et al.* 2004) on *The Social and Economic Impact of South Africa's Social Security System* which documented in nearly 300 pages the grants' "critical role in reducing poverty and promoting social development." It quantified evidence of impact on health, education, housing and other vital services. It further assessed the influence on labor market participation and productivity, as well as macroeconomic indicators such as savings, consumption, and aggregate demand. (It is not coincidental that these are the type of indicators privileged within the wider political discourse discussed above.)

Two years later, DSD released a massive, three-volume survey of grant beneficiaries (de Koker *et al.* 2006). The study was undertaken by a team of academics, consultants, and representatives of the parastatal Human Sciences Research Council and in nearly 700 pages reports on a wide variety of numerical indicators from just under 7,000 grant recipients.[10] More recently, in conjunction with SASSA and UNICEF, DSD

[10] There is a parallel history to be told of the tools and instruments through which such enormous data collection efforts are made possible. As Mattes (2007) notes, many of the approaches common in the West are untenable in South Africa; yet, ""knowing" requires a range of inscription techniques, transportation means, [and] calculation methods" (Miller and Rose 1990). In the case of this survey, laptops, GPS devices and the DSD's database were all necessary to facilitate the effort.

has managed two sophisticated assessments of the Child Support Grant (DSD, SASSA, and UNICEF 2011; DSD, SASSA, and UNICEF 2012). Both studies include an extended technical discussion of the methodology, emphasizing the thoroughness of their "gold standard" approach. Notably, one of these studies is actually a *qualitative* investigation, relying on focus groups and informant interviews, but here, too, the methodological rigor is discussed in considerable detail to emphasize the objectivity and representativeness of the work. They take care to show that the qualitative research is a precursor to the quantitative work that will "add depth and context", and is thus not a standalone piece. Finally, the Department of Social Development has also used quantitative evidence (to attempt) to settle specific debates, such as rumors of the CSG encouraging teenage pregnancy (e.g. Kesho Consulting & Business Solutions 2006).

Quantification as Advocacy

In addition to the use of quantification to defend social protection against those that would curtail it, an influential lobby has used statistical data collection and modeling to show the limitations of the program at various points in its history. Indeed, one of the primary motivations for the creation and use of quantitative data about poor South Africans has been advocacy for improvements to the social protection system, including its expansion. This has been enabled by the availability of official statistics and a political environment that allows challenges to the state and has a broad mandate to alleviate poverty and inequality. The strongest voices for the improvement of the social grants have been academically-inclined civil society organizations that have demonstrated through surveys, models, and other quantitative analysis various shortcomings of the implementation, though it has also been a tactic of government.

For example, the former Deputy Director of DSD reports that despite media attention and internal perceptions of widespread losses due to corruption in the social protection system, "it took a while for the National Treasury to believe that the Department was in fact experiencing such acute losses and they were convinced only after the department had presented concrete evidence in the form of two baselines studies in 2002 and 2003" (Jehoma, in Reddy and Sokomani 2008: 19). As with other types of auditing, accounting techniques (such as those necessary to convince the powerful

Treasury of implementation problems) are a "key fidelity technique in new strategies of government" (Rose 1999: 155).

Audits have also been carried out by critics of government effectiveness. In a different context, Hetherington (2011) has documented how grassroots organizations act as "guerilla auditors", enrolling larger discourses and techniques of accountability, transparency, and efficiency in their own agendas that may or may not align with those of the elite. A similar dynamic has unfolded in post-apartheid South Africa (though the 'guerillas' are relatively well-established and work less in an adversarial vein than the term may imply). A handful of entities have been involved with monitoring implementation and advocating for its improvement and expansion. Most relevant for the discussion of quantification as a technique of political advocacy are the Children's Institute at the University of Cape Town and the Economic and Policy Research Institute. The annual South African Child Gauge from the Children's Institute, for example, is a data-rich report that aims to "monitor government and civil society's progress towards realizing children's rights" through numerical indicators of access to social services (Hall, Woolard, and Smith 2012).

One of the earlier examples of statistical advocacy was an effort to ensure the grant amounts increased in line with inflation. As Budlender *et al.* (2008: 17) explain,

> "The amount of the CSG remained static for the first few years at R100 per month, even while the amount of other grants increased in line with inflation... In 2000, the Children's Institute and ACESS asked IDASA to investigate the extent to which the value of the grant decreased in real terms. These calculations showed that, by March 2000 already, the real value of the grant fell to R90.50 if measured in 1998 rands… These calculations were used by the Children's Institute, the Black Sash and ACESS to motivate for an increase in the CSG amount in several submissions in 2000 and 2001 to the Department of Social Development and the Taylor Committee. The first increase – to R110 per month – came into effect in July 2001. Since then, the amount has been increased each year to cover inflation, and sometimes a bit more."

A prominent example of how statistical evidence has been used to improve the implementation of the social protection is the growth of the Child Support Grant. Following its introduction in 1998, the grant had very limited take-up amongst eligible populations: after nine months, only 18,200 grants had been paid to an eligible

population in the millions (Lund 2008: 76). A major reason for the limited take-up of the CSG was the onerous administrative requirements for recipients, including a means test that proved counterproductive and exclusionary. Civil society organizations were vocal monitors of the slow take-up of the CSG, numerically demonstrating the barriers to access (e.g. Goldblatt *et al.* 2006; Leatt 2004; 2006; Rosa *et al.* 2005). The gap was significant and "there was a good deal of dissatisfaction among the public and in parts of the welfare department about the 'slow take-up rate'" (Lund 2008: 76). Eventually, the evidence-based advocacy succeeded in compelling new regulations that simplified procedures, as well as new investments in outreach. The result has been a steady growth in the adoption of the CSG.

A less successful example of guerilla auditors compelling the expansion of social protection was the now stagnant movement for a basic income grant. Although the BIG Coalition, too, offered sophisticated financial models to demonstrate the impact and affordability of a universal grant (e.g. Samson 2002), it lacked the resources of the Children's Institute and was arguing for a policy that faced far higher barriers to acceptance, especially within the small circle of policymakers around Thabo Mbeki and Trevor Manuel who espoused a different "philosophy" with regard to welfare (see Makino 2004). In practice, their numerical testimony was shelved in favor of quantitative analysts who argued for expanding the CSG instead of universalizing the grants (e.g. van der Berg and Bredenkamp 2002).

Conclusion

Despite its reputation for maniacal enumeration, the apartheid regime's gaze was directed at the specific issues in which it was interested (see Breckenridge 2012; cf. Graeber 2012). Only in the 1990s did more representative data begin to be generated. Much of this was prompted by the pressing concerns of the day, including poverty alleviation. In time, statistics have become enrolled in programs of advocacy and reform. The characteristics of quantitative evidence that make it attractive, including its representativeness, are particularly useful as a "technology of trust" (Porter 1996: 15), enabling coordination amongst strangers by constraining personal motivations through the rules of statistical sampling and analysis.

However, this does not, of course, mean the absence of interests and the end of discretion. The increase in quantification can actually be understood as a result of ongoing competition between interests; as Nikolas Rose (1999: 27) observes, "To govern, one could say, is to be condemned to seek an authority for one's authority." Those vulnerable due to opposition need to resort to quantifying their justifications. This is notable because while welfare is a constitutional right in South Africa, the defense has had to supersede an appeal to rights, adopting an instrumentalist approach, demonstrating developmental effectiveness and financial affordability of social grants. One would not expect such effort to be expended on objectively proving the impact of the grants if they were securely instituted and enjoyed near universal support (as do other rights, such as voting). This vulnerability and need to demonstrate objectivity has influenced more than just the forms of knowledge considered legitimate; it has also influenced the practice of grant delivery, the issue on which the next chapter focuses.

V. Standardization & Objectivity in the Adoption of Biometric Social Grant Identification

ABSTRACT: In addition to institutional structure and policymaking knowledge, standardization and objectivity have influenced social grant implementation. In particular, the persistence of illicit access to social grants and wayward bureaucratic action have been acknowledged as widespread problems by the bureaucratic and policy elite. Years of actual and attempted reform have culminated in the recent enrolment of 21 million grant beneficiaries in a biometric identification scheme that is explicitly framed as a means of automating processes and providing, in the words of SASSA (2011), "sameness of Beneficiary experience."

