

SURVEILLANCE FOR DEVELOPMENT? DEBATING CITIZEN IDENTIFICATION
SYSTEMS IN GHANA

By

Smith Oduro-Marfo

B.A., University of Ghana, 2013

M.A., University of Ghana, 2015

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Abstract

Many Global South states are developing citizen identification databases that are digital, smart and meant to be integrated and interoperable with other systems. Admittedly, there are nuances in the historical and institutional realities across Global South countries, yet these countries are common in terms of how their governments and international development actors frame citizen identification systems as necessary for development. The main argument advanced by various governmental and non-governmental actors is that for the state to be effective and efficient, it must be able to know who is who, who is where and who is doing what, and that states with the needed surveillance capacity can better extract taxes, promote national and personal security, and distribute public goods and services. Overall, a narrative of economic progress is dominating the promotion of citizen identification systems in the Global South. Conversely, an illegible society is being framed as a source of state incapacity and relatively lower possibilities of economic advancement. Such positive outlooks on surveillance systems must also contend with critical approaches to surveillance systems. Indeed, surveillance studies scholarship on Global South countries tends to frame the state's embrace of surveillance systems as deepening authoritarianism and repression. But what if a Global South state with democratic institutions is embracing surveillance-oriented systems in the name of development? How do stakeholders in these countries justify surveillance and how is the latter critiqued? Even if surveillance systems could spur development, how do prevailing context and institutions matter for ongoing citizen identification projects and the debates around them? The foregoing questions underpin my research to understand the spread of surveillance systems in the Global South beyond the argument that it is to serve authoritarianism and repression. Overall, I seek to understand the implications of framing surveillance-oriented systems as necessary for development.

In this study, I research three citizen identification projects in Ghana and track the related justifications and concerns of various state and non-state actors. The three projects are: the national identification system, the national digital property addressing system and the SIM card registration regime. I seek to understand how state actors, civil society, private corporations and international actors draw on development narratives to support citizen identification projects and also if, why and how these projects are contested. I map and draw on a history of citizen identification systems in Ghana from the colonial to the post-colonial era to understand the legacies that shape the current identification projects in Ghana.

I find a general consensus amongst state and non-state actors about the value of citizen identification systems to development in Ghana. Economic rationales dominate arguments in support of citizen identification systems. Yet, there are still concerns about surveillance including privacy intrusions, data breaches, corruption and more importantly, how these projects could marginalize certain groups of citizens. Despite the broad support for the three projects, it is noteworthy that the state in Ghana has struggled to successfully implement them. I explain these struggles as tied to institutional factors including the unresolved contentions about citizenship and the existence of weak legacy systems for citizen identification in Ghana. The Ghana case shows that promoting surveillance in the name of development could easily decenter critical arguments against surveillance systems. Development as existential as it is normally framed, can easily take precedence over other concerns like privacy. There is a consensus in Ghana, perhaps similar to other Global South countries that the state must perform better to improve the experience of citizenship. Thus, if it is surveillance-oriented systems that can make the state perform better and

care better for its citizens, then why not? Yet, practically, while citizen identification systems automatically enhance state surveillance, whether such enhanced state capacity will lead to inclusive development cannot be assured. My proposed ‘Surveillance for Development’ (S4D) frame captures the notion that a specific approach to, or emphasis in development is being promoted in Global South states based on the idea that these states must ‘see’ their citizens and societies in a particular way in order to develop. This ‘seeing’ is based on digital and interoperable surveillance systems that permit the continuous tracking of citizens in a non-physical, integrated and distributed manner by the state and even transnationally. These surveillance systems also permit an assemblage that allows state and governmental actors to generate various data doubles or multiple versions of citizens and profile them with attached and predetermined risk values. The profile of each data double is likely different based on what sets of information and from which agencies are combined about a person, such that even the stability of the identity of a particular citizen cannot be assured. In sum, by tying surveillance to development, the stakes are higher for citizens in Global South countries as the potential adverse implications are not just about privacy breaches but also about threats to citizenship as a status and as an experience, for example.

Table of Contents

SUPERVISORY COMMITTEE	II
ABSTRACT	III
TABLE OF CONTENTS.....	V
LIST OF ABBREVIATIONS AND ACRONYMS.....	VII
ACKNOWLEDGMENTS.....	X
DEDICATION	XI
CHAPTER ONE.....	1
BRINGING SURVEILLANCE INTO DEVELOPMENT AND DEVELOPMENT INTO SURVEILLANCE.....	1
INTRODUCTION	1
PROBLEM STATEMENT	5
RESEARCH QUESTIONS.....	6
SIGNIFICANCE OF STUDY.....	7
METHODOLOGY	7
CONCEPTS	12
CONCLUSION	16
CHAPTER TWO	19
TOWARDS SURVEILLANCE FOR DEVELOPMENT? — A LITERATURE REVIEW ON SURVEILLANCE SYSTEMS AND THE GLOBAL SOUTH.....	19
INTRODUCTION	19
IDENTIFICATION SYSTEMS AS SURVEILLANCE.....	20
SURVEILLANCE FOR CONTROL OR FOR CARE?.....	22
STATE SURVEILLANCE IN THE GLOBAL SOUTH	25
THE FLUIDITY AND POWER OF INTERNATIONAL DEVELOPMENT FRAMES	41
CONCLUSION	47
CHAPTER THREE.....	50
“IN THE SAME WAY THAT A SHEPHERD COUNTS HIS SHEEP” — A HISTORY OF CITIZEN IDENTIFICATION IN GHANA50	
INTRODUCTION	50
CITIZEN IDENTIFICATION IN COLONIAL GHANA.....	51
CITIZEN IDENTIFICATION IN POST-COLONIAL GHANA	57
CONCLUSION	69
CHAPTER FOUR.....	72
SIM REGISTRATION IN GHANA: TYING CITIZENS TO THEIR PHONE NUMBERS.....	72
INTRODUCTION	72
OVERVIEW.....	73
ARGUMENTS FOR AND AGAINST SIM REGISTRATION.....	76
STATE ACTORS	76

PRIVATE CORPORATE ACTORS	86
CIVIL SOCIETY AND MEDIA	91
INTERNATIONAL ACTORS	96
CONCLUSION	100
CHAPTER FIVE	104
THE NATIONAL DIGITAL PROPERTY ADDRESSING SYSTEM: TYING CITIZENS TO GPS COORDINATES	104
INTRODUCTION	104
OVERVIEW	104
DEBATING THE NDPAS: JUSTIFICATIONS AND CONTESTATIONS	107
STATE ACTORS	107
PRIVATE CORPORATE ACTORS	112
CIVIL SOCIETY AND MEDIA	116
INTERNATIONAL ACTORS	122
CONCLUSION	125
CHAPTER SIX	129
THE NATIONAL IDENTIFICATION SYSTEM: TYING CITIZENSHIP TO A CARD AND BIOMETRICS	129
INTRODUCTION	129
OVERVIEW	130
SHOULD THERE BE A GHANACARD? STAKEHOLDERS’ POSITIONS ON THE NATIONAL IDENTIFICATION SYSTEM	133
STATE ACTORS	133
PRIVATE CORPORATE ACTORS	139
CIVIL SOCIETY AND MEDIA	142
INTERNATIONAL ACTORS	153
CONCLUSION	161
CHAPTER SEVEN	165
“WE WANT GHANA TO BE LIKE HEAVEN” — FINDINGS AND CONCLUSIONS ON CITIZEN IDENTIFICATION PROJECTS IN GHANA	165
INTRODUCTION	165
SUMMARY OF FINDINGS	166
SURVEILLANCE FOR DEVELOPMENT: IMPLICATIONS AND POTENTIALITIES	176
CONCLUSIONS	191
REFERENCES	198

List of Abbreviations and Acronyms

ABIS	Automated Biometric Identification
AFIS	Automated Fingerprint Identification System
AFRC	Armed Forces Revolutionary Council
AMLCTF	Anti-Money Laundering and Counter-Terrorism Financing
ANSI	American National Standards Institute
BBC	British Broadcasting Corporation
CAC	Consumer Advocacy Centre
CCTV	Closed Circuit Television
CDD	Centre for Democratic Development
CEO	Chief Executive Officer
CHRAJ	Commission on Human Rights and Administrative Justice
CIDC	China International Development Cooperation Agency
CMP	Common Monitoring Platform
CPA	Consumer Protection Agency
CSO	Civil Society Organization
CSS	Centre for Socioeconomic Studies
CST	Communication Services Tax
DESA	Department of Economic and Social Affairs (UN)
DGA	Digital Ghana Agenda
DNA	Deoxyribonucleic Acid
DVLA	Driver and Vehicle Licensing Agency
EC	Electoral Commission
ECOWAS	Economic Community of West African States
EI	Executive Instrument
eID	Electronic Identification
ENBIC	ECOWAS National Biometric Identity Card
EXIM	Export and Import Bank
FATF	Financial Action Task Force
FINDEX	Global Financial Inclusion Database
GCT	Ghana Chamber of Telecommunications
GIABA	Inter-Governmental Action Group against Money Laundering in West Africa

GIS	Geographical Information System
GNA	Ghana News Agency
GPS	Global Positioning System
GSMA	Global System for Mobile Communications Association
GVG	Global Voice Group
ICAO	International Civil Aviation Organization
ICT	Information Communication Technology
ID	Identity or Identification
ID4D	Identification for Development
IDB	Inter-American Development Bank
IMEI	International Mobile Equipment Identity
IMSI	International Mobile Subscriber Identity
IPPTM	Interception of Postal Packets and Telecoms Messages Bill
GhIPSS	Ghana Interbank Payment and Settlement Systems
ISO	International Standards Organization
ITU	International Telecommunications Union
KYC	Know Your Customer
LAP	Land Administration Project
LI	Legislative Instrument
MAP	Muslim Association Party
MICNG	Ministry of Interior and Coordination of National Government (Kenya)
MLGRD	Ministry of Local Government and Rural Development
MLNR	Ministry of Land and Natural Resources
MMDA	Metropolitan, Municipal and District Assemblies
MMI	Man-Machine-Interface
MNO	Mobile Network Operators
MNP	Mobile Number Portability
MOC	Ministry of Communications
MP	Member of Parliament
MVTS	Money or Value Transfer Services
NABCO	Nation Builders Corps
NCA	National Communications Authority
NDC	National Democratic Congress

NDPAS	National Digital Property Addressing System
NGO	Non-Governmental Organization
NHIS	National Health Insurance Scheme
NIA	National Identification Authority
NIMC	National Identification Management Commission (Nigeria)
NIS	National Identification System
NIST	National Institute of Standards and Technology
NPP	New Patriotic Party
NRC	National Redemption Council
NRC D	National Redemption Council Decree
NSC	National Security Council
NSCS	National Security Council Secretariat
OAS	Organization of American States
OECD	Organisation for Economic Co-operation and Development
OGM	Office of the Government Machinery
OMR	Optical Mark Recognition
PIN	Personal Identification Number
PKI	Public Key Infrastructure
PNDC	Provincial National Defence Council
PRAAD	Public Records and Archives Administration Department
S4D	Surveillance for Development
SDGs	Sustainable Development Goals
SICM	Système Integre de Controle Migratoire
SIM	Subscriber Identity Module
SMS	Short Message Service
SSNIT	Social Security and National Insurance Trust
STRANEK	Strategic Thinkers Network
UN	United Nations
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WURI	West Africa Unique Identification for Regional Integration and Inclusion

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Dedication

I dedicate this study to the precious women in my life: my mother, Ama Gyamfua; my wife, Charlotte; my daughter, Abena; my sisters, Elaine, Anita, Cynthia and Charlene; and my other mothers, Mam C, and Dr. Linda Darkwa. It has been a long journey, but each of you make it worthwhile.

Chapter One

BRINGING SURVEILLANCE INTO DEVELOPMENT AND DEVELOPMENT INTO SURVEILLANCE

Introduction

In surveillance studies, there has been a strong debate about how to characterize or think about the implications of surveillance systems. Scholars such as David Lyon (2018) argue that surveillance systems could be for ‘care’ or for ends that promote the wellbeing of society and its members. Other scholars such as James Harding (2018) oppose Lyon’s perspective on the basis that surveillance is irredeemably dangerous and any argument that it could be used for care will only be making excuses for systems that constitutively have adverse implications for society and its members. Despite Harding’s view, there is a continuous clamor by local and international actors for surveillance-oriented identification systems in Global South¹ countries in the name of development. I see such calls for, and adoption of surveillance-oriented systems as reflecting a recognition or assumption of the welfare or care potentials of surveillance. How these surveillance-oriented identification systems in Global South² countries are justified or critiqued by state, non-state, local and international actors suggest a certain re-orientation in approaching development.

In this study, I seek to understand the increasing place of the development narrative in policy debates about surveillance in Global South countries. How is development, as an objective, being used to justify surveillance systems and practices? Also, what are the implications of situating development in policy debates about surveillance? I use ‘surveillance’ as David Lyon (2007:14)

¹ As much as possible, I use the two categories of Global South and Global North to classify states. I prefer these two constructs for being relatively less value-laden and evolution-centric. While the term Global South attracts criticisms especially for blurring out nuances amongst countries (Toshkov, 2018), it is to me, the better option compared to others such as ‘Third World’, ‘developing’, or ‘poor’ which heavily center economic and cultural hierarchies amongst states and regions, but also lacks the solidarity that ‘Global South’ engenders amongst countries in that category, at least, in the postcolonialism literature (Clarke, 2018; Mahler, 2017).

² I use Global South to denote the category that most of the countries seeing recent emphasis on, and investments in citizens identification systems belong. See for example, the list of countries the World Bank’s ID program has been involved with here: <https://id4d.worldbank.org/country-engagement>. However, I note and accept that there are historical and institutional nuances across these countries that could peculiarly shape their adoption of, and debates around citizen identification systems, even as the broad goal of development remains similar.

has defined it: “the focused, systematic and routine attention to personal details for purposes of influence, management, protection or direction.” Admittedly, the projects discussed in this study are not officially framed by their promoters as ‘surveillance’ projects. However, practically, these projects enable or enhance the legibility of society and citizens, and consequently deepen their ‘surveillability’ by the state and other actors.³

Across Africa, a casual scan reveals the increasing number of state-sanctioned surveillance-oriented projects in recent years, including civil registries, national identification systems, passport registries, voter databases and subscriber identity module (SIM) registration systems. For instance, Privacy International (August 2019) reports that only two African countries have not put in place laws that make SIM registration mandatory. Also, over 30 African countries have adopted biometrics-based voter registration and verification systems (Privacy International, November 2019). Somaliland, the small and ‘newest’ African state went a step further by becoming the first country to use iris recognition in a general election (Burt, 2018).

Many African countries are busily putting in place biometric and smart national identification cards. The mega French identification and security firm, Thales (2020) claims that over 60% of African countries are “planning to launch or refresh their identity program in the next two years.” International development actors, such as the World Bank Group⁴, International Telecommunications Union and the Bill and Melinda Gates Foundation are supporting the adoption of biometric and smart card systems in African countries. The World Bank (n.d.) through its Identification for Development (ID4D) program is directly involved with promoting new citizen identification and civil registration systems in at least 24 African countries. This includes the World Bank sponsored ‘West Africa Unique Identification for Regional Integration and Inclusion (WURI)’ project seeking to enhance access to national IDs in La Côte D’Ivoire and Guinea (World Bank, 2018).

³ I also use surveillance-enhancing in certain parts of this study on the basis that actors like the state typically have a surveillance system in place and that the new systems being promoted expand the existing surveillance potential. In other words, society may not be very legible to the Global South state but it does not mean the state is blind.

⁴ The World Bank will be simply referred to as the World Bank in the rest of this dissertation.

The ID4D program promotes effective identification systems as crucial for the attainment of the Sustainable Development Goals (World Bank, 2017). Similarly, Nigeria's Vice President, Yemi Osinbajo justifies Nigeria's investments in a digital identity ecosystem as important for the "socio-economic transformation of the country" as state institutions as well as the private sector "will leverage on it, for sustainable development and good governance" (NIMC, 2018). Kenya's 'Huduma Namba' is similarly framed as a national identification database that is needed to fulfill President Kenyatta's "development blueprint, The Big 4 Agenda" — security, housing, food and healthcare — and also serve as "a reference point for other national development initiatives" (MICNG, n.d.).

By investing in surveillance-oriented identification technology in the pursuit of development, the other resulting trend is the globalization of surveillance. The 'development' motivations underlying surveillance-oriented projects in many African countries and other Global South countries may be distinct from other parts of the world. For instance, Global North countries tend to have stronger addressing systems, civic registration systems, networked databases, transaction tracking systems and broader internet accessibility. In this context, frames such as 'everyday surveillance' (Lyon, 2002; Staples, 2000), 'surveillance society' (Lyon, 2013; Gilliom & Monahan, 2012; Wood et al., 2006; Gandy Jr., 1989), 'network society' (Castells, 2004), 'liquid surveillance' (Bauman & Lyon, 2013) and 'transparent lives' (Bennett et. al, 2014) mostly promulgated by Western scholars make more practical sense in Global North contexts where persons can be more easily tracked. While the foregoing concepts and frames may each be peculiar, they are connected by the thesis of hyper surveillance enabled by the prevalence, proliferation and embeddedness of digital technologies particularly in Global North countries. The massive growth in data generation and the associated digital footprints that result from surveillance systems in Global North countries spur investments by state and corporate actors to better keep pace with, and make sense of, the data generated in a more sustainable and efficient manner. Hardly is the foregoing narrative framed by actors in the Global North as one about 'development'. After all, countries in the Global North tend to be deemed as 'developed.'

On the other hand, societal legibility tends to be relatively weak in many Global South countries and as such, citizens and residents in these places are not as visible to the state. The foregoing

assertion is backed by Lee and Zhang (2016) who have drawn on census accuracy measures to compare state legibility among countries and sub-regions. Lee and Zhang (2016: 118) define legibility as “the breadth and depth of the state’s knowledge about its citizens and their activities” and conclude that the legibility scores in countries generally match scores for state capacity. Thus, I surmise that contemporary citizen identification projects in the Global South may be more foundational and primary in establishing, identifying and monitoring citizenship as a way to increase state capacity to deliver services and engage in other activities that might improve the lives of citizens. In this study, I am interested in how this supposed dearth in surveillance infrastructure is framed as a source of state underperformance, and the consequent development challenges in Global South countries and how the foregoing then are used by various actors to justify state-led surveillance-oriented projects — what I call ‘surveillance for development’ (S4D).

The ‘surveillance for development’ frame has rarely been directly interrogated in surveillance studies to the extent that I do here. Thus, my research contributes to the budding literature on the increasing emphasis of surveillance systems in development policy and practice. In addition to the state and its institutions, the development frame naturally invites interest from civil society and international actors such as technology companies, inter-governmental organizations, regimes, non-governmental organizations (NGOs) and foreign governments. As these actors tend to have varied motivations and understandings of what development is and how it should be pursued, their interest in surveillance-enhancing projects in developing⁵ countries are marked by contestations. These stakeholders may have different answers to questions such as: how relevant is this project? What should constitute the project? How should the project be implemented? These differences have practical consequences for the eventual nature and even success or otherwise of state identification projects. As Scott (1998) and Migdal (2001) have argued, the original policy intentions of the state could be amended upon engagements with civil society actors, depending on the strength of the state, or of civil society. Beyond development as an objective/end/goal, I am

⁵ The label ‘developing country’ often elicits the fair question: ‘developing in terms of what?’. As there are contentions about the meaning of development, classifying countries based on a particular — often economic — indicator is controversial (Nielsen, 2011:3-4). While admitting this difficulty, where I use ‘developing countries’, it is only in an economic/industrial sense and to reflect the dominant language used by the stakeholders my study focused on. In this sense, ‘developing country’ is used as a synonym for low- and middle-income economies.

also interested in how prevailing institutional dynamics and realities in Global South countries shape the state's pursuit of a more visible or legible society.

Problem Statement

Increasingly, governments in Global South countries are embracing surveillance-oriented systems in the name of development (Hosein & Nyst, 2013). Major international development actors are supporting this approach as seen for example, in the World Bank's ID4D program. The logic has been that technologies such as biometric identification systems will make societies and citizens more legible to the Global South state, and in turn, enhance the capacity of the state and its institutions in delivering development (Gelb & Clark, 2013). It is believed that once governments in Global South countries can build accurate databases on their citizens and find ways to better monitor citizens and residents, these governments can broaden the tax net, and also efficiently distribute public goods and services (Lee & Zhang, 2016).

The point of departure for this study is that the foregoing logic promotes the proliferation of surveillance systems in Global South countries. Yet, while surveillance studies literature speaks to the global spread of surveillance and its dynamics, it rarely approaches the phenomenon from the perspective of development. This silence, or gap in surveillance studies debates is likely because the Global North is at the center of surveillance studies and the idea of development as a goal is often reserved for Global South states. Thus, surveillance studies literature mainly discusses the proliferation of surveillance systems in the context of rising security threats especially post 9/11, and the Snowden revelations in 2013 (McQuade, 2016; Lyon & Haggerty, 2012; Webb, 2007) and the spread of capitalism (Zuboff, 2019).

Where the spread of surveillance in the Global South is discussed in surveillance studies, there is the tendency to frame it as proof of, or a move towards, authoritarianism (Akbari, 2021; Grinberg, 2017). But what about the resort to surveillance systems by Global South states in the name of development, particularly in countries where some substantive form of democracy exists? The trend should allow us to limit the scholarly emphasis on authoritarianism, to rather stress, research and think through the peculiarity of Global South states and their partners heralding surveillance-oriented systems as key to development. What does the trend mean for surveillance as a concept

and practice? Is surveillance legitimized by the development narrative? I address these questions in this study.

Admittedly, there is a growing literature outside of surveillance studies on how identification or registration systems could promote development in Global South countries (Effah et. al, 2020; Al-Khoury, 2014; Eniayejuni & Agoyi, 2011). Here, proponents highlight the utility of technologies that make society and citizens more legible, and boost the capacity and efficiency of the Global South state. However, I have two concerns. First, development concerns: state and society all have long-standing institutions in terms of dominant logics, objectives, actors and power flows. Historical contestations about citizenship shape citizen identification projects in many Global South states. Yet, proponents for identification systems in the Global South tend to center the usefulness of these systems and hardly indulge questions on how the traditional development institutions, state and society shape the debates about, and eventual nature of, the systems being promoted. I am interested in such interactions between existing institutions and surveillance projects in the Global South, and the implications of such.

Second, surveillance is not just about identification as it has implications for society including statist control, self-disciplining by citizens, social sorting, the commodification of personal data, and the so-called algorithmic oppression (Noble, 2018). Thus, this study is also an opportunity to apply critiques by surveillance scholars to development pursuits in Global South countries. I focus on three major citizen identification projects being undertaken by the state in Ghana: national identification system; national digital addressing system; and SIM registration. I focus on the perspectives of state and non-state actors in policy debates about the three projects, to understand stakeholders' justifications and contestations as they relate to the utility of surveillance systems to development.

Research Questions

1. What are the implications of framing surveillance systems as necessary for development?
Is surveillance legitimized by the development narrative?
2. What does 'surveillance for development' mean for the nature of the state, citizenship, and state-citizenship relations in the Global South?
3. What is the nature of debates about state-led surveillance projects in Ghana?

- a. How are state-led surveillance projects in Ghana rationalized by the state?
 - b. How do non-state actors, specifically civil society organizations, media, private corporations, support or contest state-led surveillance projects?
 - c. How do international actors — corporate and intergovernmental — influence state-led surveillance projects in Ghana?
4. How do existing political, economic institutions and historical contestations about citizenship shape state-led surveillance projects in Ghana?

Significance of Study

This study is a break from understanding the adoption of surveillance-oriented systems in the Global South as merely a factor of political repression. The study is framed to understand surveillance contestations in developing countries as development contestations: how to develop, what to develop, and who can be a part of development-related decision making, and benefit from the fruits of development. This approach deepens the complexity and sensitivity of surveillance policies in Global South countries as it permits deeper responses to the question, ‘what is this a question of’? Is it just a matter of curing a ‘partially blind’ state or it is also about re-defining citizenship as a status and experience differently or similarly for members of different societal groups. If the trend is about re-configuring citizenship, how much is this about a quest for global visibility/citizenship? Also, is the trend merely another example of a Global South state following the supposed modernization trajectory of Global North countries and bodies? And, what is the influence of institutional path dependencies? Thus, I move away from merely envisioning the adverse implications of surveillance in terms of the threat to privacy.

Methodology

This study utilizes a qualitative methodology. I prioritize contextual richness in understanding and explaining surveillance and development in Ghana. I intend that my eventual conclusions provide a useful basis for assessing and analyzing the increasing citizen identification systems in the Global South. Thus, I draw on the perspectives of multiple actors including state, civil society, corporate and international actors, to understand their justifications and contentions about state-led surveillance-oriented projects and associated development narratives. In using Ghana as a case study, my larger goal is to appreciate the various ways of thinking about the pursuit of surveillance-oriented systems in the pursuit of development. Notwithstanding my deference to difference, I

believe that there are lessons in the Ghanaian case for Global South countries especially in terms of appreciating the exclusionary dangers of state identification systems and resolving them.

Methods

I utilized a case study approach for this study. As defined by Gerring (2004: 342), a case study is “an intensive study of a single unit for the purpose of understanding a larger class of (similar) units.” The case study approach helps to generate an “in-depth, multi-faceted understanding of a complex issue in its real-life context” (Crowe et al.; 2011: 2). The case study approach permitted a focused and detailed understanding of citizen identification in Ghana, and I use such detail to frame and characterize the growing idea that surveillance-oriented systems are necessary for development in Global South countries. Thus, in the context of Stake’s (2003: 136-7) case study schema, I utilize both an intrinsic and an instrumental approach.

I chose Ghana as my case study for the following reasons. First, Ghana is generally representative of the type of Global South state I set out to understand; a state with a reasonable set of democratic attributes. I note that Global South countries are nuanced in terms of their peculiar insitutional realities as they relate to identification systems and as such, their comparability to Ghana is limited to the extent that recent identification systems are being justified on the basis of development. My choice of a country with democratic attributes is a direct response to scholarly arguments in surveillance studies that generally frame state-led surveillance projects in the Global South as a pursuit of citizen repression. Often such scholarship in surveillance studies are based on Global South states that can be labelled already as authoritarian or autocratic. Thus, my choice of Ghana responds to the puzzle of the adoption of surveillance systems in Global South states that are not authoritarian. This way, I could focus more on other possibly ‘caring’ rationales for adopting surveillance-oriented identification systems in the Global South.

The Freedom in the World Report for 2020, compiled by Freedom House classifies Ghana as ‘free’ with a score of 82 out of 100.⁶ In the report, Ghana scores 35 out of 40 points for political rights and 47 out of 60 points for civil liberties. Ghana has a reasonable level of democratic attributes including periodic elections since 1992 that have seen three party turnovers; a constitution that

⁶ <https://freedomhouse.org/country/ghana/freedom-world/2020>

explicitly promotes human rights, and an active and generally free media and civil society space. Ghana also has a generally independent judiciary and a multi-party legislature. Ghana's democracy allows some reasonable level of open inter-actor debates and contentions, which is crucial to a study such as mine that is interested in how various stakeholders justify or oppose surveillance projects. Second, Ghana fits the example of a country deemed to be a 'developing' economy and is seeing major investments in surveillance-oriented systems by the state and other local and international actors. Ghana's status as a 'developing' economy and the country's increasing openness to identification and surveillance systems encourage the relevant debates, actors and projects I needed for this study.

I traced the historical and institutional realities that shape the adoption of the National Identification system; SIM card registration; and the National Digital Property Addressing System in Ghana. I explore the history and legal basis of each of the projects, as well as the related contentions of key stakeholders including state, civil society, media, private corporations and international actors (both inter-governmental and corporate). I chose the three projects due to the emphasis governmental actors, especially, have placed on them as needed for development in Ghana. Also, the three projects reflect the kind of surveillance-oriented technology that is central to this study. The national identification system for instance is an electronic database that will hold the personal information of citizens including their biometric details. The digital addresses are also meant to tie citizens to specific locations accessible to the state and other parties at a click. SIM registration also ties citizens to specific phone numbers which then makes citizens trackable by various state agencies.

I undertook field research in Ghana from January to May 2019. I conducted archival research, document analysis, and 11 key-informant interviews. The archival research mostly involved studying the British colonial government's records, as well as post-independence newspapers. The colonial records consisted of correspondences between governmental actors including the police; letters from citizens to the colonial administration/police and vice versa; minutes of meetings of governmental institutions and some committees. These colonial documents were mostly from the late 19th century to the end of the 1940s generally matching the period of formal colonization of Ghana, then the Gold Coast. In studying citizen identification systems in post-colonial Ghana, I

mostly drew on newspapers, and legislations from the 1950s to the end of Ghana's Third Republic in 1992.⁷ The legislations provided a good sense of laws and the rationale behind them, while the newspapers, supplemented by scholarly works that cover the said period, allowed me to follow governmental and non-governmental positions on policies. The aforementioned sources informed Chapter 3, which traces the roots of citizen identification systems in Ghana mainly from colonial times to the very early 1990s. I used the archival data from the Public Records and Archives Administration Department, the National Records Department and the library of the Institute of African studies, all in Accra, Ghana, to construct a history of citizen identification systems in Ghana with emphasis on governmental policy choices. I draw on more contemporary documentary sources in discussing the first decade of the Fourth Republic.

I conducted 11 interviews with representatives of organizations and agencies that are key stakeholders in Ghana's identification space, as well as with individuals with expertise and familiarity with citizen identification projects in Ghana. My institutional interviewees are actively engaged with one, two or all of the three identification systems I studied, at the policy and/or implementation level. Key-informant interviews allowed me to better understand the positions of the policy, the civil society and corporate communities as they relate to the identification projects I studied. The interviews also allowed me to probe and seek clarification on publicly available organizational perspectives on identification projects. The interviews were based on a semi-structured format to ensure that my main research questions could be addressed, but also permit me to follow up on useful insights that came up during the interviews. The interviewees represented the following bodies: Ministry of Communications; National Identification Authority; National Communication Authority; Ghana Chamber of Telecommunications; Ministry of Gender, Children and Social Protection; Vokacom; and IMANI Ghana. I also interviewed a former high-ranking executive of Ghana's Data Protection Commission; a technical officer at the telecom company MTN; and a journalist⁸ with Graphic Communications, Ghana's leading print media

⁷ The focus on newspapers was mainly influenced by archive laws in Ghana that protect certain documents from being made public for thirty years. Worse, even when 30 years passed, it could take a very long time for documents to be moved, processed and filed. Generally, there was also a challenge with the labelling of documents. The kind of terminologies I use in this study such as technology, biometrics and surveillance are hardly found in the Ghana archives and that made searching more difficult.

⁸ I interviewed this particular journalist as he has been the main reporter for Daily Graphic and Graphic Online outlets on the National Digital Property Addressing System. In a country with few specialist reporters on technology, I approached this journalist based on his continued engagement with the NDPAS.

outfit. I also had an email-based interview with Cryptovision, a German company providing software solutions for the Ghanacard project. I have not named any of my interviewees as they mostly represented their organizations. Those I interviewed in their individual capacities were aware that they would be treated anonymously in this study to protect them from any potential blowback. I have triangulated interviewee responses with publicly available institutional narratives to fully appreciate the positions of various stakeholders.

To undertake document analysis, I assessed official and non-official records and publications on citizen identification in Ghana in order to situate the reasoning of various stakeholders. These documents mainly covered the period from the beginning of Ghana's Fourth Republic in 1992/3 to present. However, as noted earlier, a number of documents from the 1970s to 1992 were also drawn on for the historical chapter. I accessed primary documents such as legal frameworks, court rulings, parliamentary Hansards, official correspondence, press releases and agency reports. I also drew on secondary sources such as newspapers, web articles, news reports, academic publications and social media. Overall, the documentary sources were very significant in tracking debates, knowing the 'original' positions of actors, and also in accessing voices that I could not personally interview.

I have aimed to understand and document the perspectives of state, civil society, the media, private technology firms and international actors in this study as these actors in varying degrees are critical stakeholders in the framing, adoption and implementation of citizen identification policies in Ghana. Thus, the four set of actors are ideal for appreciating how citizen identification systems are promoted and critiqued. Again, while state, civil society and local private technology firms provide me with local perspectives, the international actors allowed me to explore the external influences that shape citizen identification projects in Ghana. In order to capture the institutional dimensions of such international influences, I considered the stated positions of external actors and also considered the place of external frames and systems in shaping the nature, urgency and even possibility of citizen identification systems in Ghana. This approach allowed me to then appreciate the institutional dimensions in the engagement by both local and external actors. While I note the popularity of global platforms such as Google, Facebook and Whatsapp in Ghana, this study

discusses them only to the extent that they appear in the public debates about state-led identification projects in Ghana.

During the field research, I participated in a number of informal conversations and reports with persons including cab drivers, and persons registering for, or using one ID or the other to inform my overall understanding and analysis. These informal engagements were mostly unplanned but once they began, I was generally interested in personal understanding and appreciation or otherwise of particular ID projects and the processes surrounding enrolment and use. These engagements were not run as interviews but as conversations to allow people to share their perspectives freely. As this study was designed to prioritize institutional perspectives, such personal experiences and anecdotes proved to be a valuable resource in accessing and reflecting on street-level concerns, doubts, fears and hopes about the three identification systems.

Data Analysis

For each of the citizen identification projects studied, I was interested in their legal or statutory basis, related policy provisions and the inter-stakeholder debates about them. The major area of analysis were the inter-stakeholder debates about each identification system. Here, I generally utilized a thematic approach to group the justifications for, and arguments against, each project. I was interested in how ‘development’ was framed by various actors and especially whether they followed the narrow economic growth logic or went further. Also, I analyzed the data for the institutional dimensions and influences in these debates. I was also interested in the choice of language or frames by policy proponents and opponents. In thinking about the reasoning of various actors, I paid attention to their potential sources as well as the other logics they consequently ignore.

Concepts

For this study, I draw on a mix of concepts and ideas as discussed in Chapter 2, to guide my analysis and proposed surveillance for development frame. The key ideas and concepts I draw on are mainly advanced by David Lyon and James C. Scott and include surveillance, identification as surveillance, simplification, high modernism and legibility. As indicated earlier in this chapter, I share the definition of surveillance which David Lyon (2007: 14) provides: “the focused,

systematic and routine attention to personal details for purposes of influence, management, protection or direction.” I prefer this conception of surveillance due to its neutrality and marked shift from popular imageries of surveillance that often neglect its ‘caring’ potential and concentrate on its dangers. I accept that surveillance systems could be used positively or negatively. This is how my frame, ‘surveillance for development’ is not an oxymoron but an actual possibility.

I also draw on David Lyon’s (2009) conception of identification systems as surveillance systems. Lyon advances that modern-day identification systems are very different from the historical idea of an identity document in that the former is designed to have digital components tied to interoperable databases. Thus, identification systems today are accessible at different locations, at all times and make continuous tracking of a person’s personal information possible. This conception of identification as surveillance is important as it permits an understanding that digital and biometric identification systems are practically surveillance tools. It is on the foregoing basis that projects that are mostly framed by the state as identification will fit in my narrative that they are practically a pursuit of surveillance for the purposes of development.

Also, James C. Scott (1998) has been a main source of inspiration for this study. In the book, Scott famously argued that the state’s capacity is stronger where the legibility of society is stronger. Scott presents four interrelated concepts: high modernism, simplification, legibility and civil society. High modernism refers to the undiluted faith in the usefulness of science and technology in resolving social challenges — what Scott also calls ‘techne’. Scott’s explanation of high modernism as marked by “a supreme self-confidence about continued linear progress, the development of scientific and technical knowledge, the expansion of production, the rational design of social order...” reflects the crux of modernization theory (Scott, 1998:67). Importantly, Scott situates ‘techne’ in opposition to ‘metis’; locally-relevant knowledge, and argues that often, the resort to science and technology sideline crucial contextual details and knowledge forms. Such sidelining of metis often ends up undermining the success of the state’s legibility-seeking efforts.

For this study, I have approached techne as the technologies underlying the Ghanacard, SIM registration and the NDPAS especially in terms of their surveillance components. These surveillance-oriented technologies are framed particularly by state actors in Ghana as must-have

if Ghana is to develop, and this is in line with how Scott characterizes the hopes policy makers tend to place on modernism. On the other hand, *metis* in the context of this work, refers to the historical and institutional dynamics that practically shape the nature, and success or otherwise of the three identification systems the state is pursuing. As Berman and Tettey (2001: 1) note for example, computerization has not generated the expected transformation of public administration in African countries due to institutional realities such as the “very limited technical capabilities of the bureaucracy; authoritarian decision-making processes under the control of generalist administrators; and the predominance of patron–client relationships.” Due to similar institutional dynamics, the introduction of technological systems has hardly achieved the expected successes in the operations of governmental agencies in Ghana (Tettey, 2000; 1997). Thus, as Doolin (1998) advises, I approach the triumphalist claims about technologies such as the potential citizen identification systems with a critical lens on how it may not work at all, or not work for all due to factors including institutional realities.

Scott’s second concept, simplification, is the first step in drawing on science and technology to generate or pursue the ‘orderliness’ that characterizes a legible society. It encompasses the techniques involved in “creating a population with standardized characteristics which will be easiest to monitor, count, assess and manage” (Scott, 1998: 57). Scott also describes simplification as “shorthand fictions” that often relate only to the aspects of social life that are of “official interest” to the state; are written or numerical; typically, static; and impersonal aggregates (Scott, 1998: 55-6). A basic example of simplification is the use of house numbers and in more recent times, the use of citizen or immigrant identification numbers. The goal is to reduce complex human experiences into a consistent and easily discernible model, in order to boost the legibility of society to the state. Thus, with Ghana’s identification projects, the state seeks to use technology to provide a uniform and consistent basis for creating geographic grids and also generate profiles of citizens that are intelligible to the state and easier to track.

Scott argues that in its very raw form, human societies, due to their naturally-occurring chaos, disorder, spontaneity and heterogeneity, tend to be unintelligible or illegible to the state (Scott, 1998: 47). Such inability to properly read society and predict it, undermines the capacity of the state to govern society. Thus, the making of the modern state is “inconceivable” without a legible

society (Scott, 1998: 49). By legibility, Scott simply means a society which is transparent and visible to the state. In other words, the state can largely see what is going on in the society: who is a citizen; who is a foreigner; who has immigrated; who has emigrated; who lives where; who works where; and who is doing what. Scott argues that notwithstanding the potential dangers of a highly visible society, a visible society is critical to state capacity. In sum, for the state to carry out its functions it must see society clearly.

The fourth leg of Scott's conceptualization is tied to civil society. Indeed, Scott shows no naivete about how a legible society with a strong state could lead to authoritarianism rather than an improvement in the human condition. He argues that a civil society that is not prostrate is needed to ensure that the legibility-seeking activities of the state are kept in check and do not foment realities that are antagonistic to citizenship. I place a lot of emphasis on civil society perspectives in this study. The generally free civil society space in Ghana means there is an opportunity to understand how civil society co-constructs (with the state) or undermines identification institutions. As shown later in this study, while civil society actors have persistently provided critical perspectives on citizen identification systems in Ghana, they must not necessarily be 'prostrate' to agree with the state's justifications for surveillance-oriented systems.