Introduction

Beginning in March 2012 and continuing for more than a year, millions of residents across the whole of South Africa queued at government offices in order to be re-registered in a new grant administration system. The crucial task – from the government's point of view – was capturing the biometric data of more than 21 million grant beneficiaries in a unified, central database. Elderly pensioners, the disabled, and caregivers of all ages with their children were photographed and their ten fingerprints were captured to be compared against the full database with the aim of removing any duplicate entries. A finger would also be the primary means of authenticating themselves for their monthly payment, and SASSA's contractor, Net1 CPS, was simultaneously busy expanding its network of fingerprint readers at third-party merchants who would serve as cash dispensers. In case a fingerprint scanner was unavailable, the grant recipients also provided a voice recording, to serve as a back-up means of verifying individuals at the time of payment.

In addition to bureaucratic structures and policy knowledge, fragmented and discretionary *practice* has come under scrutiny in post-apartheid welfare. This chapter presents the enormous technopolitical undertaking of 2012-2013 as the result of the same bureaucratic commitments to standardization and objectivity that have previously motivated administrative centralization and the growth of statistical reasoning. Two forms of subjective practice have continued to trouble the bureaucratic and policy elite: illicit access to grants and inappropriate or inept bureaucratic action. The use of

biometric identification has been conceived as a way to deliver grants impartially and uniformly, thus removing these practices. Although biometric technology has been used in grant delivery for at least two decades, the 2012 SASSA contract with Net1 CPS represents an unprecedented apogee for the sector: a nationally centralized database of 21 million grant beneficiaries who are to be biometrically identified for each payment.

Bedeviling Discretion: Fraud, Corruption & Bureaucratic Weakness

As introduced in chapter three, since the early 1990s the social grants have been depicted as 'in crisis' due to fraud and corruption. Historically, fraud has occurred in innumerable ways, from a 2008 case where just three people absconded with R22 million (including R1.8 million in false invoices to SASSA) (Zulu 2008), to more everyday acts of dissimulation, such as "looking poor" to pass the means test (Plagerson, Harpham, and Kielmann 2012; see also Versfeld 2012). In conversations with and public statements by SASSA officials, two practices are considered particularly widespread. First, there is concern about "phantom twins," the practice of registering fictional children in order to receive extra grants (one town reportedly had more than 100 twins in 2010 [Piloso 2010]). Secondly, there is a perception that deceased pensioners are not reported as dead, and relatives continue to collect money on their behalf. This form of fraud is often linked to the use of bank accounts, where money is traditionally deposited without verifying the recipient is alive.[11]

The illegal nature of the behavior makes estimating the extent of this problem quite difficult, but numerous entities have tried. The Chikane Committee estimated that 10 percent of the R11.5 billion budget had been lost. The next year, a report from the *Mail & Guardian* put the figure at R1 billion, a little less than 7 percent of a R14.3 billion budget. In 2006, the estimated losses were R1.4 billion, though substantial growth in the overall budget decreased it (relatively) to 2.5 percent (Reddy and Sokomani 2008). After its formation, SASSA partnered with the Special Investigating Unit, and between 2006 and March 2012 prosecuted 20,554 people for fraud and corruption; in all, 46,237 individuals have signed acknowledgements of debt totaling R304.9 million (Timm 2012).

These figures filter through Parliamentary hearings and budget speeches, news reports and opinion pieced, and the daily discussions in South African society. When the

[11] Interview with informant #6, a current government official (November 2012).

Democratic Alliance recently said in Parliament that the Department of Social Development was "crippled by managerial dysfunction" and facing "a management crisis" (Waters 2013) or the when Inkatha Freedom Party labeled "all SASSA offices across the country as… breeding grounds for corruption" (Inkatha 2013), their rhetoric was not particularly uncommon, nor was it merely opposition politicking. President Mbeki (2004), too, stridently spoke on the issue, saying "We must be impatient with those in the public service who see themselves as pen-pushers and guardians of rubber stamps, thieves intent on self-enrichment, bureaucrats who think they have a right to ignore the vision of Batho Pele ['People First'], who come to work as late as possible, work as little as possible and knock off early as possible." The leaders of DSD and SASSA are also quick to admit widespread fraud and corruption, with Minister Dlamini calling it "endemic" in the *SASSA 2011/2012 Annual Report*. The fraud and corruption which motivates much of this discourse is enormously difficult to assess accurately, but this ambiguity is rarely noted. Instead, it is the *perception* of crisis which is productive – based in, but not congruent, with facts. Roitman (2011) has called for an understanding of "the kinds of work the term crisis is or is not doing" and at least two of the results in this particular case are the removal of ambiguity and the investment in biometric identification.

Mbeki's statement above explicitly links fraud to the second form of discretionary activity to which biometrics are a response: the wayward behavior of middle- and low-level bureaucrats, especially those at the street-level. In many cases, the two are linked, but there is also a stand-alone concern that error and incompetence undermine the effectiveness and equality of service.

For pro-poor civil society organizations, bureaucrats have historically been found to be an impediment to the goal of improving legitimate access to the grants. This was most evident during the early years of the Child Support Grant when organizations like the Children's Institute and Black Sash (CI and BS 2000) highlighted "worrying… reports that applicants are often dissuaded from persisting with applications because of the attitude of welfare officials." "Access to social security," they noted, "is a constitutional right but applicants find the application process humiliating and degrading." As Simon Kimani (2000) of the National Association of Democratic Lawyers told Parliament, "some welfare officials are arrogant, rude and abusive." Outsourcing was deemed

particularly problematic by some due to the inability or unwillingness of private firms to provide quality services (see Overy & Zuma 2004).

The process of applying for grants has been called "torturous" because there "are no uniform standards, assessment guidelines and procedures, and some officials themselves do not know of or understand the procedures" (Guthrie 2002) and observers have demanded that "Welfare officials need to be educated to recognise that they are assisting in the realisation of a constitutional right and are not simply handing out charity" (CI and BS 2000; see also Rosa and Mpokotho 2006). The problems run the gamut from the meaningful but mundane (demanding extraneous documents or evidence beyond the formal requirements [Budlender *et al.* 2006]) to the corrupt (security guards at pay points demanding bribes [Williams 2012]) to the lurid (such as the case of a bureaucrat offering grants in exchange for underage sex [Mboyisa 2009]). The prevalence of this behavior has been found to create fear amongst grant recipients of trusting SASSA officials (DSD, SASSA, and UNICEF 2011). As Francie Lund and colleagues (2009) note, "administrative discretion appears to be subverting the aim of the broader social policy." They particularly note that policies such as Batho Pele and laws like the Administrative Justice Act (which requires that "organs of state may not act capriciously and arbitrarily") are not effective at managing bureaucratic behavior.

The problems have been exacerbated by the work environment. Offices have often been poorly maintained and lacking key infrastructure such as reliable electricity or connectivity. In one dramatic example, the head of SASSA related the tale of a snake-infested file storage room in Limpopo (Peterson 2011). Paperwork and documents have been particularly troubling. Instead of documents serving to make the population legible, documents have often unsettled the state's practices and goals (cf. Scott 1998). For beneficiaries, a lack of identity documents has been one of the major barriers to accessing the grants. Budlender *et al.* (2008) detail how "officials were requiring documents and other evidence far beyond what the law dictated, which amounted to asking applicants to 'jump through hoops'". Early in the Child Support Grant this was recognized as a barrier, and lobbying removed some of the requirements for children (Lund 2008: 75) but it still took a lawsuit – only decided in 2008 – to permit a broader array of documents, including sworn affidavits (Lund 2012: 486). Still, a 2010 survey found that of those not

receiving their grants, problems with documentation was the leading cause, at 22 percent (Leibbrandt et al. 2010).

For street-level bureaucrats, key forms have been lost or missing, in the wrong language, or open to forgery (Kimani 2000). During the 1990s, there was "no way of verifying the authenticity" of applicants' documents (PSC 1998), especially if they were issued by entities with whom the welfare administration had little interoperability (most importantly Home Affairs, though in time this has been improved). At other times, it was the democratic transition that led to documentary problems: in a 2001 report from the Auditor-General, 225,471 computer-generated ID numbers were identified, formally the solution for those who only had IDs from the apartheid era, but in practice the means of creating false entries by unscrupulous bureaucrats (Auditor-General 2001). Nearly a decade later, an audit of SASSA highlighted similar documentary problems, noting deficiencies "including information technology controls in the SOCPEN system" and "poor filing management" (Hlongwa 2010).