All told, Scott's concepts support suggestions that the citizen identification systems I focus on in this dissertation, can enhance the legibility of society to the Ghanaian state, and in turn, enhance the capacity of the state to lead and deliver development. Also, Scott's framework permits suspicions and critiques of the aforesaid premise, in terms of how the three projects may improve state capacity, but not necessarily enhance development due to an overemphasis on 'techne' and also, the limited influence of civil society.

I view the citizen identification systems being pursued in countries like Ghana as practically co-constructions between the state, civil society actors, private sector, and inter-governmental organizations. Thus, my study seeks to understand the logics of multiple actors, and to appreciate the agency of both local and international actors even as the state leads the creation of a legible society. Thus, unlike Scott, a point of departure for me is how state and non-state actors, domestic and international, concurrently attempt to influence the state's legibility-seeking projects. In this

sense, it must not be ignored that the legibility-seeking pursuits in the Global South must contend with different pressures including development institutions and international standards. Secondly, Scott mostly drew on authoritarian states in proving why projects meant to improve the human condition fail. By studying the case of a democratic country, the multiple voices in efforts to create a legible society are more likely and cannot be ignored. Tied to this, the question of whether stronger state capacity and societal legibility will lead to authoritarianism or development may need some revision, in favor of questions of what kind of development, and for whom. In other words, failure and authoritarianism cannot be assumed as automatic ends of state-led surveillance-oriented projects in the Global South. Overall, I am interested in how the state's ability to 'see' is increasingly framed as necessary for development by local and international development actors, and the related implications.

Conclusion

In the next chapter, I review the literature on state surveillance in the Global South and show the dominant emphasis on authoritarianism. I discuss James Scott's (1998) exposition on the utility of a legible society to state capacity, and state building but also highlight the fact that international development as created post-World War II means that state-building in the Global South state is different from what pertained with the 16th century modern state. I also review works that propose identification and registration systems as panacea for development challenges in the Global South. In response to these sets of literature, I propose the 'surveillance for development' (S4D) frame as a way of approaching the specificity of situating surveillance in development discourses and practices.

In Chapter 3, I delve into the history of citizen identification systems in Ghana, beginning from the colonial era to the late 1980s. Here, I draw on history to show some long-standing institutional realities that shape more contemporary efforts by the Ghanaian state to identify and monitor its citizens. I also discuss how certain citizenship and immigration policies in the colonial era meant that the Ghanaian state upon independence was constituted by a mix of ethnicities and nationalities such that the question of who was a Ghanaian had an unclear answer. Such tensions and uncertainties about citizenship had been deepened by various choices made by Ghana's first post-independence government and those that followed. Eventually, I show that in terms of citizen

identification, Ghana may have a legacy of ‘non-legacy’ which shapes present day efforts by the state to identify citizens.

I begin the assessment of my empirical cases in Chapter 4. In this chapter, I lay out various stakeholder arguments in favor of, or against the state’s efforts to register the owners of SIM cards. I show the initial place of motivations such as stopping the spread of false news, tracking criminals and abusive anonymous callers and texters. I then show how over time, more economics-centered arguments have been resorted to by promoters of the SIM registration regime, such that SIM registration has become a key component in the pursuit of a broader formal economy and financial inclusion. Civil society actors have however raised concerns about the potential for arbitrary state surveillance and the invasion of privacy.

Chapter 5 explores stakeholder debates on Ghana’s National Digital and Property Addressing System (NDPAS). The NDPAS is a state project that seeks to provide a digital address, practically GPS coordinates, for physical residential and non-residential structures in Ghana. The project seeks to pin citizens to digital addresses as an easy means of tracking citizens. Here too, I show how arguments about security, efficient emergency services and various economic reasons have been advanced to back the project to further prove how development is being used to extend the surveillance capacities of the state.

Ghana’s national identification project is examined in Chapter 6. This is the most important of the three projects as it is establishing a proof of citizenship. In discussing the various positions of stakeholders, I show the quest to use the Ghanacard to resolve the longstanding lack of clarity concerning citizenship in Ghana, and also the framing of the national ID card as central to Ghana’s economic development pursuits. Civil society bodies have raised concerns including how some (probable) citizens have been turned away from registration centers on the basis that they may not be citizens.

The final and concluding chapter discusses all the three citizen identification projects and highlights the trends I find in the stakeholder debates about them. Despite the adverse surveillance capabilities of the three projects, they still enjoy general support amongst state and non-state

actors. I point out the dominant economic logics that motivate these projects and how they are tied to the idea that Global South states' pursuit of development must embrace digital and biometric identification systems. I am interested in how the idea that surveillance is necessary for development is increasingly getting institutionalized as 'the way to develop', and also interested in the implications for surveillance as well as the distribution of the fruits of development if it actually results.

Chapter Two

TOWARDS SURVEILLANCE FOR DEVELOPMENT? — A LITERATURE REVIEW ON SURVEILLANCE SYSTEMS AND THE GLOBAL SOUTH

Introduction

While there is budding scholarship on the role of surveillance technologies in the Global South, there tends to be a significant emphasis on authoritarian and repressive uses of such technologies. Yet, there is growing evidence of surveillance technologies being promoted in Global South countries in the name of development. Positively, there have been some scholarly efforts to pluralize the potential utilities of state surveillance in Global South countries beyond authoritarianism. My study follows this second tradition in arguing that various stakeholders believe that state surveillance is necessary for development.

In this chapter, I review and attempt to interrelate the academic literature on surveillance on one hand, and development on the other, as they relate to the Global South. However, conceptually, the possibility of a surveillance for development narrative and practice must navigate the fact that state-led citizen identification projects, despite their digital and biometric features, are not framed by the state as surveillance. This chapter is divided into four main sections. I begin by reviewing scholarly works that highlight the evolution of modern-day identification systems into surveillance systems.

Next, I review the literature on ‘surveillance as care or control’ in order to situate the paradox and possibility of a ‘surveillance for development’ narrative. This is particularly important for critics who will immediately write off ‘surveillance for development’ as legitimizing the excesses of surveillance practices. Third, I review the literature on surveillance and identification systems in the Global South, and highlight scholars’ traditional emphasis on authoritarianism as the goal for such projects. I draw on studies that move away from authoritarianism-centered narratives to relatively ‘progressive’ ends like deepening citizenship and social welfare. I do this to show the

possibility of thinking about surveillance and identification systems in the Global South without being caught in the parochial authoritarianism frame.

Fourth, I review the development literature focusing on development narratives and their power dynamics in order to explore core debates and position my work within scholarship that situates policy choices in the Global South in the context of the growing power of (international) development as an industry with accompanying institutions. The arguments of post-development scholars are particularly useful in highlighting the knowledge, power and evolutionary dynamics in development discourses and practices. Drawing on such thinking, I am able to argue that a relatively new emphasis in development — surveillance for development — is being promoted by development actors. As Gerring (1999:359) asserted some two decades ago:

It is impossible to conduct work without using concepts. It is impossible even to conceptualize a topic, as the term suggests, without putting a label on it. Any significant work on a subject will involve a reconceptualization of that subject.

In agreement with Gerring, I conclude this chapter by sketching the crux, boundaries and utility of ‘surveillance for development’ as a frame for thinking through the adoption of surveillance-oriented systems in Global South states.

Identification systems as surveillance

While an identification system may not necessarily be a surveillance system, Surveillance Studies scholarship easily glosses over the difference when analysing various electronic, digital and biometric systems. In effect, the assumption that the practical surveillance dimensions of a digital or biometric system is obvious tends to stand in the way of the need to conceptually disentangle or entangle the concepts of identification and surveillance. Positively, a few scholars have shown explicit interest in the connection between identification and surveillance. David Lyon and Louise Amoore, discussed hereafter, have been key voices in showing how modern-day identification systems simultaneously hold surveillance utilities.

David Lyon (2009) argues that identification systems are now surveillance systems. Lyon provides two main premises for his argument. First, Lyon (2009: 8-11) advances that identity should not be confused with identification. While ‘identity’ may be the actual/nominal markers of who a person

is, identification encompasses the gamut of structures and systems imposed typically by others in marking an individual. Identification is often tied to categorization (Lyon, 2009: 11). Identity and identification are thus inter-related but may also be in tension where externally imposed categories do not capture fully and correctly one's actual identity. Consequently, Lyon argues that ID cards today, for example, should be seen as 'identification cards' and not 'identity cards' as they are not just markers of one's actual identity, but may be read in the context of other categories. Second, Lyon asserts that the citizen identification systems we see today are distinct from the paper-based types preceding it. Breckenridge (2014) makes a similar argument in describing a shift from documentary bureaucracy to biometric bureaucracies. Increasingly, deeper technologies including biometrics and computing power, are being deployed to support citizen identification systems.

Consequently, Lyon argues that identification systems today are tied to platforms, systems, and social sorting. In terms of platforms, Lyon (2009: 6) advances the argument that ID systems today are being built "deliberately" to "offer a base on which to construct a variety of applications and services." As systems, ID projects are based on "the use of networked, searchable databases" (Lyon, 2009: 7). On the point of social sorting, the "searchable databases and software protocol" underpinning ID systems promote "discrimination between groups and categories of citizen" (Lyon, 2009: 15). In essence, ID projects today are practically built for surveillance. The centralization of personal data, as well as the networking and interoperability of systems mean that at any time, personal information could be gathered, checked, interpreted or shared.

Lyon adds that a key motivation for the surveillant ID systems we have today is "precaution." Present-day social sorting and profiling are supposed to work in such a way that mandated authorities can preemptively prevent harm. If the profile accompanying a person's ID leads to him/her being categorized as 'dangerous', he/she is likely to be treated as such. This is what Louise Amoore (2008: 20) calls 'governing by identity'. Amoore argues that present-day ID systems do not only record nominal details of persons, but also attach a risk value to each individual. It can then be argued that the 'risk valuation' motivations and uses associated with present-day IDs also deepen the notion that identification systems today are practically surveillance systems. Lyon and Amoore's arguments together buttress my position in this study that citizen identification systems like those I researched in Ghana, do not just identify citizens but immediately increase the capacity

of the state to monitor citizens. Additionally, the social sorting and profiling features built into these identification systems will eventually attach a risk value to each citizen.

While I accept Lyon and Amoore's core arguments, their approach to the sources and implications of present-day ID systems is mainly from a security angle, and my work departs from this approach with my emphasis on the broader concept of 'development' as a growing basis for surveillant identification systems in Global South countries. Thus, I can observe how the profiling and social sorting features of identification systems could have consequences for who becomes a citizen or not, and also for the experience of citizenship even when attained. In effect, the systems marketed as necessary for development may mean the exclusion of certain persons from accessing the fruits of that development.

Also, unlike Lyon, I do not restrict the conception of citizen identification to ID cards properly so-called. This is in response to the reality that projects such as SIM registration and digital addressing systems are also being used to mark citizens. This points to the intensity of the situation in Global South countries where mobile phones and residential addresses are being turned into forms of digital identity, and consequently, as means of identification and surveillance.

Surveillance for control or for care?

Surveillance as a concept may be losing innate neutrality as often, 'surveillance' evokes images of adverse and non-consensual intrusion by external parties. Popular representations of surveillance in terms such as the 'watchful eye' and 'Big Brother' have gone some way to deepen suspicions about surveillance. As a result, as Hong (2017) notes, surveillance scholars typically provide "negative" critiques of surveillance. Lyon, Haggerty and Ball (2012:3) similarly note "the rather one-sided" focus by surveillance scholars on "inappropriate and often hidden uses of surveillance." To Harper (2008), such emphasis on the adverse implications of surveillance is both a product, and instigator of paranoia. In this context, discussing surveillance and development, as I do in this study, may seem paradoxical.

Regarding the conflation of the adverse uses of surveillance, with surveillance as a concept, David Lyon has consistently made the point that surveillance is Janus-faced, as it can be used for control

or for care. Lyon (2008: 2) thus defines surveillance as the “purposeful, routine, systematic and focused attention paid to personal details, for the sake of control, entitlement, management, influence or protection.” Thus, while surveillance systems may eventually not be neutral in terms of use, negative implications must not be assumed. Using surveillance tools to improve national, group or personal security cannot be deemed as inherently bad, for example.

To Lyon (*ibid.*), one way to avoid the trap of persistently framing surveillance in dystopian terms is to see surveillance as “a product of modernity”: a way of organizing actions and processes in pursuit of efficiency, speed and coordination. Lyon (2007) further argues in favor of drawing on “notions of care” developed by feminist theorists as “constructive counterpoints” to the dominant ‘surveillance for control’ arguments.

Overall, Lyon’s constant reminder of the ambiguity of surveillance encourages a more careful and open-minded examination of the utilities of surveillance systems. Also, it is within such a holistic mode of analysis that a fuller appreciation of state and non-state demands and support for surveillance practices and tools can be appreciated. Lyon’s situation of surveillance as a feature of modernity also encourages an assessment of the place of surveillance in social change. However, this opportunity has mainly been exercised in understanding the evolution of the modern Western state and less so, about the modernization pursuits of post-colonial states, like Ghana.

Texts on the ethics of surveillance present ways of reaping the positive utilities of surveillance while mitigating its excesses. Gary Marx (2012: xxii) argues that “it could be as irresponsible not to use it [surveillance], as to use it wrongly.” Marx (1998: 171) calls for escaping the trap of the reified dangers of surveillance, in favor of assessing peculiar surveillance practices in terms of “means, the context and conditions of data collection, and the uses/goals.” In the end, such a case by case assessment should center on how a specific surveillance practice or system does/will erode human dignity, or not (Marx, 1998: 183).

Allen (1998) adds that while privacy is important, it is “not everything”, as surveillance could result from “genuine obligations of caretaking, defense of others or self-defense.” Drawing on the Just War theory, Macnish (2014: 143) also advances the concept of ‘just surveillance’: that

surveillance may be acceptable where there is a just cause, correct intention, necessity, proportionality, formal declaration, authority, and discrimination between legitimate and illegitimate targets of surveillance practices. In response to Macnish, Palm (2014) calls for continuous assessment of originally justified surveillance, leaving room for proscription or limitation when the necessity for surveillance changes over time.

Marx, Allen, Macnish, and Palm's analysis may fit Hong's (2017) vision of a more 'positive critique' of surveillance where creative alternatives of surveillance forms are centered. For Hong, such creative alternatives could focus on the agency of the surveilled in navigating surveillance systems. Such an approach could be illustrated with Eric Stoddart's (2014) (in)visibility concept which shows how persons and groups consciously, fluidly and strategically permit their presence or absence within the vision of the surveiller. I have also argued elsewhere that surveillers such as the state may even pragmatically choose to see or not see citizens, even where a surveillance system has been installed (Oduro-Marfo, 2018).

I do not only see surveillance as dangerous but also recognize that surveillance systems could be used for 'care' or for 'control', or at least framed as such by stakeholders. The idea of 'surveillance for development' should then be seen as a potential 'surveillance for care' argument. Thus 'surveillance for development' may not necessarily be a contradiction in terms, but an opportunity to understand how surveillance technologies are justified (or not) as necessary for deepening socio-economic progress in Global South countries. Guided by the calls for surveillance ethics, I also pay attention to how various actors navigate concerns about the excesses of surveillance technologies as they push for the adoption of these systems.

In what follows, I discuss the state surveillance literature in the context of Global South countries. To a large extent, surveillance scholarship on Global South countries is framed in the context of 'surveillance for control', specifically, with emphasis on authoritarianism. However, there is a growing attention to the use of surveillance systems for more progressive purposes in Global South countries beyond authoritarian ends.

State surveillance in the Global South

Authoritarianism

Discussions of state surveillance in the Global South tend to foreground authoritarianism (Marczak et al., 2017; Workneh, 2015; McGregor, 2013). Often, such research is situated in non-democratic contexts or framed in terms of the authoritarian tendencies of regimes. Purdekova (2011) has, for instance, discussed the authoritarian uses of surveillance for expanding state reach in Rwanda. Purdekova shows how political and administrative organization in Rwanda is embodied with surveillance systems, as a way of forcing social consent. In the name of political decentralization, the Rwandan state creates committees at the local community level to monitor the actions of citizens. These committees promote the will of the state and serve as a bulwark against dissent and invariably, undermines democracy.

Bozzini (2011) focuses his work on Eritrea, and shows how the state uses “low-tech” surveillance to monitor citizens. Bozzini points to the use of IDs, state-issued travel documents, and checkpoints as means of controlling citizens, and in the specific case of national service persons, to counter desertion and retain conscripts. Fonseca (2017) has also examined the Angolan state’s constant physical and digital surveillance of dissenters and members of the opposition, in the name of regime security. In short, these scholars focus on how the state uses surveillance to exact citizens’ obedience for purposes of regime security.

In a similar vein, Grinberg (2017) has also examined the surveillance state in Ethiopia to understand the peculiarities of the surveillance of citizens in “developing nations with relatively low digital access” (433). He frames his study as a case of the “dictator’s dilemma’ or the ‘authoritarian’s dilemma’: whether to allow digital rights and freedoms for the purpose of development and/or preserve the regime. Grinberg argues that the Ethiopian state’s monopoly on digital services as well as pervasive surveillance, censorship and intimidating practices damage any possibility of sustainable development. Effectively, Grinberg does not necessarily discuss development as the end goal for deploying surveillance tools but rather how state surveillance undermines the civil rights and liberties that could engender development.

Purdekova, Bozzini, Fonseca and Grinberg's research present realities that fit the dystopian and Big Brother imageries associated with surveillance. Together, they show how some African states use surveillance systems to mold subservient citizens with the primary purpose of protecting the ruling regime. However, these papers are not particularly surprising in terms of what they find. Rwanda, Eritrea, Angola and Ethiopia are countries without effective multiparty democracy or a liberal civil society realm to foster dissent. The four studies thus select cases based on the dependent variable. If the question is about whether states in the Global South use surveillance for authoritarian ends, then that is what is invariably found. However, this does not make these studies any less important or less valid, as they can be justified as illustrative of surveillance in a particular kind of Global South state.

The authoritarianism-centered cases such as those in Rwanda, Eritrea, Ethiopia and Angola present two relevant justifications for my study on Ghana. First is about the need for studying state-led surveillance systems in Global South countries that have relatively stable democracies. Second, focusing on countries with democratic systems and processes can reasonably dilute the argument of regime security and state domination as the purpose of surveillance systems in the Global South. This allows us to focus a bit more on other logics such as development as I do in this study. More generally, the foregoing studies focus generally on monitoring systems, and less so on the place of citizen identification systems as surveillance systems. In sum, by focusing a democratic country, I do not suggest that surveillance-oriented systems cannot be used for development or at least framed as such, in countries with authoritarian regimes. Rather, I shift focus to Global South countries where citizen identification policies are openly debated, supported and critiqued by state and non-state actors with accompanying and accessible structures for challenge and redress. I believe this approach makes it easier to move away from automatically imagining state-led surveillance-oriented projects in authoritarian terms and as merely state-imposed.

Beyond authoritarianism

Some studies on surveillance systems in Global South countries do not necessarily center authoritarianism. Rather these works focus more specifically on surveillance-enabling identification systems and how they are justified on grounds of promoting personal/national

security, enhancing citizenship or boosting the state's distributive efficiency. These themes are illustrative of the possibility of 'surveillance for care'.

The discussion of 'security' in surveillance studies has tended to be from Global North perspectives. Several studies were spurred by the rise of CCTV cameras (Norris et. al, 2004; Slobogin, 2002; Fyfe & Bannister, 1996). The security and surveillance agenda were later stoked by the post-9/11 pervasion of state-led surveillance (Gandy, 2007; Lyon, 2006, 2003; Wood et al., 2003)), and later, by the Snowden revelations (Fuchs & Trottier, 2017; Hintz & Dencik, 2016; Lyon, 2015).