Although it is not traditional to consider inanimate paperwork an influential mediator, a growing amount of scholarship has emphasized the vitality of mundane artifacts (e.g. Latour 1992; Bennett 2010). As Matthew Hull (2012: 13) writes, "Just as discourse has long been recognized as a dense mediator between subjects and the world, we need to see graphic artifacts not as neutral purveyors of discourse, but as mediators that shape the significance of the linguistic signs inscribed on them." For post-apartheid welfare, the documentary-mediation of state and citizen has often been a source of discretion and error, undermining the aspirations to fixed objectivity pinned upon them.

This gap between standardized policy and discretionary practice was, in part, the impetus for the basic income grant movement in the early part of the 2000s. In the reasoning of those supporters, a universal grant would reduce the room for idiosyncratic discrimination, intentional or otherwise (RSA 2002; Goldblatt *et al.* 2006). However, a universal grant has proven politically infeasible, so reforms have sought to remove the imperfections of the staff through a joint process of standardization and objectification. Some of this has been through standardizing the conduct of staff through training, and while stakeholders largely agree that the situation has improved markedly since the turn

of the century, incidences of bureaucratic error and discretion are still common enough to be troubling.[12]

Given the difficulty in standardizing human behavior, social grants have increasingly been reliant on technologies deemed impartial and objective. In South Africa's pursuit of objectivity against corruption, fraud, and error, biometric identification is the cornerstone. The technopolitics of standardization and objectivity drive the adoption of biometrics as a way to reduce human discretion and boost bureaucratic efficiency. As Breckenridge (2005b: 281; emphasis added) writes,

> "The combination of digital scanning and networked information radically alters the characteristics of bureaucratic forms, removing them from the world of *paper-based documents*, and – more importantly – from the domain of *human agency*… The economic and administrative benefits that follow from this *removal of the 'human decision-maker'* are ineluctably moving the South African state towards networked and computerized biometrics as the core practice of the state."

This goal continues, and in its recent outline of work for 2012-2015, SASSA emphasizes that "The automation of systems for improved service delivery is non-negotiable… The constant use of manual systems not only limits the number of applications that can be processed in a day, but also contributes significantly to fraud and corruption in the grants administration system" (SASSA 2013).

South African Biometric Welfare

The 2012 contract and re-registration into a centralized biometric payment database is the result of both the longer genealogy traced in the previous chapters and a more immediate biometric history. Since the early discussions of creating SASSA, the diversity of payment methods has been a source of tension: on the one hand, convenience and choice for beneficiaries is a recognizable benefit, but on the other hand, the splintered payment practices are the source of troubles for the government. As early as 2003, the Chief Director of Grant Systems and Administration for DSD, Selwyn Jehoma, told Parliament that the proposed SASSA "would not have nine different contractual arrangements across all the provinces" (Jehoma 2003b). In 2007, shortly after its formation, SASSA tried to standardize payment and identification infrastructure through

[12] Interviews with informants #1 & #3 members of civil society (October 2012), and #6, a government official (November 2012).

a tender whose intent was "to ensure that service providers appointed in the nine provinces provided a standardized payment service in line with the norms of service delivery approved by government" (SASSA 2007). It was ultimately (and begrudgingly) cancelled because no such regularity was deemed possible from the bids received. As the adjudication committee wrote, the bids did not offer "standardized payment services," appropriate norms and standards of security and integrity, nor were they cost-effective (Arendse 2008). The 2012 contract was the second effort following this failure.

In the interim, SASSA has been working with an inherited system from the provinces where many (though not all) grant recipients are biometrically identified. Recall that many provinces began adopting biometric identification systems for grant recipients during the 1990s. These biometric providers used different standards that did not interoperate with each other or the national identification database, creating the risk of duplicate recipients (CRSS 1996). Then, as now, "[t]he fingerprinting technology tender was presented as the only possible solution to all these problems" (Cameron and Brand 2006: 57). These systems were, in some cases, troubled from the start: in at least some provinces, the contracts were marred by corruption. Technically, they often failed to function as promised: age, manual labor, or even cold weather could foul the scanners (Breckenridge 2005).

Furthermore, for these technical reasons and contractual clauses, SASSA has not had ownership of a unified biometric database for recipients.[13] The system that resulted from the amalgamation of provincial databases, SOCPEN, has been routinely criticized for being out of date, filled with inaccuracies, and open to fraud (FinMark 2012b). Where fingerprint verification did occur, it was not always reliable, such as the case in 1999 when one town was found to be home to 1,650 identical fingerprints (Saloojee 1999). In cases where SASSA was able to interoperate with other government databases, though, it has offered more success: in 2006, they revealed the results of comparing the database of public

Northwest	1,481
Mpumalanga	2,324
Gauteng	2,838
Limpopo	4,367
KwaZulu Natal	22,121
Western Cape	1,391
Free State	1,825
Eastern Cape	6,518
Northern Cape	840
Total	**43,705**

Table 1. A 2006 investigation found 43,705 government employees who were receiving social grants; only 21,588 were ultimately fraudulent, though.

[13] Interview with informant #2, a current government official (September 2012).

servants to those of grant recipients (see Table I). And while nearly half of those identified were entitled to the grant, 21,588 were considered fraudulent and removed (Hofmeyr 2006).

SASSA has also been forced to move forward with its own biometric identification system due to the weaknesses of the national identity infrastructure. As Breckenridge (2008) has documented, the Home Affairs National Identification System (HANIS) is a long-running and still incomplete effort to standardize biometric identification technologies and databases for the country. Stakeholders have often suggested it would prove to be an apt solution for social grants. The Public Service Commission (1998) recommended it, though recognized it may not be available for some years. During the debates around the proposed basic income grant, proponents recognized the need to build the delivery infrastructure, and imagined HANIS being a key component of that.[14] The Taylor Committee (RSA 2002) recommended a phased introduction of the basic income grant, emphasizing that "to avoid any duplication of payment, a reliable identification and verification system will have to be established." In 2003, the Basic Income Grant Coalition proposed to Parliament that "This 'smart card' based identification system is expected to offer the most cost-effective platform for the future administration and delivery of social grants" (BIG Coalition 2003).

HANIS has its roots in national security concerns during the 1980s, but as the conflicts of that decade diminished, the program was quickly enrolled in other goals, notably the expanding welfare programs.[15] Spurred by the ANC's Reconstruction and Development Program, the Department of Home Affairs issued an R800 million tender for an automated fingerprint identification system (AFIS), biometrically-enabled identity cards, and integration with the population register. However, the scope and cost of the project quickly mutated and expanded: smart cards replaced bar-coded ones; the budget for the smart cards alone ballooned to R1 billion; and an effort to have the cards support myriad government and commercial purposes commenced (Breckenridge 2008: 42-45).[16]

[14] De Wispelaere and Stirton (2012) make important points about the administrative difficulty of a universal grant.

[15] Its roots in national security make HANIS typical of many surveillance projects (Dandeker 1990).

[16] On this dynamic in innovation more broadly, see Latour (1996); Akrich, Callon and Latour (2002a; 2002b).

Although the government has collected more than 40 million fingerprint sets, as of 2008, it is estimated that as many as 4-5 million duplicates litter the database. In large part, the project has been impeded by competing legacy systems that are not interoperable, despite considerable effort at setting standards for biometric algorithms and financial infrastructures. As one scholar of the Department of Home Affairs wrote, "HANIS has been in the Home Affairs pipeline for a number of years and seems always to be just a year or two from implementation" (Hoag 2010). As of December 2012, the Home Affairs Minister was still promising to roll out smart card identity documents (SAPA 2012). Unable to rely on the presence of HANIS cards, SASSA has moved forward with its own system.

More recently, biometrics have also been turned inward as an effort to remove the opportunity for bureaucratic misbehavior. As SASSA reported to Parliament in March 2010 when justifying their budget, "[s]taff were more strictly controlled through biometric access systems and clearer controls" that recorded employee activity to search for fraud and "ensure that these staff could not easily access sensitive programs where they could manipulate information or create "ghost beneficiaries" in the system" (Pakade 2010). This is part of a broader effort to automate grant delivery, removing unskilled or corrupt bureaucrats.[17] For example, the acting CEO of SASSA illustrated the biometric imaginary's conception of biometrics in an early 2011 complaint that "The lack of automated business processes make activities extremely labour-intensive and error-prone" (Ensor 2011). Later that year, the head of SASSA's internal audit and fraud management unit highlighted automation as a means of overcoming "poor employee work ethic" (Sibanyoni 2011). Moving to electronic systems also saves money, and the acting CEO of SASSA noted during a time of financial limitations that automation also helped lower their "second largest portion of the budget", personnel (Pakade 2010).