While Global South countries have been largely peripheral in the mainstream discussions on post-9/11 surveillance, there have been a few studies that lend some focus to the topic. In such studies, there is the narrative that despite international efforts, the post-9/11 surveillance trends may not have necessarily altered surveillance forms and consequences in Global South countries. Gopfert (2016) for example, advances that on the basis of the global war on terror, countries like the USA and France have supported Niger with high-tech surveillance systems. However, policing in Niger still depends a lot on physical surveillance by gendarmes and their network of local informants. Hills (2019) also argues that despite the technological support provided by international donors, policing and counterterrorism efforts in Somalia still predominantly rely on local informants. The value in the contributions by Gopfert (2016) and Hills (2019) to my study lies in their emphasis on how the ability of certain Global South states to surveil society, still relies less on digital systems and more on collaboration with certain societal actors.

Gopfert and Hills do not center 'development' in their analyses of surveillance systems in Niger and Somalia respectively. However, they, albeit briefly, show the connections of surveillance systems in Global South countries as tied to the post-9/11 narrative of international security crises. This is important for two reasons. First, it draws attention to the continuities between the Global North and Global South in terms of the rise in global surveillance practices post 9/11. This provides an analytical frame for studies like mine that seek to understand surveillance systems in the Global South in terms of how they are justified, and the place of international actors.

Second, Gopfert and Hills posit that the hi-tech surveillance systems promoted by international actors in Niger and Somalia have not necessarily been successful, leading to a situation in which security officials have to mainly rely on local knowledge. Of course, this solution should remind us of James Scott's argument against high-modernism (*techne*), in favor of contextual, practical knowledge (*metis*). For studies like mine, such examples of the little success of 'modern' surveillance systems present an opportunity to trace how holistic policymaking debates about citizen identification systems in Global South countries are necessary and critical. Also, it prompts us to think through the place and implications of prevailing institutions in the installation and use of new surveillance systems in Global South countries.

Frowd (2017) has also discussed the increasing resort to biometric surveillance systems in Global South countries for purposes of security. According to Frowd, the growing adoption of biometric technology results from what he calls the "biometric ideal" — the belief that biometric systems ensure smarter and more efficient surveillance. The 'biometric ideal' is conceptually akin to James Scott's 'high modernism' as both highlight the (often misplaced) belief that scientific tools offer the best solutions to social problems. Focusing on border security in Senegal, Frowd assesses the *Système Integre de Controle Migratoire (SICM)*, a product of the US firm, Securiport LLC. The SICM is used at Senegal's central airport to scan the passports of travelers, take their photographs and fingerprints. Frowd attributes the failures of the SICM to the technical limitations of biometric systems as well as the politics and competition between local security agencies and professionals. Thus, like Gopfert and Hills, Frowd draws attention to the influences of local practices and institutions on modern surveillance technologies.

While Frowd does not center 'development' in his analysis, his study provides the critical dimension of how biometric technologies have come to be accepted as the ideal surveillance tool in Global South countries. To Frowd, the biometric ideal typically "results from the construction and circulation of knowledge about biometrics by a transnational field of security professionals, assembled through official publications as much as through professional practices such as workshops" (2017: 343). Frowd's work thus draws attention to the (transnational) social construction of the biometric ideal. In other words, the state's attraction to 'techne' in the Global South is tied to its romanticizing and legitimation by transnational actors and their allies. Such

thinking elevates questions relating to the place of sovereignty and local agency in the adoption and use of biometric and other technologies: to what extent are Global South countries adopting biometric systems as autonomous actors, or as influenced by international thought and pressures? And simply, how impactful for public policy in Global South countries, is the growing logic that biometric and other tracking technologies are useful?

While Frowd concentrates on biometrics, my research covers a broader array of surveillance-oriented technologies including biometrics, digital mapping, and mobile telephony.

In effect, drawing on Frowd's language, the underlying justifications for the projects I studied suggest the increasing place of a 'surveillance tech ideal'. Also, while Frowd focuses on the biometric ideal in a security context, I connect the 'surveillance tech ideal' to the broader theme of development. Thus, I pay attention to how the promotion of citizen identification systems by local and international development actors is underpinned by the narrative that their associated surveillance utilities are necessary for development.

To Frowd, the 'biometric ideal' projects the adoption of biometrics as a marker of modernity, and as prestige. Marko (2016) notes a similar performativity in South Sudan's adoption of biometric passports. In his paper, aptly titled "We Are Not a Failed State, We Make the Best Passports", Marko (2016) argues that South Sudan's adoption of biometric passports was partly to convey the image of a modern "non-failed" state. Thus, beyond the tangible uses of biometrics, its deployment in Global South countries holds the intangible value of projecting a state as doing what states are supposed to do, as competent, and as technologically competent especially in terms of ensuring local and international security. Indeed, this in itself is some sort of marketing byline as Global South states and corporate allies justify surveillance technologies and also for the former to promote themselves as secure spaces. In addition to biometric systems, I make room for how SIM registration and digital addressing systems also serve the Global South state's egoistic and performative narratives of modernity, and security competence as part of a larger development narrative. Such performativity and soft politics by the state is another motivation and end that James C. Scott (1998) does not necessarily attend to in his argument about the state's quest to make society legible. Beyond security, proving citizenship is an obvious major objective of citizen identification systems.

Also, authoritarianism and security have implications for citizenship. For instance, where surveillance systems are used for authoritarian ends, a liberal experience and practice of citizenship can hardly suffice. However, there remain the fundamental dimensions of how citizens are actually determined, credentialed and identified by the state. The associated implications of the foregoing dimensions are critical, as citizenship allows persons to “establish claims to entitlement” with the state (Wood & Firmino, 2009: 298).

Historically, the modern state has used documentation to formalize and legitimize citizenship, and in effect, state-citizen relations. Weller (2012), Lloyd (2003), Higgs (2001) and Torpey (2000) have argued that the identification of citizens was crucial in the construction of the modern state and its effective jurisdiction in Europe. Their arguments suggest a foundational relationship between citizenship and identification/documentation. However, European states and states in the Global South are constitutively different, at least in terms of how they were established.⁹ The arbitrary imposition of borders by European imperial powers in Africa, for example, led to enduring complications for citizenship and statehood. Such complications further highlight the usefulness and risks with citizen identification systems in Global South countries, as the questions of identity may not easily be settled with or by technologies of identification.

Drawing on the concept of state fetishism, Gordillo (2006) has for instance, explained the roots of what he calls ‘ID-card fetishism’ exercised by certain citizens in the Global South. Using the case of the indigenous people of Chaco in Argentina, Gordillo argues that as the indigenous persons in Chaco have a history of alienation from citizenship rights, their relatively recent access to national IDs has generated positive emotional attachments to the document. Using the case of Brazil, Wood and Firmino (2009) have similarly shown how the fear of exclusion, and anonymity — “disappearing” or being “lost” to the state — has meant a broad social support for citizen identification systems. Such history-informed embrace of citizen identification systems could

⁹ I acknowledge there may be some similarities between the Treaty of Westphalia and the Berlin Conference of 1884-85, at least in terms of border demarcations. The key difference however is that with the Berlin Conference it was colonizers demarcating boundaries and jurisdiction with no input from any African. On the other hand, while Westphalia had European leaders deciding on the future of their own homelands and allocating rights to states.

explain cases in the Global South where the introduction of such systems, despite their contributions to state surveillance, are met with relatively less resistance by citizens.

While Gordillo focuses on a particular ethnic/racial group, Wood and Firmino (2009: 300) assert that the social support for identification is strongest amongst the “poorest in Brazil” who see such projects as “mechanisms of inclusion.” The two studies provide two critical insights for my research. First is the reality that in many Global South countries, state membership is still passionately being defined, and negotiated, and continues to be a major faultline for socio-political tensions and conflict. Thus, the contemporary citizen identification systems being deployed in such countries have to navigate contentions and norms about social belonging. Second, citizens’ quest to legally belong, and be cared for in Global South countries may subdue or marginalize suspicions of state “surveillance or control” (Wood & Firmino, 2009: 299). This second insight suggests a potential prioritization by citizens of socio-economic progress over surveillance and privacy breach concerns.

While citizens in Global South countries may support state-led identification projects as a way of not getting “lost” or “disappearing”, Marko (2016), as noted earlier, shows with his analysis of South Sudan that these systems may be more performative than actually ensuring inclusiveness. In practice, citizen credentialing systems may not be inclusive or progressive for citizens just by their existence. Marko (2016) also argues that the nominal and transactional costs involved in acquiring a nationality certificate or passport in South Sudan exclude many citizens from acquiring such. He adds that the changing citizenship laws, potential mandatory re-enrolment exercises, inaccurate enrolment data, administrative corruption and poor record-keeping by state bureaucrats destabilize the concept of citizenship in South Sudan. Thus, while citizenship may be a birthright or a more straightforward claim to assert in certain countries, the case is different for many South Sudanese citizens as the attainment of citizenship is mediated by a number of fluid factors. I argue that the citizen identification systems being rolled out in Global South countries mediate the attainment and experience of citizenship. The degree of the said mediation is tied to the nature of laws, regulations, policies and informal institutions accompanying citizens’ enrolment/registration, and actual use of identification systems.

Marko (2016:115) in arguing that biometric registration systems in South Sudan are merely due to “the will to impress” and “not the will to improve”, uses the deficiencies in the acquisition of passports and nationality certificates as evidence. However, the failures of identification systems could be, to a lesser extent, evidence of the lack of care, but rather, proof of the weakness of citizen enrolment and credentialing as an institution in a particular country. Moreover, as shown by Frowd in the case of biometrics in Senegal, performativity and a genuine belief that biometric systems promote efficiency are not necessarily divergent. After all, Marko notes that state actors in South Sudan promote biometric registration systems “as useful for provision of a cost-effective, secure, and accurate bureaucracy” (2016: 126). Often a ‘seeing’ bureaucracy is deemed as a key source and attribute of stronger state capacity, as Scott (1998) as well as Lee and Zhang (2017) have argued.

In terms of bureaucratic efficiency, David Lyon (2007: 79) advances that “bureaucratic organization, one of the hallmarks of modernity, is a key generator of surveillance” and that “indeed, surveillance is one of the features that constitute bureaucracy as such.” Here, Lyon connects the concepts of bureaucracy, modernity and surveillance in co-constitutive terms. Lyon has drawn on Max Weber’s ideas to think through how bureaucracies through documentation, classification and reference practices strengthened the early modern state’s ability to know its citizens, sort citizens and make decisions relating to them. Thus, the early modern European state had meaningful filing and record-keeping as an attribute, what Breckenridge (2014: 8) calls the “documentary state.” Max Weber had argued that bureaucracies are the most rational way of organizing human activity and maintaining order (Lyon, 2007: 79). In this sense, the connections between the visibility of citizens, state surveillance and bureaucracy are based on assumptions of rationality and efficiency. However, rationality and efficiency may not necessarily mean an appropriate, competent or equitable state or governance. Lyon (2007: 102-3) warns that classification leads to social sorting norms that could have adverse implications for certain members of society. Classification is typically based on the subjective creation of profiles, and these profiles could end up replicating and reifying stereotypes that work to overtask, marginalize and exclude certain groups of people (ibid.).

Lyon's assertion encouraged a major line of reflection. The early modern state, typically European, is contextually different from the average Global South state in terms of their founding histories. States in the two categories did not begin life under the same conditions. Despite the differences, the adoption of citizen identification systems in Global South countries is being justified as making bureaucracy more efficient, citizens more visible and the state more capable. In response, my move to center 'development' as a meta-narrative in justifications for surveillance systems in Global South countries, is an attempt to reflect on policy debates and practices that the early modern European state did not have to contend with.

While Lyon presents bureaucracy, surveillance and modernity as co-constitutive in the experience of the early modern European state, is it same for the typical Global South country? On the average, the Global South state may be considered as legally modern, fitting the Westphalian and the Montevideo Convention's conceptions of statehood, but also as practically modernizing at least in terms of state capacity and economic development. On one hand, some forms of bureaucracy exist in Global South countries but on the other hand, meaningful and effective documentation and credentialing of citizens still remains elusive. The adoption of citizen identification systems in Global South countries could thus be an attempt to catch up on an initial step missed, or may be a proof in itself that the step missed, was crucial for strengthening state capacity and national development. In effect, the contemporary deployment of identification systems in Global South countries is not in the context of a tabula rasa, but must contend with contextual socio-political and economic institutions including bureaucracies that are not always rational, and citizenship contestations.

James Scott's (1998) concepts of simplification, legibility and state capacity capture the crux of the "documentary state." Scott argues that the modern state attempts to simplify society and the environment in order to 'see' them. For Scott, the legibility of society is crucial to the state's ability to perform its functions whether good or bad. However, Scott disagrees that the state can successfully make society legible by solely focusing on what is deemed scientific, positivistic and rational — "high modernism" and "techne." In essence, the rational and non-emotional bureaucracy may not accrue the required social legibility and capacity to the state. Scott instead

argues the utility of “metis”, flexible, practical and local forms of knowledge in building the state’s capacity to lead the pursuit of socio-economic progress.

Thus, in critiquing rationalist bureaucracy, while Lyon warns against the dangers of classification and social sorting, Scott warns against pinning hopes on science and technology without recourse to local knowledge forms and practices. Importantly for me, if the modern state must ‘see’ to function, then it stands to reason that ‘seeing’ is deemed a constitutive attribute of the modern state and its competence. Thus, ‘seeing’ as realized through regimes like the documentation and addressing of citizens is a quality that states must possess to be considered modern, and must use these systems effectively to be considered competent. This should partly explain the aspirational, prestige and pragmatist basis of deploying citizen identification systems in Global South countries. As projected then, ‘vision’ is something modern and competent states do have. In the context of the foregoing perspective, we could then better appreciate the increasing popularity of citizen identification systems in the Global South, especially those based on complex technologies.

Keith Breckenridge (2014) has observed a global shift from the “documentary state” to the “biometric state.” Breckenridge explains the biometric state as the state that seeks to have, and govern with a universal biometric register. This register, based on compulsory enrolment, contains the biometric details of citizens and is connected to all other databases such that the dispersed information of every citizen can be collated, centralized and accessible as a single file. A key vision for the biometric state is that “biometric surveillance will close the documentary and bureaucratic gap between real, biological, individuals and the mechanisms of administration” (Breckenridge, 2005: 4). Thus, in principle, Breckenridge’s conception of the biometric state presents continuities with James Scott’s arguments. First, the enduring statist quest to make society more legible and second, the resort to science and technology in the said pursuit.

Breckenridge’s departure from James Scott simultaneously lies in the second continuity: biometrics-based identification is a move away from depending on paper records to body records; it is the conjoining of identification, authentication and de-centered access to citizens’ records. Thus, reading Scott and Breckenridge together suggests an evolution in how the state ‘sees.’ This is important as the ‘technology for seeing’ shapes the nature of the state, citizenship and state-

citizen relations. Where ‘a’ technology for seeing is framed as ‘the’ technology for seeing, the conception of what the capable state is and does, also changes. Thus, in this study, I make the argument that the increasing conjunction between surveillance-enabling citizen identification systems and ‘development’ is based on, and is reifying a specific conception of how the state ‘worth its salt’ must see.

Breckenridge stresses that the biometric state is as observable in Global South countries as it is elsewhere, if not more. He observes that “the most powerful biometric surveillance systems are being developed in the poorest countries, the former colonies of the European empires” (Breckenridge, 2014: 17). Presently, the largest state-led biometrics project is India’s Aadhaar, which provides citizens and residents of India a unique identity number. In many African countries, various biometrics-based projects are being implemented by the state to identify citizens. Frowd’s (2017) earlier-noted idea of the “biometric ideal”, and Donovan’s idea of the “biometric imaginary” reasonably explain the foregoing trend. The biometric imaginary sees “biometric technology as a necessary, suitable, and effective means of constructing a standardized and objective welfare state” (Donovan, 2015: 817). Thus, the resort to biometric registers in Global South countries is practically a repair, or reset of state bureaucracy. Then I can say that ‘the biometric state’ for many Global South countries is a reconstruction of the state as they have known it, in pursuit of a stronger capacity. Such reconstruction can viably be explained as an admission of the underperformance of the documentary state in the Global South. We must then reflect on questions of path dependency and how transitioning from a relatively weak documentary state in itself, shapes the pursuit of the biometric state.

While Breckenridge and Donovan have been interested in how biometrics transform bureaucracy and the associated implications, I go beyond to situate the adoption of biometric and digital citizen identification systems in the broader context of development. This is in cognizance of the growing argument that the pursuit of an efficient bureaucracy in Global South countries serves the larger goal of development. This provides a meta-narrative that could potentially explain Breckenridge’s (2014: 17) assertion that “the most powerful biometric surveillance systems are being developed in the poorest countries.”

Additionally, while the heavy investments in complex biometric systems in “the poorest countries” may be surprising, Breckenridge (2014) constantly reminds us that these systems were historically developed and improved in the Global South, particularly India and South Africa, in service of colonialism and imperialism. In the next chapter, I show a similar deployment of biometrics in colonial Ghana. Breckenridge’s reminder of the colonial origins of biometrics should encourage the situation of present-day citizen biometrics projects in the Global South, in a *longue duree* in order to understand influential historical legacies. However, once surveillance technologies are situated in the context of development, the legacies that should interest us should not only be in the colonial history of surveillance, but also that of the practice and discourse of development. My simultaneous interest in development and surveillance is not entirely novel, a few scholars have touched on the relationship between the two concepts often as an offshoot of discussions on identification and civil registration (Szreter, 2007; Scott, 1998).

In terms of the connections between legibility and development, Scott (1998: 91) argues that in the 19th century, the state’s pursuit of the “improvement of all the members of society — their health, skills and education, longevity, productivity, morals, and family life” was actually “a fundamental transformation.” It was a “new conception of the state’s role” (ibid.). Prior to the 19th Century, the state was mainly about enhancing its “wealth and power as a sovereign” (ibid.). However, by the 19th century, the state realized that the welfare of society did not only serve to strengthen the state, but was also “an end in itself” (ibid.).

To improve the human condition, Scott explains that the state drew on the rationality, and positivism of the Enlightenment era as seen for instance, in the increased resort to statistics. This is the basis for Scott’s interest in the simplification and legibility that underpin state-led social engineering schemes: the idea that the universalization, objectivity and uniformity that science offers are useful tools for moulding citizens and society, and improving the human condition. Scott shows how the pursuit of a legible society by the state could be borne out of a genuine desire to improve society, and to make citizens better. However, he does not address or discuss the prescriptiveness similarly embedded in international development thought and practice. For Global South countries, state power is not just interacting with social forces but also international

and transnational forces and interests powerful in a way the Global North state did not have to navigate in its state-building.

Unlike Scott, Simon Szreter (2007) has engaged on issues of citizen identification and development from a more deterministic and prescriptive angle. He argues that poor countries are poor because they lack comprehensive registration systems. Essentially, Szreter frames civil registries as some sort of independent variable, and socio-economic development as a dependent variable, and draws on the history of England as proof. To him, the socio-economic progress of England from the 17th century was influenced by the protection of property rights of individuals. Such protection of liberal rights resulted from the capacity to differentiate between persons by registering them, as well as their properties. Such registration and documentation practices promoted the liberal market and the participation of individuals therein.