The continuing salience of these twin goals is clearly evident in the issuance of the new grant payment contract in early 2012 to Net1 CPS, a South African technology firm. The government's RFP called for "significantly improved services" with "sameness of

[17] The classic reference on automation, surveillance, and labor is Zuboff (1988); Magnet (2011) discusses the link between biometric adoption and labor control.

Beneficiary experience."[18] It sought a solution to "increase the commonality of [the] payment distribution platform…" "The minimum acceptable requirement," they said, "is that all ten finger prints of Beneficiaries must be captured. The Biometric Data capturing during enrolment will be used for matching and authenticating during payment process." In addition to requiring this data from grant recipients, beneficiaries – such as children – would also be incorporated. The goal, it explained, was to "enable the life certification process" and ensure "that a Beneficiary is not enrolled more than once" (SASSA 2011). In contrast, in the existing system, the millions of recipients who received grants through electronic transfer to bank accounts only needed to provide a PIN to be paid (see Figure I). The ability to transfer a PIN to another person (unlike a fingerprint) created the possibility of the grants being received by undeserving individuals.

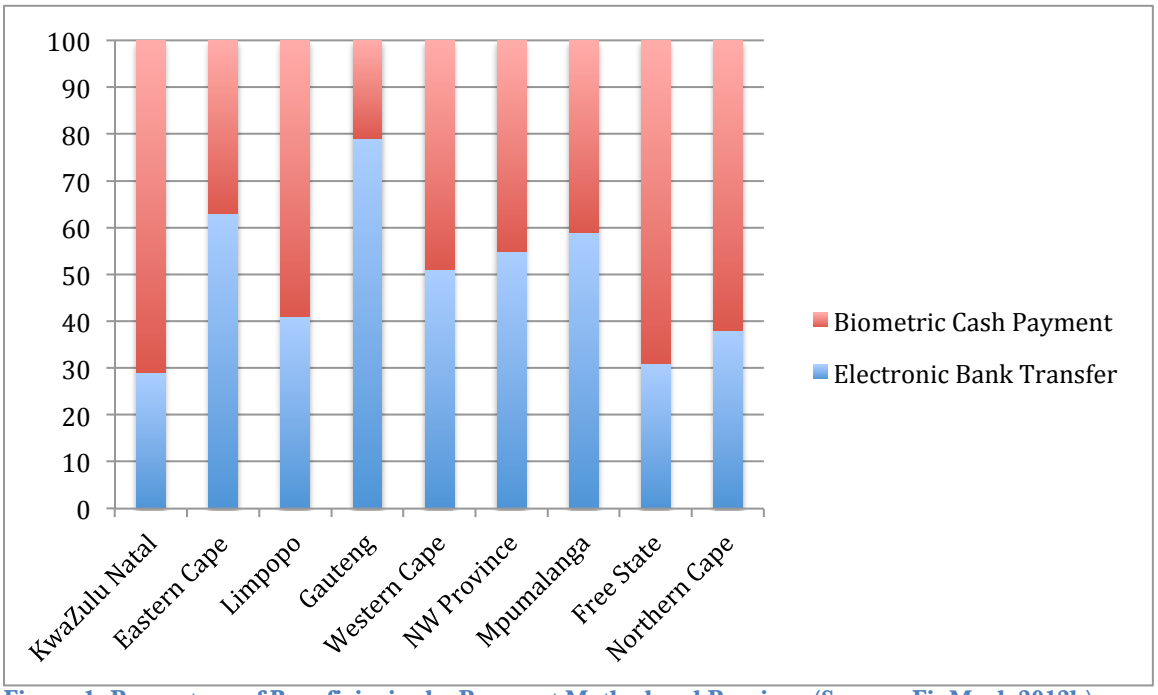

Figure 1. Percentage of Beneficiaries by Payment Method and Province (Source: FinMark 2012b)

The award in early 2012 of the R10 billion contract for the entire country to Net1 CPS prompted an acrimonious court challenge by a losing bidder, AllPay.[19] As a subsidiary of ABSA bank, AllPay was the incumbent payment provider in the Western Cape, Free State, Gauteng and parts of the Eastern Cape, while Net1 CPS operated in

[18] All government document quotations are *sic*, including the peculiar capitalization.
[19] Another bidder, Empilweni, also contested it, but lacked the resources to do so as meaningfully.

the other provinces (except Mpumalanga, where a third firm—Epilweni—was used). AllPay alleged improprieties in the tendering and the allegations were quickly supported by subsequent media reports that suggested the influence of bribery (e.g. McKune 2012a). These assertions that have led authorities in both South Africa and America (where Net1 is listed on the stock exchange) to investigate, but as of May 2013, no updates were available.

In their court filings responding to AllPay's complaint, SASSA made clear the importance of standardization and biometric authentication, including an extended explanation at the beginning about the difficulties they sought to overcome with the new tender:

> "Prior to the coming into operation of SASSA in April 2006, the administration of social assistance was assigned to the Provincial Departments of Social Development. This assignment created numerous service delivery challenges… The administration of social grants at provincial level created a platform for abuse arising mainly from a lack of uniformity which in turn suppressed the opportunity for detection of such abuse. It was accordingly resolved that to deal with this difficulty, that a national approach be adopted in dealing with social grants in order to instil uniformity and standardization" (Ramokgopa 2012: 8-9).

The filing also bemoans the "fragmented payment system" inherited from the provinces, split between multiple, incompatible contractors. For example, in the Eastern Cape, the SASSA representative explained, "There are five different service providers with six methodologies of payment. Whilst this is not the forum to demonstrate the difficulties this causes, I wish to allude to the fact that the six different methodologies employed in the Eastern Cape Province has directly led to substantial fraud and other abuses" (Ramokgopa 2012: 10). Many of these legacies were remnants of the 1990s, and because of the failed 2007 tender, SASSA has been unable to absolve itself of these commitment.

In contrast to SASSA's response, AllPay's complaint depicted a different vision for the contract. "AllPay's focus," they asserted, "is to facilitate access to financial services and products to beneficiaries of social grants, with particular focus on the rural and semi-urban communities" (Webb 2012: 22). Given the extensive network of ABSA bank branches and ATMs, AllPay maintained that they could provide formal financial services where Net1 could not (as a non-bank). An insistence on biometric identification for each

payment (instead of just registration), would render ATMs useless because they do not have fingerprint scanners. Thus, biometric verification, AllPay asserted, "undermines the Government's stated policy of "banking the unbanked" and enabling beneficiaries to access their grants anywhere in the country and through any medium, including ATMs" (Webb 2012: 63). AllPay further pointed specifically to Net1 CPS's proprietary standard which historically did not interoperate with the standard national payment system.

However, in contrast to AllPay's belief that moving recipients into the banking system was the key goal, SASSA firmly asserted that "The key objective of the tender is to facilitate standardization of the payment process while eliminating fraud and duplication of payments by introducing proof of life (biometric) as a prerequisite for all payments." It was, they explained, "part of SASSA's ultimate plan for consolidation, centralization and ownership of payment data." SASSA contended in court that AllPay "did not make provision for adequate biometric verification and standardization of services" and thus "fell short of requirements imposed by SASSA" (Ramokgopa 2012: 11).

Net1 CPS, in contrast, put biometric identification at the core of its offerings, and, as they gleefully revealed in their submissions to the court, their new offering has been able to combine their proprietary biometric payment technology with the standard national payment system (such as that used by bank cards and ATMs). Because the standard system would still not allow fingerprint verification, Net1 CPS would "conduct proof of life verification telephonically, as an alternative to fingerprint technology" (Belamant 2012: 14). This new form of voice biometric verification would be used in cases where recipients were receiving their grants into a bank account, requiring a brief monthly call to certify they had not deceased.

This seems to have caught AllPay by surprise. Not completely without merit, they had believed that fingerprinting was the biometric method *de rigueur*. It was not the case that AllPay was opposed to biometric identification – indeed, they spent considerable time detailing their technical acumen – but only after seeing their opening salvo in favor of "banking the unbanked" stall. It was a difference in emphases arising from technical and institutional legacies; while both would conduct fingerprint enrolment to remove duplicate entries, Net1 stressed an objective and standardized way to check identity each

month for all recipients. Net1 CPS stakes its work on universal biometrics; for AllPay, it has always been secondary to its banking and ATM system.