Szreter argues that the registration and identification of citizens yield positive socio-economic fruits where an effective social security system is in place. This caveat is important as it notes that having a comprehensive civil registry may not in itself lead to socio-economic progress. He also offers the caveat that any registration system “must be created principally for the liberty and the use of private individuals, and not to serve the purposes of commercial organizations or states” (81). Here, Szreter’s departure from Scott is clearer; the former emphasizes a civil registry driven by citizens and, in favor of individuals’ interests. Scott, on the other hand, is aware that practically, such legibility-seeking projects will be driven by states, prioritizing their own interests.

An additional basis for Szreter’s recommendation (2007: 68) is that being registered with the state and having a legal identity as a person, is a human right and has basis in international law as per article 24 of the International Covenant on Civil and Political Rights: “Every child shall be registered immediately after birth and shall have a name.” In this sense, Szreter’s argument is simultaneously pragmatic, and legalistic or at least rights-based.

With the historical example of England, Szreter (2007: 80) expresses surprise in 2007 that international development actors like the World Bank had not prioritized the institution of comprehensive civil registration and identification systems in “poor countries”, as it is exactly

what such countries needed. Thus, more than Scott, Szreter situates his discussion of registration and identification systems within an international development frame, and in effect, acknowledges that development policy in “poor countries” is (could be) also driven by external actors such as development aid donors, and external factors such as the experience of countries in the Global North.

Overall, Szreter’s argument carries shades of the paternalism, liberal ends, and linearity of modernization theory: poor countries should do as the rich Western countries did to foster the market economy needed for socio-economic progress. On the other hand, even scholars like Scott who discourage such prescriptive and universalist policy-making still agree that citizen registration and identification have positive utilities. My concern with Szreter’s argument is the lack of emphasis on the peculiarities of the average Global South state, especially regarding the contestations about citizenship.

The politics of citizenship which cannot be taken for granted in Global South countries, as it goes a long way to determine who can be registered and identified as a citizen, and can then proceed to partake in the economy and public life as an individual. Also, unlike historical England, there are already civil registration and related institutions in Global South countries with cultures and path dependencies that must be navigated by any new citizen identification project. Also, the states in the Global South countries are more likely to lead civil registration projects, and not citizens. Notwithstanding the foregoing questions, Szreter’s call for citizen-driven and citizen-serving civil registries ties in well with my study as I am interested in how non-state actors within the state also justify and push for citizen identification systems in Ghana.

Szreter’s concern in 2007 that international development actors were not prioritizing registration and identification systems in development policy is hardly valid now, in the context of the World Bank’s ‘Identification for Development’ (ID4D) program. Alan Gelb has been a strong advocate for ‘identification for development’, a concept that eventually became the basis of the eponymous World Bank program. Before the institution of the ID4D program by the World Bank, Alan Gelb and Julia Clark (2013: i) argued that there exists an “identity gap” between rich and poor countries:

Unfortunately, under-documentation is pervasive in the developing world. Civil registration systems are often absent or cover only a fraction of the population. In contrast, people in rich countries are almost all well identified from birth.

Gelb and Clark argue, akin to Szreter, that the “identity gap” is “not only a symptom of underdevelopment but a contributing factor” and suggest that identification must be treated as a component of development policy and not as another stand-alone program (2013: 51). More frontally, they advance that “formal identification is a prerequisite for development in the modern world” (ibid.). While Szreter generally recommends comprehensive civil registration systems, Gelb and Clark are more interested in how/what identification systems must be instituted, and argue in favor of biometric identification systems. Drawing on a survey of 160 cases of “developmental” uses of biometric systems in the “developing world”, Gelb and Clark conclude that biometric identification promotes the inclusion of persons in the economy, and efficiency of state systems. The authors show some awareness of how the positive potentials of biometric systems could be undermined by realities such as corruption, privacy breaches, exclusion of certain persons, and checkered popular and political support (2013: 42).

The contributions by Gelb and Clark and even that of Szreter, present insights on the construction of citizen identification systems as a key pursuit in development. I observe, for instance, their usage of ‘poor countries’ and ‘rich countries’ as state-sorting categories to which the absence and presence of ‘the right’ identification systems are matched, respectively. This is hardly a departure from categories such as ‘developing and developed’, and ‘third world and first world’ that have been a mainstay in development discourse. I also observe the use of ‘identity gap’ to frame a comparative difference in Global South countries, and then as a basis for recommending a solution. While Scott (1998) presents the prescriptiveness of high modernism as rooted in the rise of science and positivism of the Enlightenment era, the arguments of Szreter as well as Gelb and Clark show a second kind of prescriptiveness, one based on Global North experiences.

It is valid to wonder the exact place of biometric systems in the development of ‘developed’ countries. Gelb and Clark (2013) point out that in rich countries, biometric systems are mainly used for purposes of security. Yet, the identity gap in Global South countries is tied to the broader

goal of development and made a basis for international intervention. They suggest that the ‘remedy’ for the identity gap requires:

... greater partnerships both between and within countries that have undertaken identity projects, agencies that frequently use or fund biometric and identification technology—the World Bank, OAS, IDB, UNICEF, UNDP, bilateral agencies—and technical experts (Gelb and Clark, 2013: 53).

Presently, the World Bank’s ID4D program is investing in strengthening citizen identification systems in the Global South, including the development of textual guides, standards and statistics. I do not discard the value of global partnerships in the case of citizen identification projects in the Global South but to appreciate that the promotion of identification systems as necessary for development may share continuities with longstanding debates and practices relating to development. This way, we are also reminded of questions about where development policy ideas come from, how they are promoted, the ends they serve, and who benefits.

On the other hand, Gus Hosein and Carla Nyst (2014) have explicitly noted the growing connections between international development practices and surveillance. Hosein and Nyst note the increased promotion of technologies with surveillance potential by international development and humanitarian aid actors. These technologies include those for information management, digital identification, mobile phone data-based systems and border security. Primarily, Hosein and Nyst (2014) argue that sponsoring such systems in ‘developing’ countries could lead to adverse surveillance practices, and may even fail. They assert that the introduction of projects such as those based on biometrics to alleviate poverty is often met with a “less critical eye” in the target countries. This trend in turn, fosters a number of dangers including the inaccuracy, insecurity, and misuse of citizens’ data. Hosein and Nyst take a rights-based approach and warn against sustaining a false dichotomy between privacy rights and development (2014: 32). They call for prioritizing democratic and legal safeguards even ahead of assessment of the potentials of technologies. Also, Hosein and Nyst stress that contextual realities must always be relevant in calculations of what technology to adopt.

Hosein and Nyst’s work is useful for my research in understanding that the development projects tied to citizen legibility naturally have implications for surveillance. Also, their study holds utility

in shedding light on the role of international development actors in the promotion of such surveillance-enabling systems. My study shares the central ideas in Hosein and Nyst's argument that international development aid could be promoting harmful surveillance systems in the Global South. However, Hosein and Nyst center their paper on "international organizations, foreign aid donors, and international funding agencies" (2014: 9). My research does not only focus on international actors but also how governmental actors, as well as civil society organizations and private technology firms partake in debates about surveillance-oriented systems and co-construct them.

Thus, I can do two things; first, appreciate how citizen identification systems may not merely be an imposition on Global South countries, but also illustrative of the multi-actor nature of development policymaking and implementation. Second, I can also assess the continued validity of Hosein and Nyst's point that the adoption of surveillance-enhancing technology systems is largely met with "less critical eye" in developing countries. I am interested in the logics various actors raise in favor of, and against such systems. Importantly, my study is interested in how promoting such surveillance technologies in the Global South in the name of development, reflects the promotion of a specific approach to development that focuses on the visibility of citizens to the state, and even transnationally, and marked by tracking systems that together could create different versions of a citizen.

The fluidity and power of International Development frames

For the purposes of this study, I approach development from three perspectives. First, development is a specific field with actor-hierarchies and associated power flows; "a domain of thought and action" (Escobar, 1995: 10). Second, development logics are social constructs. Third, development is a process of social, political and economic transformation. While these three perspectives are intertwined, it is important to understand each to appreciate the flow of ideas from, and peddling of influence by international development actors that tend to be a part of policy promotion and adoption in the Global South.

In the first sense, I associate myself with scholars such as Graham Hancock (1992), James Ferguson (1994), as well as Powell and Seddon (1997) who refer to international development

actors and processes as the “development industry.” For Hancock (1994: 41-2), the development industry is “complex, diversified and devolved” and “financed largely by the official aid of rich countries, mandated to promote 'development' in the poor ones.” Powell and Seddon (1997) add that the industry is “dominated, both in terms of strategy and lending policy, by the so-called Bretton Woods International Financial Institutions” and “consists not just of the bilateral government agencies, but also of the multilateral agencies of the UN (including the World Bank), the European Development Fund and the regional banks.” The ‘domination’ noted by Powell and Seddon, and the “mandate” noted by Hancock speak to the reality of actor-hierarchies and associated power differentials in the development industry. More recently, the concept of ‘big D’ has been offered as a way of capturing the essence, boundaries and historical specificity of the development industry (Lewis, 2019; Hart, 2001; 2006).

At the heart of the development industry is what Escobar (1995: 17) calls the “professionalization of development knowledge and the institutionalization of development practices.” Venugopal (2018:3) expands the constituents of the development industry in describing it as “the world of policies, planners, and projects. The protagonists of relevance here are those who produce, consume, and circulate development narratives: national policy-makers, aid donor staff, academics, think tanks researchers, journalists, evaluation experts, parliamentary committees, NGO activists, and advocacy groups.” Of course, the said “protagonists of relevance” do not wield the same levels of influence.

For my study, noting the existence of the development industry is important as it permits attention to the influence of three of its features: temporality, actor-hierarchies, and knowledge power patterns. The emergence of development as a practice and discourse can be pinned to a specific moment in history — on the heels of World War II: Truman’s ‘Four Point’ speech in 1949, and the formation of the Bretton Woods institutions (Lewis, 2019). Ferguson for instance, argues that the question, ‘what is development’ would have “made no sense even a century ago” (xiii). It is in a similar sense that Escobar (1995:10) describes development as a “historically singular experience.”

This temporality of development lends itself to the point that Global North states, the so-called “rich countries” (Hancock, 1992), was not the subject or object of the ‘development industry’ although they are models. In his famous Four Points speech, Truman (1949) literally pronounced the US and its European allies as responsible for helping “under-developed countries.” A dualism in which certain countries were not as advanced as others, became the foundation of the development industry. The hierarchy has had implications for knowledge generation and transfer (Robb, 2013: 21). As seen in the works of modernization theorists, the Global North countries were exemplars; they had developed and as such, were to be deemed the natural knowledge centers driving the development industry (Robb, 2013: 13). The much-critiqued Euro/Anglo-centricity of the Bretton Woods institutions evidences both the actor-hierarchies and the knowledge power flows of the development industry (Hobart, 1993: 2). Thus, the temporality is naturally coupled with actor-hierarchies and power differentials.

Thus, my intended ‘surveillance for development’ argument is geographically and historically specific in terms of the states subjected to it. By extension, the historical (and even present-day) experience of state-led surveillance in Western countries cannot fit into my ‘surveillance for development’ argument. Western states, by definition, are not to be ‘acted upon’ by the thoughts and practices of the development industry. The logics of socio-economic transformation espoused by the dominant actors in the development industry are not meant for change in Western countries even if there are still subaltern groups in Global North countries that are generally excluded from equitable access to socio-economic progress and dividends. Thus, the peculiarity of the ‘surveillance for development’ argument cannot be effectively undermined by present or historical incidence of state-led surveillance in Europe, for instance; whatever the goals are/were, they were/are not shaped by the development industry and its logics.

My second approach to development is an appreciation that the knowledge forms and logics promoted by the dominant actors in the development industry are social constructs. This argument has been strongly made by post-development scholars such as James Ferguson (1994) and Escobar (1995). Here, I am not as interested in the soundness or otherwise of development logics, but more that the logics are not natural, fixed or objective. Development logics come to be, and gain more currency where dominant development actors accept and promote them:

The thoughts and actions of “development” bureaucrats are powerfully shaped by the world of acceptable statements and utterances within which they live; and what they do and do not do is a product not only of the interests of various nations, classes, or international agencies, but also, and at the same time, of a working out of this complex structure of knowledge (Ferguson, 1994: 18).

As Ferguson notes in the quote above, the categories and logics of development are shaped by actor interests and understandings. While the categories and logics of development come to exist, and get to disappear, driven by actor interests and understandings, they tend to assume global legitimacy and become “a specific way of knowing the world” (Pahuja, 2014: 35). Buchanan et al. (2018: 5) call this the “world-making effects of development.” Post-development scholars argue, for example, that the underlying categories of development such as developed-developing-underdeveloped do not represent an “objective condition” (Matthews, 2010: 5). These subjectivities however form the basis of development logics and once they are “adopted by the governments or people of developing countries as constitutive of their aspirations, they are hegemonic in Gramsci’s sense” (Powell & Seddon, 1997: 2-3).

One way of institutionalizing and lending legitimacy to subjective categories, and logics of development has been the use of numbers — statistics, indicators and graphs (Buchanan et. al, 2018; Buss, 2015). Such quantification tends to present subjective facts as objective and also serve a legitimizing commensuration function (Espeland & Stevens, 2008). By comparing states along and across certain indicators, questions such as; who is lagging; who needs help; who must learn from whom, are answered. As stated by Doris Buss (2015: 381):

Measurement is never an innocent act. It is a thoroughly social process, from the array of individuals and communities engaged in the act of generating data, to the effects on the social relationships and institutions that are the subjects of measurement. Categories of people and behavior are created to enable counting, comparison and ranking to take place, affecting how problems are defined and emerge as worthy of attention.

I find the fluidity and evolution in the development industry’s programs and logics just by observing this list of popular international development ideas, programs and frames: modernization, sustainable development, human development, Structural Adjustment Program, Millennium Development Goals, and Sustainable Development Goals. Each of such development agenda and programs emanated from Global North development partners and quickly gained

prominence across Global South countries and shaped policy making in the latter. Ghanaian governments have often for instance emphasized a particular development frame if it is the dominant global frame being pushed by particularly Bretton Woods institutions at a particular point in time. These ideas and programs periodically promoted across Global South countries have been legitimized by the use of quantification including Gross Domestic Product, the Human Development Index, and performance data related to the Sustainable Development Goals.

My goal here is not to critique the social constructs underlying development, but to show the possibility of new approaches to, and emphasis in development, and to note ‘surveillance for development’ as a frame gaining emphasis in the development circles. How do we prove so? The World Bank is promoting the construct of an ‘identity gap’ in the Global South and justifying it as a challenge to development in the Global South. In 2015, the United Nations’ SDG target 16.9 which calls for ‘legal identity for all’ by 2030, promoted the ‘identity gap’ as a development challenge. Loisel (forthcoming, 2022) traces the construction of SDG target 16.9 over time.¹⁰ The initial draft by the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda in 2012 called for “free and universal legal identity, such as birth registrations” while the eventual choice by the Open Working Group on Sustainable Development Goals in 2015 was “legal identity for all by 2030” (ibid.).

Sperfeldt (2020) also points to how the concept of ‘legal identity’ as used in the SDGs is a construct that ties rights to a legal status and not one’s status as a person. Sperfeldt (2020) also points to subsequent embrace of the construct of digital identity by international actors which then means the latter focus on promoting identification systems that are digital and biometric. The World Bank’s ID4D has been set up to prioritize the attainment of target SDG 16.9 and is building institutions to promote citizen identification systems in development discourse and practice. A related institution to ID4D is the Findex survey which is generating statistics and indicators to prove the identity gap in Global South countries. There is also the private sector-led ID2020 Alliance seeking to promote the global adoption of a global model of digital ID, and also promote

¹⁰ Marie-Eve Loisel’s chapter, tentatively titled, “From Legal Identity to Digital Identity for Refugees: Empowering Move or Perilous Development?” will be appearing in an edited collection on the Digital Welfare State in 2022.

the role of the private sector.¹¹ Ultimately, the idea that citizen identification, and of a certain digital kind, is necessary for development is being institutionalized.

My third approach is to see development as a process of socio-economic transformation for individuals, groups, society and the state. Some scholars refer to this as the ‘little d’, to reflect how this process has been geared towards promoting capitalism and yielded uneven results and inequities in Global South countries (Hart, 2001, 2005; Lewis, 2019). While I am more interested in how socio-economic change generally serves as the nominal goal of the actors in the development industry, I take inspiration from the ‘little d’ school, in paying attention to the place and implications of private capital in ‘surveillance for development’ projects in Ghana.

As surveillance systems are a form of technology, I note the natural connections between this study and the sprawling literature on information and communication technologies for development (ICT4D). The ICT4D literature provides useful insights on how and why technologies have failed or been successful as tools for development. The positive ramifications of ICT4D in Global South countries have included social inclusion (Creech, 2006), transparency (Lobo & Balakrishnan, 2002), business profitability (Esselaar et al., 2007) and productivity (Faha & Vaumi, 2015). However, ICT4D projects have often been undermined by factors especially related to adaptability and sustainability (Marais, 2011).

These challenges have been deemed as emanating from technological determinism (McCarthy, 2013). Additionally, Cherlet (2014: 776) notes the challenge of “epistemic determinism” — the belief that knowledge is knowledge, and will have similar implications in societies where they are generated and societies where they are exported to. Heeks’ (2002) *Design-Actuality* concept draws attention to the challenges with the aforesaid determinisms. He argues that where there is a gap between the context and vision of the designer of a technology, and the context and realities of its actual users, ICTs may fail in developing countries. Again, the foregoing debate buttresses Scott’s (1998) warning about emphasizing *techne* over *metis* in the pursuit of development.

¹¹ <https://id2020.org/alliance>

The ICT4D literature provides useful insights for my present study. First, it is an example of a temporal development logic that centers technology much like the ‘surveillance for development’, I am arguing. Second, concerns about technological and epistemic determinisms provided a useful basis for tracing the continuities between development logics, as well as understanding where these logics come from and the place of local agencies. However, I contend that while citizen identification technologies are a variant of ICTs, they are unique in terms of how they enable a reconstruction of, and pluralize citizen identity, alter state-citizen modes of contact and enable a diffused state surveillance and citizen visibility.

Conclusion: Towards ‘Surveillance for Development’?

The contours of my surveillance for development thesis can be outlined in four key points. First, I argue that ‘surveillance for development’ is increasingly being promoted in development practice and thought. Admittedly, it is rare to find development actors owning the ‘surveillance for development’ narrative. The inherent negative connotations of surveillance make it an unattractive concept or name to headline public policy. However, my argument is about the understanding that the citizen identification systems being deployed today are effectively surveillance systems. Secondly, the ‘surveillance for development’ frame I claim, is promoted by international actors through knowledge frames, assessment frames, technical support, standardization and funding. Thus, while domestic actors exercise agency in adopting or critiquing citizen identification policies and programs, I do not ignore the external influences that also influence citizen identification policies and approaches.

In thinking of development and surveillance together, I am able to imagine ‘development’ as sitting closer to the ‘care’ end of the care-control spectrum of surveillance proposed by David Lyon (2018). Yet this could mean justifying surveillance systems despite their attendant risks. The scholarly works discussed in this chapter provide strong foundations in approaching the surveillance-development nexus from at least four interrelated perspectives. First, we have to think about how development legitimizes surveillance. Such legitimacy could come from the narratives and institutions of the development industry but also from the actual living conditions in Global South countries. In this sense, even the supposed relatively low levels of socio-economic development in Global South countries can in themselves legitimize surveillant citizen

identification systems. Second, we have to think about how surveillant citizen identification systems/projects could inherit the features of development logics and institutions. In other words, for instance, long standing critiques of development policy-making, such as epistemic determinism and technological determinism could have implications for the kinds of citizen identification systems deployed in Global South countries. Here, there are valid questions about the implications of the variations in citizenship contestations, economic institutions, and political institutions on identification projects.

Third, a major feature of international development institutions is their dominant market and neoliberal biases, a point that sits at the center of the ‘little d’ concept. Usefully, surveillance studies have paid attention to the capitalism that characterizes globalizing surveillance. Here, Shoshana Zuboff’s (2018) ‘surveillance capitalism’ concept — the idea that personal data has now become a major source of capitalist accumulation — has been dominant. In that sense, bringing surveillance and development together means that we have to think about how the personal data of Global South citizens is increasingly going to feed a surveillant machine pursuing capitalist ends.

On the other hand, there is the need to centralize the second question of who is actually going to develop the software and hardware underpinning these systems. Local firms? Is it going to follow old development patterns where the bulk of capital gains do not stay in Global South countries? Tied to this is the reality that the personal data at the heart of citizen identification projects are sensitive and could be weaponized. Thus, the question of who is building the systems and the access they have gains more significance.

Fourth, surveillance scholars emphasize that the integration, interoperability and assemblage technologies underpinning present-day identification systems make citizens more transparent (Ericson & Haggerty, 2000). Citizen identification systems today are built for national and international interoperability. Where such citizen transparency is promoted in development discourse and practice, some interesting questions result. Is the success of development projects now being reconfigured as tied to the national and global transparency of citizens? Then, is development deepening the global transparency of citizens? Does international operability, and

even the involvement of foreign actors in citizen identification projects mean that such projects are not simply transactions between state and citizens but rather a state-citizen-international/transnational actor transaction? Practically, this last question has implications for who is involved in determining and experiencing citizenship in Global South countries. Also, it presents the dimensions of prestige and punishment in terms of the actions of states in the Global South as they relate to the narrative of ‘surveillance for development’.

To conclude, I have used the review of the literature in this chapter to situate my ‘surveillance for development’ argument in studies that see present-day identification as surveillance; the possibility of surveillance as care; and development as socially constructed. I have argued that while there is a growing logic of ‘surveillance for development’, there have been few studies that explicitly think through the two concepts together. While there are a few studies discussing identification and development, they do not re-imagine identification as surveillance as I do here. Also, even studies that touch on surveillance in the context of development, do not necessarily engage the implications of development as an industry with actor and power hierarchies, nor attend to the potential transformations of development by surveillance.

In the next chapter, I discuss the history of citizen identification systems in Ghana. This is to help understand the institutional contexts that the recent citizen identification systems in Ghana must navigate. Generally, a country with age-old legacy systems and institutions for citizen identification can be expected to have a smoother transition to more electronic and digital databases. However, as I show in the next chapter, Ghana practically has a weak legacy of institutions as they relate to citizen identification. This ‘legacy of non-legacy’ must be navigated by the state and its partners as they implement citizen identification systems.

Chapter Three

“IN THE SAME WAY THAT A SHEPHERD COUNTS HIS SHEEP” — A HISTORY OF CITIZEN IDENTIFICATION IN GHANA

Introduction

There is a long history of citizen identification in Ghana, similar to other British colonies. As we will see in this chapter, colonial administrators introduced a range of identification systems in order to make the then Gold Coast more legible to the colonial state for purposes of management and control. Also, the colonial administration’s approach to immigration, labor and borders complicated citizenship. After independence in 1957, succeeding governments made policy choices that further deepened the lack of clarity around issues of citizenship and state membership. Historical practices, norms, and understandings influence contemporary citizen identification policies and their implementation. This chapter will trace the historical legacies that shape Ghana’s present pursuit of citizen identification systems. I take a chronological approach in discussing state-issued identification systems from the colonial era to the first decade of Ghana’s Fourth Republic.

I first discuss the use of identification systems in colonial Ghana. In the related colonial policies and legislations, there is evidence that the ability to distinguish and track persons along the continuum of native, subject, British and immigrant was deemed important to the colonial administration’s social control. Next, I trace identification projects in post-colonial Ghana; overall, they have mainly sought to distinguish immigrants from citizens, and generally meant weaker legacy systems for citizen identification. Political ideology, socio-economic crisis and pragmatic local and domestic politicking heavily framed the demands for, and deployment of identification systems in post-colonial Ghana. I drew mostly on archival materials and newspapers as sources for this chapter. All told, the historical institutions related to citizenship and citizens identification in Ghana provide useful context for appreciating the arguments for and against citizen identification systems detailed in the next three chapters.

Citizen Identification in colonial Ghana

As direct violence proved ineffective, colonial regimes developed sophisticated forms of control through documentation and surveillance... a plethora of surveillance methods were established to monitor “dangerous populations”: traveling passes, distinctive zones, and permit regimes (Berda, 2013:628).

There is a wide-spanning literature on surveillance and identification systems as deployed in European colonies (Zureik, 2013; Sa’di, 2012; Zureik, 2011; McCoy, 2009; Constantine, 2008; Bayly, 1999). In using surveillance to ensure social control, colonial governments utilized spatial planning and architecture (Bigon, 2016; Njoh, 2009; Scott, 1998); identity cards (Ogasawara, 2008); photography (Rizzo, 2013); census (Appadurai, 1993; Cohn, 1984); and civil registration (Szreter & Breckenridge, 2012; Kalpagam, 2000; Scott, 1998; Smith, 1996). While the literature on surveillance and colonialism pays some attention to Africa (Breckenridge, 2014b; Berda, 2013; Rizzo, 2013, Cooper, 2012; Doyle, 2012; Njoh, 2009), I use this section to extend this research agenda to Ghana.

Like present-day governments, the British colonial administration deemed an opaque society as adverse to governance. A letter from W. Brandford Griffith — then the Gold Coast Governor — to local chiefs in 1890 evidences the colonial government’s desire for a legible society:

The Queen has expressed a wish to know how many subjects she has in the Gold Coast Protectorate, and has instructed you to obtain this information for her and send it to the District Commissioner. I ask you therefore to number the people of all the towns and villages in your country, and when you have done this to let the District Commissioner know how many males and how many females you have in your country... I wish you to clearly understand that I am not asking you to do this in order to tax your people, or for any purposes but your good. The Government in requiring this information has no intention to tax you or interfere with your country, and I only want information to give to the Queen... You will see that it is for your advantage that I should know how many people belong to your country *in the same way that a shepherd counts his sheep to know how many look to him for protection and care* (De Graft-Johnson, 1969:3).

Governor Griffith’s letter presents statist motivations about societal legibility that endure to this day. First is an awareness of the popular mistrust of government (in terms of what governments do with refined data about citizens). Second is the framing of government-led legibility projects as important for the wellbeing of the citizenry. Third is the idea that the effectiveness of the

government reasonably depends on the legibility of society. While the Governor downplayed taxation, possibly due to earlier violent rebellions in the Gold Coast against direct taxation (Gardner, 2012: 47), he nonetheless showed awareness of the potential utility of disaggregated demographic data to taxation.

Beyond the census approach, the colonial administration set up civil registries. The Cemeteries Ordinance (1888) instructed the registration of dead persons; this was mostly restricted to expatriates working with the colonial administration (Ghana Statistical Service, 2015: 2). In 1912, the Births, Deaths and Burials Ordinance was also passed to extend registration to newborns. Birth and death registration were overseen by the Department of Medical Services (*ibid.*). Birth registration was mostly restricted to Europeans; natives were only registered in a few areas.

There also were efforts by the colonial administration to register persons who were ‘aliens’; these were foreigners from non-British territories, as distinct from ‘subjects’ — considered persons from other British colonies (Kobo, 2010: 74). The Defence of the Gold Coast Ordinance (1928) provided that aliens should be registered during periods of emergency and warfare. During peacetime, Police “unofficially” tried to “keep track of all aliens admitted into the Gold Coast” (PRAAD, 1939-46: 6).¹² In April 1939, the Police requested that legislation be passed to “compel Aliens to register their places of residence in the Gold Coast at least four times each year” (*ibid.*). Without providing details, in one archival record, the Police asserted that “past and present events clearly indicate” the need for legislation that asks aliens to register during peacetime (*ibid.*). The Executive Council or the cabinet supported the said request by the Police (PRAAD, 1939 - 46: 3).

The colonial administration also issued house numbers, driver badges and labor cards. A letter from the Sekondi-Takoradi Town Council to the Colonial Secretary in May 1946, for instance, highlights the usefulness of house numbering to the “collection of rates” (PRAAD, 1946). An effective house numbering system could help state agents pin citizens to addresses for efficient tax extraction.

¹² PRAAD is the abbreviation for Public Records and Archives Administration Department. Full citations will be provided at the end.

Direct taxation in a number of British colonies was initially in the form of the *hut tax*, targeted at households. As Herbst (2014: 213-4) notes, the state's ability to collect taxes is a "measure of the state's reach" and that a "widely distributed tax base" promotes state consolidation by providing a "robust revenue stream." The hut tax would first evolve to *poll tax* which was targeted at male adults, and ultimately to differential taxation based on income (Hailey, 1957: 676). Differential taxation was to avoid challenges with the hut and poll taxes including the force and violence of collection and the social resistance it bred (Fjeldstad and Therkildsen, 2008: 116). Eventually, the 'illegibility' of certain parts of the Northern Territories of the Gold Coast led the colonial administration to opt instead for general levies on townships that were to be collected by chiefs (Maasole, 2017: 272-278). For the same reason, sometimes the colonial government substituted head or hut taxation for unpaid labor (ibid.). Overall, colonial taxation was to finance colonial administration (Fjeldstad and Therkildsen, 2008: 119), mark the power and hegemony of the colonial government (van Dyk, 2019: 5) and "emphasise European rule or domination over the African" (Maasole, 2019: 182). Thus, while colonial taxes could be used to provide social services, they tended to be more about control and hardly about care.

The colonial administration also issued driver badges. Driver badges made with a heavy metallic plate, served as identity cards for drivers in the 1940s. Sections 66 and 67 of the defunct Motor Traffic Ordinance (Cap 195) instructed drivers to have these badges (PRAAD, 1943-1944: 1). Annually, about 1,500 badges were ordered at an aggregate cost of 86 pounds (ibid.). While the police used a driver-car index database to monitor drivers (PRAAD, 1943-1944: 3), the badges were supposedly to help the public in identifying drivers (PRAAD, 1943-1944: 2). In this sense, the driver badges were framed as serving a public good by supporting lateral surveillance among citizens.

Jennifer Hart (2014; 2017; 2020) situates driver credentialing in the Gold Coast as a marker of contestation relating to power and knowledge forms, between British administrators and natives. She explains that through commercial-driver choices like horn-honking, picking up passengers at undesignated spots, and operating beyond authorized zones, the roads had come to defy the colonial government's sense of order and control (Hart, 2020). The commercial motor scape was then not as legible to the colonial government as preferred, and consequently, the associated

politics was not as favorable to the colonial government. As Rathbone argues (1993: 107), the colonial police “spent more time on urban crime, the policing of licensing and from the 1920s on, the growing burden of traffic regulation.” To Hart, the efforts to ‘professionalize’ and regulate commercial driving were attempts by the colonial administration to impose their rationalities on natives, and assert control over who could drive, how, where, when and for how much profit — another example of *techné* over *metis* (Hart, 2014: 200).

Driver badges were suspended during World War II due to financial reasons. Also, there was an understanding within the colonial government that the badges actually served “no vital purpose” (PRAAD, 1943-1944: 6). Moreover, as drivers already had licenses, driver badges were deemed superfluous. Also, colonial administrators had noted that drivers removed the badge or borrowed a different person’s badge to avoid being identified (ibid.). Here, it is important to note the anti and counter surveillance practices of natives.¹³

The colonial government also issued labor cards to identify workers. Such cards extended the possibility of monitoring, regulating and controlling colonial labor (PRAAD, 1942). Francis Galton (1900: 120), a chief promoter of fingerprinting in British colonies, espoused the distrust at the heart of the fingerprinting of colonial laborers:

Employers when advancing money to labourers, or making contracts with them, or paying their salaries, are now beginning to protect themselves by requiring the finger-print of the labourer upon the agreement of receipt.

Also, the colonial administration used passports in an attempt to curb the spread of plagues in the Gold Coast. When the bubonic plague struck the Gold Coast in 1908, a land cordon was established around Accra, and natives were instructed by colonial authorities to carry passes (Simpson, 1909: 7). The pass showed the name and thumbprint of the bearer, and was proof that its bearer had been inoculated at least a week prior to the date stated on it. The pass had to be signed by a General Medical Officer, and about 4,000 of them were issued. Natives’ freedom of movement, in and out of Accra, were tied to the possession of the card. In the context of the bubonic plague, the ‘pass’ was additional to other surveillance measures by the colonial administration, such as the

¹³ Unfortunately, I could not access any additional archival document in this particular folder that discussed why drivers wanted to avoid being identified. But I assume that if they were not licensed drivers or were driving a car registered to a different person, they would not want to identify themselves correctly.

“supervision and inspection of all cargo shipped from Accra”, and the “medical inspection of passengers leaving Accra” (ibid.).

For the most part, fingerprinting in the Gold Coast was related to the criminal and penal justice system (PRAAD, 1942-47). The official correspondence within the colonial administration on fingerprinting centered heavily on recidivism. There was a strong concern that without an effective fingerprinting regime, repeat offenders would not be identified to serve the required sentences. To this end, there was a gradual expansion of fingerprinting in the Gold Coast's criminal and penal system.

Section 13 of the Prevention of Crime Ordinance (also known as Cap 39) instructed “competent police authority” to take “photographs, descriptions, measurements, thumbprints and fingerprints” of those convicted of felony, dishonesty or fraud (ibid). In 1938 and again in 1942, the Police argued that convicts and all persons charged should have their fingerprints taken (ibid). In this sense, the basis for conviction and a person’s eventual innocence would be irrelevant; once a person was arrested, his/her fingerprint record would be kept.

The police argued that limiting fingerprinting to felons and those convicted of fraud and dishonesty, would undermine the police’s ability to “perform their task efficiently” (PRAAD, 1942 - 47: 3). The Colonial Secretary set up a committee to assess this proposal to expand fingerprinting. The three persons on the Committee were Eric Nottingham (Commissioner of Police), Raymond Browne (the Attorney General), and Arku Korsah (a local lawyer). Despite the Police’s argument that similar legislation existed in other colonies such as Nigeria, the committee rejected their proposal on the grounds that it was an over-stretch, and unnecessary (PRAAD, 1942-47: 21-22). Additionally, for some in the colonial administration, the associated cost of implementation related to staffing and logistics made the proposal difficult to accept (PRAAD, 1942-47).

There were social agitations about fingerprinting in the Gold Coast. In letters to the Colonial Secretary, citizens complained about the adverse implications of fingerprinting beyond the penal system. Such letters petitioned the Colonial Secretary to cause the police to destroy fingerprints of the petitioners (PRAAD, 1942-43). The petitioners complained about how their fingerprints had

been wrongfully taken, or stored by the police. One petitioner had lost his job with the US Army because his fingerprints with the Gold Coast police showed him as an ex-convict (PRAAD, 1942-43: 10). This was despite the fact that a judge had overturned the conviction. Another petitioner feared that his fingerprint records could undermine his chances of getting a job as a government worker, and also endanger his place in “high society” (PRAAD, 1942-43: 7). A third petitioner was afraid that he could not join the Gold Coast Police if his fingerprint records were not destroyed (PRAAD, 1942-43: 4).

Cumulatively, these petitions indicate citizens’ awareness of the challenges with, and adverse implications of fingerprinting by the colonial government; challenges that still accompany contemporary biometric systems. The first set of challenges were procedural: collecting fingerprints where the law did not instruct; or keeping prints despite a court order to destroy them. The second set of challenges related to the effects of fingerprinting and photographing on the life chances of suspects and convicts beyond the penal system. Again, like the anti-badge practices of drivers, the said petitions should be read as social resistance to the colonial state’s identification and surveillance pursuits.

There was also a spatial dimension to the quest by the colonial government for a legible Gold Coast. Ato Quayson (2014) notes that town planning in the colonial era was used to segregate British persons and natives. While parts of Accra, such as Victoriaborg, Cantonments and Ridge were specifically designed for Europeans, places like Mamprobi, Kaneshie and Chorkor were reserved for natives. The varying plot size, residential design and population density all marked differentials between the European and the native. This segregation served a macro-level identification and social sorting purpose.

The colonial administration exploited plagues in the Gold Coast in 1908 and 1911, to intensify the use of spatial planning for segregation (Bigon, 2016; Quayson, 2014). The cordoning of Accra during these plagues, the imposition of identity cards/passes, the in-depth inventory of the sick, and the creation of distinct settlements for the afflicted and their relatives, were all practical ways of sorting/keeping away the ‘risky’ natives from the British. Such spatial segregation was also the case in other major Gold Coast cities including Kumasi (Schmidt, 2005); Cape Coast (Agyei-

Mensah & Ardayfio-Schandorf, 2007: 106-7); and Takoradi (Obeng-Odoom, 2015: 41). Today, the occupation of specific residential spaces still provides a good sense of who or what a person is. In fact, the same spaces that were occupied by the Europeans in colonial days, are now largely occupied by the Ghanaian elite, and often remain the better spaces for accessing public utilities.

In sum, the colonial state invested in legibility-seeking systems as a way of enhancing social control. The goal was to boost the state's capacity to extract obedience, and taxes from citizens, and to promote personal and social security. In this pursuit, the identification and segregation practices also framed natives as untrustworthy, and risky to the colonial administration and the British person.

Going back to the title of this chapter, the shepherd did not count his sheep just to “know how many look to him for protection and care.” Rather, the shepherd's counting was also based on the mistrust of a supposedly “dangerous population” (Berda, 2013: 628) and boosted the state's self-serving pursuit of extraction and social control. Importantly, the colonial archives remind us that Ghana has a long history of the state attempting to make sense of, and control society, but also reminds us of a society that ‘talks back’.

Citizen Identification in post-colonial Ghana

For context, it is useful to understand the identity dynamics of the Ghanaian population upon independence in 1957. First, as Piel (1974: 368) notes, Ghana has a long history of “international migration” such that “by the beginning of the colonial era, Hausa, Fulani, Arab and Mossi traders were well established” in Ghana. Thus, there was a very complex identity motif even before the Gold Coast became a formal British colony in 1874.

Second, Ghanaian borders, like those of most African countries, were arbitrarily imposed by European powers during the ‘Scramble for Africa’ in the late 1800s (Lentz, 2003). In doing this, members of related ethnic groups were split across borders. That meant cultural identity did/does not match neatly to legal constructs of citizenship. People in border areas practicalize the aforesaid mismatch by being more fluid in their conception of who they are, and in their everyday lives

beyond the remit of citizenship as a legal concept. For example, Ghana's border with La Côte D'Ivoire has Akans on both sides and Ghana's border with Togo has Ewes on both sides.

Third, the complexity with ethnic identity in Ghana was deepened by the colonial administration's permissive and self-serving disposition to foreign labor. As Piel (1974: 368) notes, the British colonial administration sourced labor into the Gold Coast, from across West Africa. The administration, for example, picked up workers from Liberia's coastal areas to work in Gold Coast harbors and mines; the administration even had a recruitment center in present-day Burkina Faso (ibid.). Based on the stereotype that Hausa people were "martial", the colonial administration also drafted Hausas from Nigeria into the Gold Coast police and military (Killingray, 2000).

However, British law on citizenship decisions in case of decolonization instructed that British subjects would forfeit their British citizenship if they accepted Ghanaian nationality upon Ghana's independence (Kobo, 2010: 74). This was the case for British subjects in the Gold Coast such as those from Nigeria. The so-called aliens from French colonies had little chance of obtaining citizenship in Ghana. This is notwithstanding the fact that African subjects and aliens had been drafted into Gold Coast affairs for years, including the security services by the British administration. The so-called aliens heavily included persons who shared ethnicities with Ghanaians because they came from just the other side of arbitrarily-imposed national borders. However, and ironically so, the Gold Coast only shared borders with French colonies. Those who may actually share ethnicities with Ghanaians and even have Ghanaian relatives, were the ones designated as 'aliens', with a much more complex route to citizenship in Ghana. Thus, upon Ghana's independence in 1957, there was bound to be a practical difficulty in mapping the contours of citizenship. The country Dr. Kwame Nkrumah, Ghana's first head of state, inherited, was already hosting a potpourri of ethnicities; all with varied claims to membership of the old society and as such, also to the newly independent state.