In addition to the court filings, SASSA officials have validated the new system to the public. In response to an inquiry about fraud from Parliament, the CEO of SASSA called the new biometric scheme "the greatest risk reduction tool that SASSA had engaged in its history" (Peterson 2012b). Emphasizing the appeal of removing bureaucratic weakness, she has specifically highlighted "automation of business processes" (Peterson 2012a). Standardizing the system with other sectors was also a key benefit: "The gathered details of our beneficiaries will be checked against the population register in the Department of Home Affairs, the database of the South African Receiver of Revenue and that of the Government Employees Pensions Fund. We will work with the Departments of Home Affairs, Health, Basic Education, Defence, State Security and the South African Police Service" (Dlamini 2012). Speaking in March 2013, as the re-registration process was finishing, Social Development Minister Dlamini (2013) reported that nearly 19 million recipients had been registered into the new system and that she was "pleased to report that 44 thousand social grants were manually lapsed at the request of the beneficiaries. A further 66 thousand grants lapsed due to non-collection. We shall continue to root out fraud and corruption whenever and wherever it appears to ensure that social grants only go to eligible beneficiaries." She noted a further benefit was the ability to detect nearly 400 beneficiaries who were receiving their grants outside of South Africa (a revelation at least one Member of Parliament deemed "shocking"). Net1 CPS, too, has joined the chorus, projecting that it "will save the national government in excess of R2 billion to R4 billion per annum, as it will eliminate any duplication, any fraudulent claims ostensibly on behalf of deceased person, the claiming of multiple child benefits in regard to the same child (by the same or multiple recipients) and similar fraudulent practices" (Belamant 2012: 21).

Conclusion

In many ways, the new grant infrastructure instituted in 2012 is the result of nearly two decades of reform efforts. The Chikane Committee's call for biometrics to be addressed in a unified, national manner has been accomplished. In Minister Dlamini's (2012) words, "The improved biometric-based payment solution was long overdue and will go a long

way towards minimising fraud and corruption so prevalent in the previous systems." Whether it is effective, of course, remains to be seen, yet the adoption of the program follows similar logics that have motivated other aspects of the post-apartheid social grants scheme, including institutional centralization and the growth of quantified evidence.

The approach of actor-network theory (ANT) seems particularly apt for this technopolitical initiative, merging, as it does, material and social actors. In particular, the task of the bureaucratic and policy elite can be understood as an effort to reduce the transformation in goals that Callon (1986) calls "translation" and ANT posits as a basic reality of action. Because action is always mediated, and mediators always serve to alter the goals – however sparingly – translation needs to be minimized to reliably "act at a distance" (Law 1986). In the case of SASSA, the task of distributing millions of rand per month has required creating a sociotechnical network that minimizes the capacity for intermediaries to serve as anything but passive infrastructure. In the words of the PSC (1998), the goal is that "policy and execution are not divorced." In practice, this has spurred a growth of automated technologies like biometrics that enhance the power of the center by reducing the leeway of mediating actors. As Daston and Galison (1992) note, "Instead of freedom of will, machines offer… freedom from will." Biometric identification, then, is to serve as a means of audit, which Rose (1999: 155) deems a "key fidelity technique" for holding others to account.

Following Busch (2011: 68), biometric "standards are a means by which we construct objective reality." But if the literature on audit (e.g. Power 1997) is an indicator, there will need to be a *social* solution to the lack of trust, for ones based in technique alone "fail to immunize the assemblages they govern from doubt" (Rose 1999: 155). After all, already are reports emerging of biometric registration machines being stolen to generate false payment cards.[20] The next chapter turns more extensively to the ways in which this technopolitical program may disappoint.

[20] Interview with informant #11, a member of government (April 2013).

VI. The Myth of Perfection & the Ambiguities of Delegation

ABSTRACT: In the process of building the post-apartheid welfare state, biometric identification has been promulgated as a necessary and effective means of standardizing service delivery and removing undue discretion. This chapter addresses both the means and ends of the technopolitical programs I have outlined. First, I suggest that the various biometric failures should not be considered exceptions, but rather endemic to technological solutions, necessitating an adjustment in how biometrics are conceived in welfare programs. Secondly, I suggest that even when goals are, by-and-large, reached, there are inherent tensions in the trajectory of the centralized biometric welfare regime in South Africa, one that may distance the state from the citizen.

Introduction

Throughout the sources of elite discourse discussed above runs a commitment to standardization and objectivity that has influenced the institutional forms, regimes of knowledge, and technological infrastructures of post-apartheid welfare. These animating attitudes have served to promote a particular understanding of biometric identification as a necessary, effective, and appropriate means of social grant administration, a collective belief I have called the biometric imaginary. In this final substantive chapter I would like to approach this more reflexively. I believe the consensus view of biometric welfare deserves skepticism, for both its means and ends are not as straightforward or uniformly beneficial as commonly held. As a means of individually identifying grant recipients, biometric identification has shortcomings that are not insignificant but nor are they fully addressed. Secondly, there are reasons to believe that the goals of standardization and objectivity are creating a regime that places too little emphasis on alternative values.

The Myth of Perfection

The bureaucratic elite and their peers in civil society, the news media, and elsewhere have presented biometrics as a material means of improving service delivery, uniformly identifying recipients, and removing undesirable activity. Speaking of the new biometric grant program, Social Development Minister Dlamini (2012) unequivocally stated that it "will eliminate incidents of fraud and corruption in the social grants system" which she

said resulted from the "manual system that SASSA has been using." SASSA's chief, Virginia Peterson (2012c), claimed "the new SASSA card… will make it virtually impossible for fraudsters to defraud the Agency."

The appeal of biometric identification rests on its presumed uniqueness and universality, its ability to labor reliably free of error. This is especially so when compared to other methods of identifying recipients. For example, forged identity documents have been said to undermine the accuracy of the grant database (e.g. Saloojee 1998). PIN-based means of authenticating identity for payment have also been sidelined, with Net1 CPS denigrating them as "simply not user-friendly and safe enough to safeguard the funds to the poorest of the poor" (Belamant 2012: 34). PIN-based cards are also condemned because of worries that moneylenders will confiscate cards and demand PINs from grant recipients as a means of debt repayment. The same portability of PINs also facilitates withdrawals on behalf of the deceased. Instead, biometric verification offers a means of uniquely identifying – with certitude – the payment recipients, and it can do so universally.

Influential supporters of using biometric identification for cash transfers similarly conceive of the method as accurate and free from the difficulties associated with other forms of identification. The World Bank asserts that "Biometric identification can overcome traditional difficulties in identifying beneficiaries without appropriate documentation" (Garcia and Moore 2012: 7).[21] Proponents of radically expanding the social grants suggest that biometrics would allow "for the virtual elimination of fraud" and that "illiteracy would not be a barrier to the mass roll-out of such a system" (Coleman 2003: 124). The Center for Global Development, too, has supported biometrics, arguing that the "barriers to cash-transfers are no longer technical, but political" (Gelb and Clark 2011); for them, the technology offers a "revolution" and opportunity to "leapfrog development" (Gelb and Clark 2013). This sort of "rupture-talk" (Hecht 2002) is widespread in the development industry and offers the possibility of radically accelerated progress while occluding the history of failure that comes from both the technological weakness and social intransigence.

[21] In the case of South Africa, this is not true: documentary identification is still required for enrolment in the biometric system.

In the case of biometrics, it builds on the presumption of universal accuracy – everyone has fingers! – and algorithmic objectivity. This understanding of biometrics is not unique to South Africa; as Magnet (2011: 2) has detailed, it is fundamental to biometrics: "Biometric science presupposes the human body to be a stable, unchanging repository of personal information from which we can collect data about identity." Biometrics are thought to be "particularly useful because they are to replace human subjectivity with 'mechanical objectivity'" (83). In contrast, Magnet argues that biometric technology is prone to failure, not as an aberration or exception, but rather that "biometric errors are endemic." The experience in South Africa adds to this thesis, suggesting the faith in biometrics is at least partly mistaken, that they are unable to remove the unevenness of experience for which they are adopted.

The confusion arises from a simplistic, overly technocratic understanding of the real-world implementation. The biometric imaginary is often misled by focusing too closely on the technical means through which individuals are identified by the state, rather than understanding the larger complexities of such an unwieldy task. As J.D. Peters (2001: 9) elaborates, it is a familiar error, a belief that communications technologies will solve failures to communicate; it is, he writes, a "mistake to think that… better wiring will eliminate the ghosts." Yet, the extraordinary investment in the infrastructure of identification is more often focused on the "wiring" rather than the soft, social minutiae of bureaucratic functioning. Even the otherwise thoughtful Chikane Committee fell prey to defining problems and solutions in terms of technological systems, arguing that the "principle cause… [of] serious and widespread" fraud and corruption "is the lack of proper systems of internal control". Such as view ignores the role that poverty, inequality, and limited opportunity have in generating fraud. Instead, it focuses particularly on reforming systems of surveillance and audit. Biometrics, here, become another technical solution to social problems (cf. Pritchett and Woolcock 2004).

As Breckenridge (2005a) relates, this dynamic has a lengthy pedigree in South Africa. Time and again, what he calls "the panoptic fantasy" motivated an enormous effort to accurately register and identify the population. Under Verwoerd, the Native Affairs Department undertook a massive fingerprinting exercise to replace the paper-based archive, but, in the process, greatly overestimated the potential of the method. This

continues in the post-apartheid era. As he writes, "Computerised biometrics, like its paper-based predecessors, is driven by the fantasy of administrative panopticism – the urgent desire to complete and centralize the state's knowledge of its citizens" (Breckenridge 2005b: 271)[22]

The panoptic fantasy and the pursuit of objectivity are myths of perfection in contemporary South Africa, as well. Prior efforts to solve delivery problems through biometrics have ignored the embodied practices through which biometrics are enacted (cf. Suchman 1987). For example, long lines on payday mean recipients stand out in the cold for hours, often before sunrise, and the scanners tend to be ill-suited for such frigid fingers (Mabeta 2003). At the time, CPS was reportedly "reluctant to invest in new fingerprint technology that would sort out this problem" so instead a street-level bureaucrat had to manually override the fingerprint requirement, opening the door to street-level corruption. This sort of local discretion is precisely what biometric standardization has fought against: for example, during the 1990s, the employees of CPS's precursor, Aplitec, "selected the best fingerprint impressions on a case-by-case basis" meaning that it was difficult to search for duplicates in a database – one person may be enrolled multiple times under different fingers. Furthermore, fingerprints captured during previous biometric social grant systems tend to be of poor quality, and even "a simple cut can make a finger unreadable, and it is common for grant-holders to actually lose the finger that was originally chosen to secure the payment card" (Breckenridge 2005b: 274).

Similar problems have emerged during the 2012-2013 registration initiative. For example, the children who were required to be enrolled were often fearful of the red light emitting from the fingerprint scanner, protesting and crying as they mistakenly thought they would be burned.[23] Early results from the use of the voice recognition system, too, suggest technical difficulties, including poor recording environments during re-

[22] Critics and detractors, too, often fall prey to this panoptic fantasy (perhaps starting with Foucault). For example, Edwards and Hecht (2010) note that anti-apartheid activists "exaggerated the police computer capabilities, but not their goals." Contemporary critical scholars similarly find justification for their worries in the belief that biometrics represent flawless means of surveillance, such as van der Ploeg (2002: 60; emphasis added) who says that biometrics are "rapidly growing in importance as a tool to *perfect* a far wider range of social categorizations, including, for instance, welfare recipients, refugees, and migrants."

[23] Interview with informant #6, a current member of government (November 2012).

registration (Kweyama 2013). This is a sort of 'friction' that, as Edwards (2010: 97) notes, "generates errors and noise." It is also indicative of Burrell's (2012) assessment that many digital technologies now proliferating in sub-Saharan Africa are poorly designed for the "invisible users" who are not considered in the process of invention.

A more significant failure of the biometric technology is the portion of the population that has been unable to enroll, especially domestic laborers whose fingerprints are eroded from years of washing dishes. Additional worries exist for farm and mine laborers, many of whom have lost fingerprints or even whole fingers and hands. Because biometric identification is compulsory in the new system, these populations will require a procurator, an individual who will enroll and withdraw money on their behalf. Of the figures available, in October 2012, with only 15 percent of the recipients re-registered, 13,000 procurators had been required (SASSA 2012). Perhaps ironically, this creates a form of dependency that, at the very least, will introduce complicated negotiations and conflicts for the individuals. More fundamentally, it unsettles the stated goal of "sameness of Beneficiary experience" (SASSA 2011). Critical studies of biometric identification have previously highlighted this disjuncture between the presumed (and marketed) universality of biometrics and the diverse reality of bodily features; in particular, scholars like Magnet (2011) have emphasized that the persistent failures of biometric technology represent gender and class distinctions: while fingers typical of white collar labor are rarely problematic, for low-income populations doing manual labor, this is not the case.

There is a classic tension active here. On the one hand, standards are trying to be set centrally, rectifying the inequality of access arising from the apartheid era. On the other hand, the inestimable complexity of the world can rarely be classified, sorted, and homogenized without considerable difficulty (Busch 2011; Bowker and Star 2000). One of the dangers of the biometric imaginary is that this tension is subsumed by the pressing desire to improve the welfare state. General consensus can obscure subtle ethical and political implications, and this broadly-sensed urgency is certainly also involved in the near total absence of privacy or data protection discussions.

This history of biometric failure and the ongoing difficulties are rarely acknowledged. For all their mimetic aspirations, neither biometric technologies nor the dominant ways in which they are conceived accurately reflect reality. This lack of

correspondence is what makes the concept of the biometric imaginary particularly apt in this case. An imaginary is not a fantasy – it is grounded in reality and is actually productive – but at the same time, it may be decoupled from certain on-the-ground realities as the consensus blurs certain distinctions. The overwhelming focus on standardization and objectivity are, in my view, key reasons for this indifference. But the durability of the biometric imaginary is also a result of its successes, and it would be a mistake to ignore the subtle ways in which success and failure are intertwined.

Like other technopolitical efforts, biometric identification can be a productive failure (Edwards and Hecht 2010; Edwards 1996: 75-112). The promises embedded in the technology – such as ending corruption – need not be fully realized in order to justify the expense and effort of biometrics. This interpretive flexibility enables a wider range of support for biometric identification, fueling the biometric imaginary. Because biometric technology is *presumed* to be effective it can serve certain needs.

This was clear when Minister Dlamini (2013) was "pleased to report" in March 2013 that the biometric re-registration process had resulted in 44 thousand grants being cancelled and 66 thousand lapsing due to non-collection. This was represented – both in her speech and the subsequent news reports – as a successful example of using biometric identification to, as she put it, "root out fraud and corruption whenever and wherever it appears to ensure that social grants only go to eligible beneficiaries." As a percent of beneficiaries (less than half a percent) this is quite small, but that does not seem to register. An important fact is that welfare surveillance and auditing in the form of biometric identification did not need to prove *technically* efficacious in order to produce its effects here. These individuals were not caught, but rather preemptively canceled or let lapse their grants. Even if all the lapsed grants were fraudulent (an heroic assumption given widespread beneficiary confusion and frequent normal turnover), it was not the promised de-duplication or identity verification that was responsible. It was the *perception* that the technology functions which produced its result. The authoritative presentation of biometric technology as effective is performative (cf. Austin 1975); rupture-talk helps to create the desired disjuncture.[24] A bit more speculatively, one can imagine that the

[24] On this phenomenon in surveillance see Bogard (1996) and Gates (2011).Joseph Masco (2002: 460) has noted a similar result in his ethnography of nuclear scientists operating in a context of

presentation of such anti-corruption efforts – especially ones utilizing innovative and not particularly well-understood technology – performs a different reality to another audience: it demonstrates a particular seriousness about the 'crisis' in grant fraud and corruption on the part of DSD and SASSA.

Finally, it is important to note another way in which biometrics 'work' even if they do not meet their promise of ending fraudulent access. In receiving the SASSA contract, Net1 CPS secured a large and lucrative market of around R2bn annually. Had they lost the contract, 50% of their business would have followed (Speckman 2012). Instead, they have revealed that they are currently in talks with 11 other countries, no doubt benefiting from the prestige and experience of this contract. Serving as payment provider for so many has also opened up ancillary markets, such as (controversially) offering financial services (McKune 2012a). For those who place credence in the corruption allegations (which they deny), the importance of this contract to the firm is taken as motive, but a more general point is also true: the fervent commitment to combating the 'crisis' with biometric identification – and not, say, identity documents – has boosted a nascent technology without many other markets.

Delegation, Standardization, and the State-Citizen Relationship

Despite this skepticism about the promise of biometric identification, the ambitions are not wholly mythical. Although the new system cannot live up to the goals of reliably identifying all grant beneficiaries let alone stopping fraud, it is not impotent, and the *ends* should be subject to critical analysis as well as the means.