The Nkrumah years (1957-66)

Dr. Kwame Nkrumah, in his independence declaration speech, famously asserted: "the independence of Ghana is meaningless, until it is linked to the total liberation of Africa." Nkrumah, an avowed pan-Africanist, believed that African countries would only be powerful if they merged

into a single political union. Ghana's pursuit of the pan-African ideal came with national commitments of material, ideological, and reputational resources to the cause.

To legitimize Ghana's leadership in the pan-African project, Nkrumah operated a liberal immigration policy. Persons of African descent and those married to Ghanaians could acquire citizenship in Ghana (Rathbone, 2000:104). Such a *laissez faire* approach to migration and citizenship favored African nationals across students, scholars, liberation fighters, journalists, politicians, entrepreneurs and lay people who sought refuge in Ghana (Peil, 1974: 372). Similarly, Nkrumah's support of the campaign for the Trans-Volta Togoland (TVT) territory to become part of Ghana was consistent with his pan-African intent.¹⁴ TVT eventually was combined with parts of South Eastern Gold Coast to become the Volta Region of Ghana; a vibrant site for contestation about citizenship in Ghana till this day. Even presently, there is a movement from the said region pushing for secession from Ghana (Suuk et. Al, 2020).

Yet, at the same time, Nkrumah's government passed the Citizenship and Nationality Act, the Immigration Act, and the Deportation Act soon after assuming office in 1957. The Deportation Act was to target any "alien" individual who was considered to be a threat to public order" (Biney, 2007: 161). Leading members of the Muslim Association Party (MAP) were deported. MAP allied with the leading opposition party at the time, the National Liberation Movement. Rabinowitz (2018: 114) explains the targeting of MAP leaders as Nkrumah's attempt to "fight against the opposition" by plucking the "lowest hanging fruit: Muslim strangers." Aside from those Nkrumah deemed to be his political opponents, the "legislation requiring aliens to have residence and work permits was not at first enforced for Africans" in line with the pan-Africanist tendencies of Ghana's first government and leader (Piel, 1974: 370).

The Nkrumah government's commitment to documenting immigrants was more pronounced with the passage of the Alien Act in 1963. The Act, amended in 1965, asked employers to inform the Minister of Interior of the commencement or conclusion of work by a foreigner, within seven days (Biney, 2007: 175). This was to ensure that "immigration authorities can keep a tag of all aliens

¹⁴ TVT was part of present-day Togo, and was initially held by Germany. TVT was British-governed after World War I, when France and Britain shared German possessions in Africa. Presently, a separatist group, the Homeland Study Group Foundation is pushing for a new state, Western Togoland.

who enter the country to take up work and ensure that they engage in only those activities for which their residence permits were granted” (ibid.). These were the twilight years of Nkrumah’s rule. At this time, he had become personally and politically paranoid due to a number of attempts on his life, and went to great lengths to secure his regime (Biney, 2007: 176). Of course, the lessening liberality of the immigration regime increasingly contradicted Nkrumah’s “pan-Africanist convictions” (Biney, 2007: 326).

The Aliens Act and its amendment in 1965, explicitly required foreigners to have official travel documents and resident permits and also use specific ports of entry. The amendment also required foreigners to report to the nearest police station within twenty-four hours after entering Ghana. In effect, intensified alien documentation regime was one of the earliest statist efforts to identify and document a section of the society in post-colonial Ghana. This regime was a way of distinguishing between the citizen and the immigrant, by documenting the immigrant.

As this section demonstrates, Nkrumah’s pan-Africanist bent inspired a liberal immigration regime with less emphasis on documenting the African immigrant. At the same time, Nkrumah’s later sense of political insecurity inspired a more defensive migration regime, marked by increased emphasis on immigrant documentation. In essence, documenting citizens was not necessarily a central policy pursuit of the Nkrumah government; a trend to continue in the Second Republic, under Prime Minister, Kofi Abrefa Busia.

From NLC (1966-69) to the Busia years (1969 to 1972)

Beginning from the second half of Nkrumah’s rule, Ghana’s economy suffered a downward spiral. Amidst the decline, a bad economy was a given reason for the National Liberation Council’s (NLC) overthrow of Nkrumah. The economic downturn persisted through the rule of the NLC, and the military regime’s policy responses suggested a position that immigrants’ activities were hurting the economy. The NLC intensified efforts to document and identify immigrants. The NLC passed the Ghanaian Enterprises Decree (1968), which sought the transfer of business ownership from foreign to local hands within five years as well as the prohibition of immigrants from living in mining areas. The NLC also passed Legislative Instrument 553 (1968) instructing all foreigners to get work permits in order to employ, or be employed in Ghana (Peil, 1971: 206).

In 1969, the NLC permitted a democratic election and later handed power to a civilian government, led by Abrefa Busia. As the economy worsened, the Busia government increasingly advanced the convenient narrative blaming immigrants for the slump. The highlight of state-immigrant strife during the Busia era was the passage and implementation of the Aliens Compliance Order. The order was issued by the government amidst soaring citizen agitations about the economy. The Busia government on November 18, 1969, announced:

It has come to the notice of the Government that several aliens, both Africans and non-Africans in Ghana, do not possess the requisite residence permits in conformity with the laws of Ghana. There are others, too, who are engaged in businesses of all kinds, contrary to the terms of their visiting permits. The Government has accordingly directed that all aliens in the first category, that is those without residence permits, should leave Ghana within fourteen days; that is not later than December 2, 1969. Those in the second category should obey strictly the term of their entry permits, and if these have expired they should leave Ghana forthwith. The Ministry of Interior has been directed to comb the country thoroughly for defaulting aliens, and aliens arrested for contravening these orders will be dealt with according to the law. Special cases of persons who though alien, were born in Ghana and have lived in the country all their lives and lost contact with their countries of origin, as well as persons who though not born but have lived in Ghana for many years, will be considered, each on its merits provided they are of good behaviour and are gainfully employed (Aremu & Ajayi, 2014: 177).

Immigrants were blamed for the harsh economy because they supposedly owned many local businesses; took up too many local jobs; facilitated smuggling activities; converted their income into foreign currency; and transferred their profits and savings to their home countries (Peil, 1974: 368). In a letter to the editor of the Ghanaian Times newspaper, entitled “Let Aliens Go”, a citizen complained:

If one wants to purchase a car or lorry, one has to fall on a Syrian. The Lagosians (Nigerians) completely dominate our markets, the Gaos (Maliens) also monopolise the corn/maize, yams, groundnuts, salt, edible oils, timber boards and scantlings and other retail trades. These aliens bank their foreign exchange earnings in their respective countries for development, while we (Ghanaians) continue to suffer and live in abject poverty (Osei Bonsu, November 20, 1969:4).

In July 1969, the Busia government instructed foreign embassies to, within nine months, register their citizens in Ghana, and provide them with the necessary documentation to apply for work permits (ibid.). After the Aliens Compliance Order, there was also the Ghanaian Business Promotion Act (1970) which heavily reduced the five-year grace period for foreign business

owners enshrined in the Ghanaian Enterprises Decree (1968), passed earlier by the NLC, to just one month.

Thus, while Kwame Nkrumah strengthened immigrant documentation and identification regimes for political reasons, the Busia government and the NLC before it did the same in response to economic pressures. However, in both cases, the targeting of immigrants was substantively about regime security. Effectively, there was a growing resort to ‘othering’, and immigrant documentation as a solution to Ghana’s economic woes in the late 1960s. Thus, I argue that the original foundations of identification systems in post-colonial Ghana were mainly immigrant-centered: the Ghanaian government was distinguishing between the immigrant and the citizen by documenting the immigrant. The Acheampong-led National Redemption Council (NRC) revised this approach, after overthrowing the Busia government in 1972, to increase the focus on distinguishing between citizens, by documenting each citizen.

The Acheampong years (1972-1978)

The *Aliens Compliance Order*, notwithstanding the 100,000 or so deported aliens, did not lead to the revival of Ghana’s flailing economy. Media reports suggested that institutional corruption had undermined the full implementation of the Order. A newspaper columnist argued that while Syrians and Lebanese were the ones with real economic power, they largely remained untouched after bribing government officials (The Ghanaian Times, January 28, 1972: 6). In the end, the country was still “facing the most serious economic crisis” and the “alien affair” had “once more become a national problem” (ibid.).

Despite their ideological disagreements with the Busia government, the NRC moved to apply the Aliens Compliance Order more stringently. The NRC also passed the Ghana Nationality Amendment Act (1972) to provide an explicit route for certain classes of aliens to attain Ghanaian citizenship. In this sense, alien identification and documentation continued to be a central project for successive governments. Newspaper headlines at this time, such as; “Four Aliens sent back”; “Report Aliens in Hiding”; “16 Aliens jailed”; “150 Aliens are grabbed”; and “Aliens asked not to return” evidence the general focus on the ‘alien problem’ in Ghana at the time.

The Acheampong government is well known for its so-called ‘economic warfare’ or ‘war on the economy’. Policies like ‘Operation feed yourself’, ‘Operation feed your industries’ and debt repudiation remain the NRC’s memorable campaigns in its ‘war on the economy’. However, the government’s investments in a national identification project in 1973 was also fashioned to revive the economy. This was Ghana’s first attempt to provide a universal identity card to its citizens and qualified immigrants.

Based on the Citizens Identity Card Decree (NRCD 129), Ghanaians above age sixteen were to register for an identity card. The project was to cover about 5.5 million people over four years (Nketsia, December 1972:1). It had two phases. In the first, ID cards were to be issued to citizens in (the border areas of) the border regions – Volta, Upper, Brong Ahafo, Northern and Western. This initial phase was to cost about 750,000 Cedis and the project was framed by state actors as “largely self-financing” (ibid.). Like the current national identification project, fingerprints and a photograph were required in accessing the identity card in the 1970s.

Essentially, by formally documenting Ghanaians, the NRC diluted the longstanding focus on immigrant documentation. Inasmuch as ‘knowing’ immigrants was useful, it was equally important for the state to ‘know’ its citizens and be capable of distinguishing amongst them. The NRC believed the identity card would “facilitate crime prevention and detection... make the system of identification easier, especially for social security claims and employment, and thus help check fraudulent deals arising from impersonation and mistaken identity” (ibid.). These logics are similar to those underpinning the current citizen identification projects in Ghana, as I show in the succeeding chapters.

The NRCD 129 (1972), the Citizen Identity Card Decree provided that:

- The identity card shall bear the number, name, photograph, occupation and residential or home address of the holder.
- The identity card shall remain the property of the Government.
- The application form shall contain the finger-prints of the applicant.
- Any police officer may for good cause request any citizen of Ghana to produce his identity card for inspection by that officer.
- Every employer, whether public or private, shall cause the identity card number of every employee to be entered on the personal record of that employee.

- Every person having a duty to administer the Social Security Scheme shall amend the registration numbers allotted to contributors under the scheme to correspond with their identity card.
- No person who is required by this Decree to hold an identity card shall be employed by any person unless he produces his identity card.
- The Commissioner responsible for Local Government may by legislative instrument make regulations – providing for the issue of identity cards to aliens resident in Ghana; providing that no alien resident in Ghana shall be issued with an identity card unless he produces a resident permit or is exempted from the need to obtain a residence permit.

The NRC sought to use the identity card project as the foundation for constructing a legible society and also for an identification assemblage by connecting the ID card to employment, social security and resident permits. Importantly, a person's citizenship and the associated rights were only going to be assured if he/she possessed the national identity card. The fact that the implementation of the project started from the border areas in Ghana speaks to how the 'alien' continued to be central in Ghana's identification policy.

Beyond the national identity card project, newspaper records show that, in Ghana the 1970s was generally a period where identification systems were deemed as necessary for resolving various national challenges. Per the Foreign Travel Decree (1972), Ghanaians who wanted to travel outside the country had to apply for an *Exit Permit* and in doing so, give the government a one-month notice. Also, there were calls in the media for identity cards for cocoa agents, educational inspectors, and scrap metal dealers. There were also calls for photographs on school certificates to help curb impersonation. Broadly speaking, the difficulty in distinguishing between citizens was a major public policy concern at the time. However, three years into the distribution of the national identity card, the project was ended due to financial and logistical challenges (Attafuah, 2006).

The AFRC regime (June-September 1979)

In 1978, the Acheampong government was overthrown in a bloodless palace coup by the *Supreme Military Council II*, led by General Akuffo. Although important political changes were introduced under his leadership, such as 'Operation Feed Yourself', a program aimed at developing self-reliance in agriculture, corruption was seen to continue, even grown, under the SMC II. Two months after leading an unsuccessful coup, Jerry John Rawlings (J.J. Rawlings) led a military uprising of the junior ranks of the Ghanaian military on June 4, 1979. General Akuffo was

overthrown and the Armed Forces Revolutionary Council (AFRC) led by Rawlings, took control of the country. In September 1979, the AFRC handed over power to a democratically-elected civilian government, led by Dr. Hilla Limann.

During its short time in power, the AFRC focused on streamlining immigrant documentation regimes. Some scholars, such as Akyeampong (2006), argue that reforms to the immigration regime under the AFRC actually targeted particular groups of people, specifically Syrians and those of Lebanese descent, who were viewed as dominating commerce and the small business sector. As Akyeampong notes, Rawlings drew on the ‘us versus them’ trope by suggesting that Lebanese and Syrians had amassed wealth while ordinary Ghanaians were “hungry” (2006: 317).

Changes to the immigration regime under the AFRC resulted in the deportation of 36 foreigners including 23 Lebanese, 10 Indians, and 3 Europeans (Ghanaian Times, 18th July 1979). Government officials justified their deportation by claiming that they were engaging in retail business “to the detriment of the national economy” while they only held a visitor visa. ‘Non-African’ immigrants were ordered to go register with the immigration office (Akyeampong, 2006: 317). The AFRC later instructed non-African immigrants to always carry the registration card on them: “any alien found without such registration card would be considered an illegal immigrant and deported forthwith or jailed for five years without the option of a fine” (Ghanaian Times, 3rd September 1979). In short, the AFRC continued and perhaps deepened the approach of dividing the country’s residents into ‘citizens’ and non-citizens by documenting immigrants, and in some cases, deporting them. Economic arguments were used to justify such policies and action.

The PNDC regime (1981 to 1992)

In 1979, J.J. Rawlings and the AFRC handed power to a civilian regime led by Hilla Limann after an election. But in 1981, J.J. Rawlings, as leader of the Provisional National Defense Council (PNDC) this time returned to office after overthrowing the Hilla Limann government. The PNDC was the longest serving regime in Ghana’s post-colonial history. In terms of citizen identification, the PNDC asked the National Commission for Democracy in 1987, to study and report back on the utility of a national identity card project (NIA, n.d.). While the Commission was in favor of

such a card, the PNDC cited funding constraints as reason for not undertaking a national identification exercise (ibid.).

Despite the absence of effective citizen identification systems, the PNDC constructed the most intrusive surveillance state in Ghanaian history (Ocquaye, 1995). In its pursuit of a legible society and eventually, social control, the PNDC passed laws requiring registration by religious bodies; normalized extra-judicial scrutiny of the financial records of individuals and businesses; and used security officers and members of the Workers Defence Committees and People's Defence Committees to spy on citizens (Oduro-Marfo, 2018).¹⁵ Libel and Seditious laws were also used to monitor and intimidate the media leading to a “culture of silence” (Ankomah, 1987).

The intrusive tendencies of the regime resulted in several incidents of citizen abuse including the confiscation of properties, public flogging, murders and disappearances. In the larger scheme of things, for Ghanaians, the PNDC era remains vivid evidence of the worst implications of unfettered citizen legibility, and unhinged state surveillance. For example, Opoku (2010: 38) draws on the example of the PNDC's granular attention to the bank details of Ghanaian business people to explain the continuing fear of some Ghanaians to have formal trails accessible to the state. This, he argues, is seen in the reluctance to save with a bank or at least, save certain sums with banks, or even to expand their businesses. Add to this the surveillance and intimidation of traders, especially market women by the AFRC¹⁶ and PNDC in the name of price control (Clark, 1988), and the continued illegibility of most traders to the state begins to look more calculated and rational than I assumed it to be.

Overall, citizens may be taking longer in formalizing their financial and economic relations due to memories of violent surveillance and targeting by the state. This memory and fear of an overly intrusive state, despite its plausibility, rarely comes up in explaining Ghana's large informal sector and non-banked population. While in recent years, the state's pursuit of a broader formal economy

¹⁵ These two committees were later transformed into the Committee for the Defence of the Revolution.

¹⁶ For instance, the AFRC and regimes in the name of reining in profiteers, enforced price control on goods and instituted a regime of surveillance of economic actors (Clark, 2010). Eventually, in 1979, the Makola market in Accra was razed down by soldiers, because the market was supposedly the hub of profiteering — locally framed as ‘kalabule’ (ibid.).

has been used as a justification for identification systems, citizens' mistrust of the state as a shaping factor is hardly centered. As Opoku (2010: 38) argues, it is important to understand the historical roots of the challenges present-day citizen identification projects in Ghana seek to remedy.

The Fourth Republic (1993 onward)

In 1992, Ghana transitioned to a democracy. A new constitution and multiparty elections ushered in the 'Fourth Republic' in January 1993. As will be discussed in more detail in the next few chapters, since the elections in 1992, the government has initiated a number of state-led identification projects, with many of them increasingly biometrics-based. For instance, almost every major public identity card or document in Ghana is now biometrics-based including the National Health Insurance card (for affordable healthcare), Social Security and National Investment Trust card (for pension security), the E-zwich card (for banking transactions), and the driver's license.¹⁷ All these cards collect the photos, signatures, and fingerprints of enrollees and are each overseen by a different state institution. The card glut in Ghana has cost implications for enrolment and maintenance of registers. It is in this context that the national identification project, discussed in Chapter 6, is promoted by the state as 'one card for all'. In the remainder of this section, I focus on the voter's ID card, as it has been the most common, and consequential state-issued ID in the Fourth Republic.

There is high sensitivity surrounding the voter's ID card amongst Ghanaians and this sensitivity is mainly tied to the high stakes and political polarization accompanying general elections. For context, while Ghana has had periodic elections since 1992 and seen three party turnovers, these elections are often characterized by tensions and contestations which largely result from the fact that in a 'winner takes all' democracy, losing an election tends to mean enduring four years of likely marginalization and possible political witch-hunt. Also, the voter's ID card has for a long time been the most common state-issued ID and has de facto served as a foundational identification

¹⁷ The National Health Insurance Scheme was introduced in 2003 to make access to public healthcare free, once a person pays a token premium. Since it was introduced, enrollees have had to submit their fingerprints and headshot during registration. SSNIT is Ghana's largest pension program and from 2016, all contributors have had to apply for a smartcard. As is mentioned later, both the SSNIT and NHIS cards have now been linked to the Ghanacard. The e-zwich card, also biometric, was introduced in 2008 by the Bank of Ghana to allow holders to transact business with multiple banks. Soon after, the e-zwich card was also made compulsory for all beneficiaries of the Livelihood Empowerment Against Poverty program, Ghana's flagship cash-to-poor program. The driver's license was also made a smartcard in 2017.

card instead of the functional ID it is (Akuetteh et. al, 2020), and in turn, not having the voter's ID would challenge access to certain public goods and services. Only citizens from age 18 can vote in Ghana, and each voter must have a voter's ID card. This has meant that being denied access to the voter's ID card, while aged 18 years and above, is a verdict by the state on one's citizenship status, and beyond voting, could impede one's ability to undertake transactions that require proof of identity.