One such concern that is beginning to emerge is the role that biometric identification has in separating the state and citizen. One of the ways this occurs is through the heightened importance of expertise, often materially embodied in technology.[25] The effort to end private exploitation of public monies has led to a situation where discretion has increasingly been delegated to digital technologies, chief among them biometric scanners and databases. "Delegation", refers to the interchangeability of

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"hypersecurity" – as with the nuclear bomb, technologies like lie detectors *work because they are perceived to work*. They "offer the illusion of a high-tech answer to the problem of the social but ultimately fall back on brute intimidation as the means to an end." Masco (2002: 462) asserts that this culture of suspicion compromises "the very scientific institutions they are intended to secure", and the literature on welfare surveillance in the global North suggests the same.

[25] On this, generally, see Mitchell (2002).

human and technical labor, a practice rich with moral implications, such as when part of the task of safe driving is delegated away from autonomous selves to the concrete speed bump (see Akrich and Latour 1992). As Ribes *et al.* (2013) put it, "delegation to technology sinks organizational work into infrastructure" meaning that human autonomy is often curtailed (in this case, quite purposefully).

In the case of South Africa, delegation has primarily been twofold, (a) away from little-scrutinized and poorly-verified grant applications and toward interoperable databases to remove those deemed underserving and (b) away from street-level bureaucrats and toward biometric cash dispensers. This transformation is widely considered ethically legitimate, a technical means of enforcing rules, but in neither case is it an unalloyed good.

On the topic of (a) enforcing application regulations, the emphasis on technologies of surveillance and audit serves to constrict what Scott (1992) calls "infrapolitics", the everyday weapons of the weak such as grant 'fraud'. Many poor South Africans share details on how to pass the means test and qualify for a grant (Versfeld 2012). In a situation of rampant and durable unemployment, much of it caused by decades of racial authoritarianism, there is a case to be made that these tactics – while formally illegal – are a necessary livelihoods strategy.[26] According to the Special Investigation Unit, one of the primary forms of grant "fraud" is "individuals who initially qualified to receive a grant, but then saw an improvement in their financial status which generally disqualifies them from receiving grants" (Timm 2012). Formally, these people are required to notify SASSA of their changed situation. However, income generation by the poor is highly fluid, fluctuating widely over the course of months (Collins *et al.* 2010). The simplistic, binary means test is therefore unlikely to accurately capture the lived reality of poverty. This is, of course, exacerbated by the small amount of the grant, making other forms of income generation necessary.

The continuing delegation to proprietary technological systems of audit and surveillance change this dynamic. The shift from human to device is not a straightforward

[26] Moreover, it seems odds that fraud and corruption should be so closely linked when, in reality, they are different activities, often operating in different moral registers: a poor individual acting even poorer to get some assistance does not seem the same as a salaried government employee falsifying invoices, yet 'fraud and corruption' are so tightly linked discursively that the distinction is rarely made.

translation, but rather a subtle transformation. Simplified technical systems allow for yes versus no answers, not complicated street-level negotiations. The biometric technologies are "black boxes" (Latour 1987), unavailable for public inspection, let alone human negotiation. Politics now requires getting inside the black box, something that is out of reach for nearly all South Africans. Objectivity is not neutral, and their conflation is deeply mistaken because the removal of subjective discretion is deeply biased towards those that control the technology.

The second delegation, at the point of payment, also has subtle implications. The new system has sought to increase convenience by no longer requiring recipients to appear at a SASSA facility on a given day. By distributing the grant payments at myriad merchants the (laudable) hope is to reduce lines and travel. While 60 percent of beneficiaries used to receive their grant at pay points, as of April 2013, it had decreased to 22 percent, with a significant shift toward retailers and ATMs (Dunkerley 2013). As the transition to the new system was finalized in early- to mid-2013, beneficiaries receiving payments at merchants or ATMs began to report technical problems, such as their card being 'eaten' by the ATM (e.g. Matlala 2013). In contrast to the traditional SASSA pay points, where a government employee was present, in the new system, beneficiaries now interact with a third-party merchant or faceless machine. In either case, beneficiaries had little recourse.[27]

The irony is that the distance between citizen and state has been extended in an effort to remove discretionary middle-men between the fiscus and the pocket of the poor. As Ferguson (2013: 236) puts it, "one wonders if, for some, these technical advantages might not be offset by the 'social' attractions of a more familiar sort… where the socially 'thick' recognition that comes from being looked after by a local party-state is after all preferable (for many) to the frighteningly 'thin' recognition of the iris scan – if only because it implies a humanly social (rather than technocratically asocial) bond between state and citizen." In these ways, biometric welfare resembles what Callon *et al.* (2009) call 'delegative democracy', the assignment of technopolitics to specialists, not the broader public. When something fails – as it did during a technical error in January 2013 where

[27] Interview with informant #10, a current government official (April 2013).

many pensioners in the Western Cape did not receive their full grant – the delegation means those on the ground are unable to address the errors.[28]

These delegations and redistributions of power, in turn, raise the stakes elsewhere. The countless street-level negotiations, maneuvers, and deceptions that the biometric imaginary condemns as illicit fraud (rather than ambiguous infrapolitics) are minimized while the influence of the biometric policy and technical standards are enhanced.[29] When the rise of biometric welfare administration is viewed as redistribution – rather than (as the biometric imaginary has it) an absolute reduction – of subjectivity, then it is less surprising why the current biometric contract between SASSA and Net1 CPS has been the subject of intense legal dispute and allegations of corruption. If true, it suggests that the effect of the biometric system has been to reduce petty corruption but increase grand corruption. Although SASSA and Net1 strenuously deny the allegations (and have gone forward with the contract) the episode is an illuminating suggestion that the reduction of subjectivity at the street-level increases the subjectivity at the center. The centralization also created a certain fragility, illustrated during the court case when a lower-court judge found the contract "illegal and invalid" (McKune 2012a) but refused to set it aside due to the disruption it would cause to the millions of grant beneficiaries.

Indeed, the centralization of welfare decision-making in post-apartheid South Africa has created a situation of concentrated judgment about who qualifies for grants and who does not, both in policy and technical enactment. The opposition to street-level objectivity magnifies the influence of decisions made by SASSA. Infrastructural standardization, biometric identification, and quantitative reasoning have been fundamental techniques of this rationalization. As scholars of these phenomena have noted, they play an instrumental role in centralizing authority. Porter (1996: 51) writes that "Accounts and statistics, broadly speaking, are the lines connecting the world to what Latour calls 'centres of calculation'". In his history of fingerprinting, Cole (2002: 235) also notes biometrics ability to create centres of calculation (Latour 1987), bringing much of

[28] Interview with informant #4, a member of civil society focused on human rights (March 2013).
[29] This can be compared to other social sectors, such as healthcare. Vale (2012a; 2012b) has documented the improvisations necessary for community health workers to fulfill their duties, a street-level informality that is in conflict with official rules. A similar conflict is currently occurring with the qualifications for the disability grants, as more stringent rules exclude the needy.

the world into focus in one location. The digitization of this process allows it to occur effectively on an unprecedented scale.

Given the pathetic state of social assistance delivery at the end of apartheid, it seems clear that some centralized uniformity was necessary (Geviser 2007: 716). Recall, at the time of the transition, there were more than a dozen agencies responsible for social policy and limited administrative capacity tended to affect most the neediest. SASSA has, in large part, improved upon these situations (PSC 2011).

But has this process of bureaucratic rationalization gone too far, as Weber warned it might? Is South Africa's "radically centralized" (Breckenridge 2008) bureaucracy an iron cage? Many believe so, particularly under the Mbeki presidency of 1999 to 2008 (Terreblanche 2008). Mbeki was, in many ways, a classic technocrat, "with a devotion to technique rather than building relationships" (Friedman 2009).[30] The Mbeki government operated under what Marais (2003) called "the logic of expediency", under which there is "a tendency to regard subnational governments as purely technical agents of 'delivery' rather than spheres of representation" (Friedman 2009). Embedded in this imaginary is delivery as a one-way affair and a tendency to view 'citizens' as 'customers' (Hemson and O'Donovan 2005). Framing the government's role in terms of 'delivery' makes success dependent upon efficiency, not "to determine citizens' wishes and to secure their co-operation but to recruit the best 'delivery' techniques and personnel" (Friedman 2009). In this highly modernist mindset, government-to-citizen interfaces can be a burden to be overcome (Friedman 1999; Marais 1997).

The process may be exacerbated by the peculiarities of post-apartheid democracy. Elections are infrequent and limited to a vote for the national and a vote for the provincial party. Members of Parliament are chosen by party elite, not voters, meaning they have little to no incentive to learn about voter opinions. And, perhaps most significantly, the ANC retains a nearly two-thirds majority, which allows it "to ignore or even violate public preferences on a range of issues without seriously threatening its electoral prospects" (Mattes 2012: 19).

[30] I use the term technocrat without intending the negative association, but rather to denote a particular mode of governance dedicated to rationality, technique, and method.

Barchiesi (2011) has argued that ANC policymaking is often "insulated from political contestation and dominated by technocrats, experts and consultants" meaning that anti-welfare ideologies amongst elites can trump welfare proponents. This may be the case, including with the basic income grant, where even government elite admit that a different "philosophy" guides their opposition to the proposal (Meth 2004). But it is key to remember that, in large part, this centralization has been the result of political liberalization, an opening up that means no longer is poor administrative capacity free from the agitations and demands of the public. Instead, the trouble may be that the techniques through which this national equalization of standards for service delivery have been accomplished – standardization, quantification, and biometrics – have created a more subtle barrier, a "regime of perceptibility" (Hecht 2012: 173; Murphy 2006) that structures the production of official knowledge about poverty.

I first sensed this during a heated exchange at the Carnegie III Conference on Strategies to Overcome Poverty & Inequality, held in September 2012. In the question and answer session following a presentation by the Department of Social Development of their quantitative impact assessment (the "gold standard" study discussed in chapter four), an incensed representative of a grassroots NGO berated the government official for not doing more. The questioner passionately disputed the positive picture painted by the state's impact assessment, depicting, instead, the misery of poverty, the insufficiency of the grant, and the everyday troubles experienced trying to access it. She was joined by another audience member who lamented the continued exclusion of individuals who qualify for the grant due to administrative hurdles. A SASSA official in charge of the CSG (who happened to be in the audience) responded by detailing the myriad outreach efforts – from radio campaigns to canvassing rural geographies – as well as the administrative reforms implemented to overcome the exclusion. In remarkable candor, the exasperated official ask the audience *what more could they do*? They simply do not know how to find these excluded people!

While the welfare officials are, of course, constrained by the political support for expanding the grants in scope or size, I believe a more fundamental tension is at play. It is not simply the practical difficulties of reaching 21 million beneficiaries in a country as large and geographically diverse as South Africa, though that certainly matters, too.

There seems to be an epistemological incongruence between the state and citizen. This became clear in another exchange I witnessed between SASSA officials and community leaders at a workshop hosted by a well-respected NGO. Here, too, SASSA officials found their national figures on grant uptake and impact to fall on deaf ears. The community leaders exhorted government to *do more*. The suffering they saw daily was visceral and embodied, ongoing and human. Their experience with it was unmediated, present in their own social worlds.

The government officials, however, have a different task and therefore a different assemblage of instruments, data, infrastructures, and organizations that mediate their perceptions. As Talal Asad (1994) wrote in his comparison with ethnography, statistics "are the products not of experience but enumerative practices." While some would be quick to condemn their synoptic view, I cannot help but feel more ambiguous about the whole technopolitical regime that produces it, for it seems to be closely tied to the founding principles upon which everyone seems to agree: post-apartheid social policy should be equitably and competently administered, in a manner that is impersonal and objective, free from the informal and formal discriminations of the previous era. While far from perfect, a contextualized and historical understanding of bureaucracy as "a positive extension of the repertoire of human possibilities" (du Gay 2000: x) might be appropriate in this case, even while recognizing that an extension of the repertoire of human possibilities comes with worrying downsides.

Conclusion

Surveillance, Lyon (2007) points out, is always ambiguous. The devices and techniques of monitoring and auditing are ineluctably bound up with the particularities of a given context, meaning their effects are multiply determined. In the case of biometric identification, the post-apartheid context has yielded distinctions in the drivers, meaning, and implications of the technology. Biometric identification still serves to represent and reproduce "in visible, everyday forms" (Mitchell 1991: 81) 'the state', but it is doing so in what Ferguson (2011) has deemed a "left art of government."

Despite the generally progressive goals to which this technological apparatus is directed, as it co-constructs a social world, the complexity it confronts will not easily be shoehorned into its categories and assumptions; too firm of a commitment to certain

values such as standardization and objectivity will risk neglecting others, such as the necessary ad hoc negotiations of an engaged state or the ambiguity of 'fraud.' Imaginaries fade into the background, seeming to be common sense, and thus these transformations occur subtly, but this does not lessen their meaningfulness.

VII. Conclusion

The social grants are one of the flagship interventions of the new South Africa; at around 3.5 percent of GDP and benefiting around 40 percent of the population, they are intimately involved in the formation of South Africa's democratic identity, even if, in many ways, they are the product of the old South Africa. This importance and their scale make the social grants the subject of politically divisive debates, ranging from their affordability to their impact. Throughout these contests, though, runs a firm commitment to delivering grants reliably and equitably. The quality of implementation, therefore, is central to the broader politics of grants. This realm of implementation is one of civil servants and paperwork, statistical methodologies and accounting techniques. It is a complex interchange between the state and citizen that occurs millions of times each month. And it is a relationship to which biometric identification technology is pivotal.

On one level, this dissertation has been an exploration of the salience of biometric technology within the social grants program. What explains the investment in identification infrastructure by the welfare bureaucracies? Why this method and not others? A colloquial answer would point to fraud and corruption, and while the widespread belief that the grants are the subject of exploitation and administrative incompetence has been a key motivating factor, this does not exhaust the particular reasons and manners through which it has unfolded. Instead, my argument traces a shared commitment – the biometric imaginary – that has grown during nearly twenty years of welfare implementation. The biometric imaginary positions biometric technology as a necessary, suitable, and effective means of achieving standardized and objective welfare administration. It is broader than just the purchase and use of fingerprint scanners; it builds upon programs of institutional reform, policymaking debates, and infrastructural development, but the implementation of a nationally centralized biometric identification scheme is perhaps its apogee, a technopolitical goal that has come together during the post-apartheid era as various forms of delivery weakness and fraud have bedeviled the initiative.

As I have traced, the institution of a national biometric grant identification scheme in 2012 has a long lineage. Most directly it is the result of SASSA's failed 2007

tender which was cancelled when no standardized option was deemed feasible. But the goal of a standardized and objective delivery mechanism is the result of a longer history, extending to at least the democratic transition where the inheritance of a fragmented bureaucracy curtailed the ability of the state to use its redistributive function to alleviate poverty. Since the mid-1990s, this fragmentation has been blamed for weak service delivery and widespread fraud and corruption. Unification through a process of centralized standards setting has been the order of the day, necessitating institutional reorganization, regulatory alignment, and infrastructural interoperability. That the biometric database has been explicitly designed as a nationally centralized system is not an accident, but rather the result of nearly two decades of broader reform and commitment. One could readily imagine alternative models – such as the provincial biometric schemes adopted during the 1990s – but the lack of interoperability with other provinces and the attendant sub-national differences in service delivery have proven to be at odds with the egalitarian ethos of the era.

One could also imagine alternative methods of identification, such as the paper identity books and PIN-based authentication. And at various times, these and other alternatives have been proposed – after all, imaginaries are not totalizing nor uniformly applicable – but the promise of a unique and universally valid identifier that would operate free from human temptation has attracted the bureaucratic and policy elite. For the government, biometric identification represents an automated – and thus impersonal – means of identification, a way to end illicit behavior while paying grants uniformly.

As I have argued, these commitments to standardization and objectivity are deeply held, influencing welfare policy and practice beyond just biometric identification. As the new biometric grant system unfolds, they will undoubtedly continue to influence its trajectory.

VII. Appendix

Interviews

1. A member of civil society focused on social security law (October 2012).
2. A member of government working on social security (September 2012).
3. A member of civil society focused on human rights (October 2012).
4. A member of civil society focused on human rights (March 2013).
5. A member of civil society focused on financial services (October 2012).
6. A member of government focused on social security (November 2012).
7. A member of civil society focused on financial services (November 2012).
8. A member of government focused on consumer rights (November 2012).
9. A former government social security stakeholder (April 2013).
10. A member of government (April 2013).
11. A member of government (April 2013).

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