In a first-past-the-post electoral system, the two major political parties, the National Democratic Congress (NDC) — the offshoot of the PNDC — and the New Patriotic Party (NPP) have consistently invested in, and politicized the question of who accesses the voter's ID or not. The tension is compounded by the fact that the NDC has traditionally had strong electoral support in border areas. These areas are known for loose boundaries and consistently are sites of contentions about Ghanaian citizenship. The concern of a bloated electoral roll has typically been framed as evidence of foreigners having access to the voter's ID. Such squabbles about voter registration have sustained suspicions which in turn, have forced a lot of innovations in voter identification.

For the 1992 general elections, the voter's ID had the thumbprint, but no photo of enrollees. The Electoral Commission (EC) introduced photo ID cards in 1996 and Optical Mark Recognition (OMR) scanning technology for the voter's ID (Baxter, 1996). To make counterfeiting, and alteration of the voter ID card more difficult, the EC also invested in ultraviolet technology to verify thumbprints, and a 120 grams meter² paper: these were rigid enough to be a card, but destroyed if pulled from its plastic casing (ibid.). These protective measures were in addition to the use of unique voter identity numbers. Over time, the EC has introduced biometric voter registration and verification systems (Effah & Debrah, 2018).

Even amidst all these technological innovations, the controversies about voter inclusion/exclusion as tied to the question of citizenship, do not go away (Piccolino, 2016; Whittaker, 2015; Kobo, 2010: 69-70). Before the 2016 General Elections for example, the NPP called for a new electoral roll on the basis that thousands of foreigners had been registered. In making their case, the then running mate, Dr. Mahamadu Bawumia asserted “What is interesting about the data is that quite a large number of the constituencies with unusual increases in the voters' register are those that

border neighboring countries” (Myjoyonline, August 2015). In effect, elections in Ghana have served as a reminder of the unresolved question of ‘who is a Ghanaian’ and the touchiness of the subject has been heightened by political parties exploiting the matter for political ends.

Conclusion

This chapter has traced the history of citizen identification in Ghana, from the colonial era to the first decade of the Fourth Republic. I also discuss some projects that were implemented beyond the indicated temporal scope to show some continuity in citizen identification and provide some context. Overall, I have discussed that the larger goal of colonial identification efforts was to make the colony more legible to its administrators. Such legibility was to be in service of extraction, security and social control. The colonial archives show continuities with current initiatives in terms of statist concerns that state capacity and control are tied to citizen registries, citizen IDs, settlement planning, and the ability to distinguish subjects from non-subjects.

As will be evidenced in more detail in subsequent chapters, the colonial government’s most crucial legacy for identification systems in Ghana lies in the fact that it left behind a Gold Coast membered by multiple ethnicities and nationalities with varying claims to citizenship. Years of fluid ‘artificial’ borders, migration, and trade, as well as the colonial government’s utilitarian sourcing of labor across the West African sub-region meant the question of who was a Gold Coaster was left with a less clear answer by the time the colony gained independence. Till this day, as a recent study found, there are still groups at risk of statelessness in Ghana including those with a nomadic lifestyle, persons living in border areas, inhabitants of ‘Zongos’ (often deemed to be immigrants), and victims of constitutional changes (Atuguba et. al, 2020).

Upon independence, governments in Ghana further complicated the citizenship question due to self-serving policy choices. Kwame Nkrumah, for example, mostly favored a pan-African approach to citizenship and therefore a laissez faire approach to immigration. Where post-colonial governments pursued identification and documentation, they mostly focused on sorting the ‘alien’ from the citizen by identifying the ‘alien’. It was only in the 1970s that a Ghanaian government moved to sort its citizens from each other by documenting them and that was eventually botched. To worsen matters, the AFRC and PNDC military regimes through violent surveillance of the

wealth and business of individuals may have made the Ghanaian citizen suspicious of being legible to the state. Further, the contestations about citizenship over time, have become murky as the main political parties in Ghana have approached the subject from the perspective of electoral votes.

Also, it is insightful that the archives do not only show a legacy of statist efforts to make society legible for stronger control, but also hold some evidence of social resistance and support. Such challengers have included persons who wrote to the colonial administration to reclaim their biometrics, drivers who defied identification policies in the colonial era and even political parties that hinder the use of stronger citizenship sorting mechanism in order to protect the claimed citizenship of persons of a certain ethnic or regional extraction. On the other hand, I have mentioned how some citizens demanded of the state, stronger citizen-immigrant sorting techniques in the name of reclaiming the economy for locals. In that sense, the social support or resistance to present-day citizen identification projects in Ghana as shown in the succeeding chapters, extend a history of state-society interactions or even contentions about citizenship.

In sum, contemporary efforts by the Ghanaian state to identify its citizens must navigate a legacy of 'non-legacy'. There is no definite practical consensus on citizenship that could be readily converted into a new citizenship register. Again, there are hardly any effective national citizen registration institutions to draw on for the more contemporary projects. The closest has been voter registration, but that as an institution has been blighted by political coloration from the beginning of the Fourth Republic. State agencies for example, do not have previous synergy systems relating to citizen identification to draw on. Citizens are also unfamiliar with the exact ways in which state institutions could shape their lives with a national identification system. In the next three chapters, I discuss stakeholder debates surrounding three citizen identification systems and in doing this, pay attention to how the legacies discussed in this chapter are of relevance particularly the non-resolution of the citizenship question, and the traditional absence of strong identification institutions. These historical legacies are reflected in arguments and are a key part of the metis that influence the nature, success and challenges of present-day citizen identification projects. It is in this sense that citizen identification systems cannot be uniformly conceptualized and promoted to, and in Global South states as the underlying technologies have to negotiate peculiar dynamics, opportunities and limitations. This chapter exemplifies the historical specifics that may produce

institutional differences in the adoption of, and debates around citizen identification systems across Global South systems even as development remains a common meta narrative.

Chapter Four

SIM REGISTRATION IN GHANA: TYING CITIZENS TO THEIR PHONE NUMBERS

Introduction

“There is no iota of scientific evidence in that; somebody has just pulled a prank on the nation” (Essel, January 2010). On 18th January 2010 many Ghanaians waited, expecting an earthquake to rock the country (Norman et. al, 2012). They believed this because a rumor had circulated on social media via a text message warning specifically about “cosmo rays entering Earth from Mars” and suggesting NASA and BBC as sources (BBC, January 2010). As quoted above, Okudzeto Ablakwa, then the Deputy Minister of Information, responded to the rumor and tried to quell people’s fears of the earthquake.

At dawn on the fateful Monday, and throughout the preceding night, many Ghanaians panicked, were sleepless and stood outside their homes. There came no earthquake; the rumor was a hoax. However, the fear and panic drew attention to the potential social threat of text messaging. The consequent calls for finding, and bringing to book the brain behind the viral text message elevated the creeping conversations about the need for a national Subscriber Identity Module (SIM) registration exercise (ibid.). It is viable to consider the foregoing incident as exemplifying the ‘security’ roots of SIM registration in Ghana. Yet, to my mind, the general suspicion that the state could not possibly find and apprehend the original ‘texter’, and the eventual confirmation of the doubt, also spoke to larger concerns about state capacity and an illegible society.

This chapter focuses on public debates about the SIM registration project in Ghana. As I show, public debates about the registration of mobile subscribers have become complex in terms of the variety of interested voices and their motivations. The chapter is organized into three main sections. First, I present an overview of SIM registration in Ghana as a way of introducing readers to the general nature of the project including its history, the laws underpinning it and the main stakeholders implementing the project. I then present and discuss the various perspectives of stakeholders on SIM registration. These stakeholders include both state as well as local and

international non-state actors. As I show in this chapter, initial arguments in favor of SIM registration such as national security and tracking anonymous callers and propagators of false information have been quite overtaken by emphasis on economic utilities by various actors. Overall, SIM registration has over time been framed as a key factor in Ghana's pursuit of development and with emphasis on financial inclusion.

Overview

The telecommunications sector is one of the most vibrant and competitive in Ghana. The sector has seen a rise in mobile voice subscriptions from 900 in 1992 (NCA, n.d.[a]) to 40.4 million as at December 2018; representing a penetration rate of 138.88% (NCA, 2018a). Mobile phone subscriptions in Ghana are almost 40% above Ghana's population. Mobile data subscriptions stood at 26.1 million by December 2018, representing a penetration rate of 88.8% (NCA, 2018b).

Most telecom subscribers in Ghana are on a prepaid plan. Thus, unlike countries where postpaid or contract subscribers dominate, the mobile network operators (MNOs) in Ghana do not have to chase their clients to pay their bills. Thus, it was reasonable that for a long time, the MNOs did not push for the registration of SIM cards. In 2007, the National Communications Authority (NCA) became the first state entity to hint at a SIM registration exercise (Ajao, 2007). In 2009, the National Security Coordinator's (NSC) office publicly directed MNOs to register their subscribers (Parliament of Ghana, 2010: 762). Revisiting the introduction section of this chapter, the earthquake hoax incident then served the motivations of actors who had begun to push for SIM registration.

The Ministry of Communications (MOC) and the NCA operationalized the NSC's directive in 2010 (GNA, June 2010). While the directive was being implemented, the NCA and the MOC pushed for a legislative instrument to provide explicit legal backing for the exercise. The Subscriber Identity Module Registration Regulations [Legislative Instrument (L.I.) 2006] was then passed by parliament in February 2012. Despite the passing of the legislation, implementation challenges led the Ministry of Communications to pursue a SIM re-registration exercise in 2020 (Appiah, October 2019). The SIM Registration Regulations (L.I. 2006) provides that:

- “A network operator or service provider shall not activate a Subscriber Identity Module for a subscriber, unless the subscriber: (a) completes registration of the Subscriber Identity Module in accordance with these Regulations...
- A subscriber shall, for the purpose of the registration of the Subscriber Identity Module of that subscriber, furnish the network operator or service provider with the following information: (a) the name and residential or occupational address of the subscriber; (b) the date of (i) birth, in the case of an individual; (ii) incorporation, in the case of a body corporate; or (iii) registration, in the case of a partnership or an unincorporated body of persons; and (c) an identification document.”

Section 5 of L.I. 2006 provides directions on the use and non-disclosure of subscriber information. To help mitigate challenges with the implementation of L.I. 2006, the Electronic Communications Act was amended in 2016 to criminalize the sale of pre-registered SIM cards. More recently, in 2020, the Executive Instrument (E.I.) 63 was passed. With E.I. 63 or the Establishment of Emergency Communications System Instrument, the state used COVID-19 as an excuse to enact a law permitting control over telecommunications during public emergencies (Oduro-Marfo, 2020). While public emergencies are not defined in the E.I., telecom companies are now obliged to set up registries for both SIMs and International Mobile Equipment Identifiers - IMEIs (ibid.). The mobile network operators are now also obliged to grant the state access to their terminals for “mass dissemination of information to the public in case of an emergency” (ibid.). On the basis of privacy, the Human Rights Division of the Accra High Court ruled however, in July 2021, against the collection of the personal information of subscribers by government as enshrined in E.I. 63 (Ghanaian Times, 2021). It remains to be seen whether the state will appeal the decision or not and as the ruling is specifically against the E.I. 63, it is curious whether it can apply to the prior existing L.I. 2006.

Regarding technology, SIM cards have a smart microprocessor with an operating system, memory and other security features (Gemalto, n.d.). They are designed to primarily authenticate the subscriber and also ensure that subscribers are billed accurately for their use of a mobile network. As Infosec (2013) notes, in addition to sensitive information such as the subscriber’s contacts and messages, SIM cards carry information such as the Integrated Circuit Card Identifier; International Mobile Subscriber Identity; Mobile Subscriber Identification Number; and a temporary mobile identity. Thus, each SIM card is designed to be peculiarly identifiable.

Similarly, phones are peculiar as they come with a distinct International Mobile Equipment Identifier (IMEI). If a SIM card (and a phone) can be tied to a distinct person through an identity document, the capacity to track and monitor the activities of the subscriber increases. Thus, SIM registration seeks to make the utilization of the surveillance technologies embedded in a phone and a SIM card, more meaningful to the state and its allies seeking to track mobile phone users.

As GSMA (2016: 8) notes, there are two main approaches to SIM registration. Governing authorities can verify a person's registration details with a national/universal register or a functional/specialized database. In Ghana, the latter is predominant as the universal register, the National Identification System/Card, is under construction. MNOs in Ghana navigate the absence of a reliable national register by using products like GVIVE¹⁸ for verification.¹⁹ To verify the successful completion of SIM registration, subscribers can send a blank text to the short code 400 or dial #400*.

In terms of the actors implementing the SIM registration regime in Ghana, the Ministry of Communication and the National Communication Authority oversee the implementation of the SIM registration mandate. NCA is under the MOC and is directly responsible for regulating and monitoring telecommunications in Ghana. NCA enforces the SIM registration mandate while the mobile network operators undertake the actual registration of subscribers using their offices as well as private agents.

¹⁸ GVIVE is a web-based platform developed by BSystems, a local company. The platform collates the major national functional registries including those of the National Health Insurance Authority, Social Security and National Insurance Trust, Electoral Commission, Passport Office and the Driver and Vehicle Licensing Authority.

¹⁹ MTN Official, interview, 8th March 2019

Arguments for and against SIM registration

State actors

“The law is categorical”

In 2009 and 2010, there were concerns about whether SIM registration was obligatory under Ghanaian law. The National Security Coordinator, who was a lead proponent of SIM registration, deemed calls for a specific law to back the regime as “needless” (Asante, 2010). The then Minister of Communications, Haruna Iddrisu argued that SIM registration already had legal backing in Section 8(2) of the Electronic Communications Act, 2008 (Act 775) which provides that:

The Authority [NCA] may authorize a network operator or service provider to disclose lists of its subscribers, including directory access databases, for the publication of directories or for other purposes that the Authority may specify.

Thus, in the government’s interpretation, the NCA had a legal right to ask MNOs for a list of their subscribers, and SIM registration was justified as the means for MNOs to meet such a request. The Minister added that Section 68 of the same Act 775 also formed a legal basis for SIM registration:

The Authority [NCA] may require a licensee, special licensee, authorisation holder or any other person, to supply information, including specific answers to questions submitted to the licensee, special licensee, authorisation holder or that other person... (ibid.).

Sections 68(e) and 68(f) of Act 775 also provide that the NCA could request for “operational and financial information” and “other information the Authority may consider relevant” respectively, from the MNOs. To meet especially Section 68(e), the Minister framed the personal information of subscribers as “operational information” (Parliament of Ghana, 2010: 760).

The Minister’s interpretation was rebutted by some legislators. For example, a legislator, J.B. Aidoo argued:

Madam Speaker, this Law [Sections 8 and 68 of Act 775] does not compel anybody to register... It is a compulsion on the operators to disclose [details of their] subscribers. Madam Speaker, can the Honourable Minister tell us specifically which law is mandating Ghanaians or SIM card users to register with these network operators? Can he be specific — which law — because this law as I see it does not compel anybody to register (Parliament of Ghana, 2010: 768).

Here, J.B. Aidoo was arguing that the provisions of Act 775 only mandated the MNOs to supply information about their subscribers to the NCA, and did not necessarily oblige subscribers to submit information to the MNOs. The Minister responded:

... mobile subscribers and users do not walk on their own, they belong to networks. The law is categorical that mobile operators are expected to comply with the directives of the regulatory body. The authority has accordingly requested them to provide [a] database of their subscribers; failure to do so, we will not hesitate to sanction them (ibid.).

The Minister was drawing on the state's power of sanction to force compliance but indirectly to also truncate debate about the legitimacy of the SIM registration directive. However, when eventually MNOs and their subscribers poorly complied with the directive, the government pushed for a specific legislative instrument — the SIM Registration Regulations. In effect, the initial complacency of the government about public buy-in was revised by the prevailing social resistance to the SIM registration directive.

In February 2012, the Subsidiary Legislation Committee, a parliamentary subcommittee, reported that the proposed SIM Registration Regulations met “provisions of the constitution, the National Communications Authority Act (Act 524) and the Electronic Communications Act, 2008 (Act 775)” (Parliament of Ghana, 2012: 347). A problem with the Committee's assertion was that the said NCA Act (Act 524) had been repealed, and replaced with a new act, Act 769. Yet, when the Minister of Communications drew the Committee's attention to the new NCA Act, there was no attempt to re-consider the proposed SIM registration regulations in light of the new act.

Even after the passage of the SIM Registration Regulations, compliance by individuals and the MNOs was poor. Thus in 2016, the government made further legislation to define, criminalize and sanction the sale and use of pre-registered SIM cards. Private vendors were registering SIM cards with their own ID cards, to sell at a higher price. Thus, the Electronic Communications Amendment Act, 2016 (Act 910) was amended in its section 73(b) to provide that:

- (1) A person shall not deal in a pre-registered subscriber identity module or user identity module.
- (2) Any person who knowingly deals in a pre-registered subscriber identity module or user identity module commits an offence and is liable on summary conviction to a fine of not more than three thousand penalty units or to a term of imprisonment of not more than five years or to both.

(3) For the purposes of this Section, a "pre-registered subscriber identity module or user identity module" means a module that has been registered with the data of a person other than the person who finally acquires the module for use on a network except as permitted by law.

New ‘sanction’ laws quickly become central in the public rhetoric of state actors. For instance, in a press release, the Ministry of Communications (April 2019) cautioned: “All subscribers and Mobile Network Operators should ensure compliance with relevant statutory provisions....”. In the release, LI 2006 and Section 73 of Act 910 were stressed. The MOC highlighted — literally using bold font — the implications of violating section 73(b) of Act 910 as “punishable by **a fine of not more than three thousand penalty units or to a term of imprisonment of not more than five years or to both**” (ibid.). Laws, in themselves, thus have served as a convenient way for state actors to justify SIM registration and compel citizens to register. Such use of the state’s legislative powers also allows the quick displacement of counter or opposing logics and practices into the realm of illegality; and raises the personal and corporate cost of resisting SIM registration.

“The telephone has become a dangerous weapon”

Quelling insecurity has been a very strong justification for SIM registration in Ghana. This is not in any way peculiar as many of the countries that have made SIM registration mandatory argue its utility in fighting crime (Ahmed et. al, 2017; Hemeson, 2012; Gow & Parisi, 2008). Thus, it is unsurprising Ghana’s National Security Council Secretariat (NSCS) was one of the first state actors to push publicly for a mandatory SIM registration regime (Salia, May 2009). The NSCS argued that “if the mobile phone sim cards sold in Ghana and other countries in the sub-region were registered, the owners or users could be appropriately identified to facilitate [criminal] investigations” (ibid.).

Part IV of Ghana’s Security and Intelligence Agencies Act (Act 526) establishes the office of the National Security Coordinator (NSC) and the NSCS. Per Section 19 (d) of the Security and Intelligence Agencies Act, the NSC “assists the relevant Intelligence Agency to gather defense intelligence both internal and external and use the information to detect and prevent threats to the security of the State.” To carry out the above-stated mandate, Section 29 of Act 526 permits the NSC to seek a court warrant to intercept the communications of citizens.

However, in a country where many citizens use mobile phones, and overwhelmingly in a prepaid manner, there would be practical difficulties in tracking people if SIM cards are not registered. In 2010, the then National Security Coordinator, Lt. Col. Rtd. Gbevlo Lartey, in a radio interview asserted that “the telephone has become a dangerous weapon” and as such, “if a telecom operator cannot or does not have the details of its customer then its capacity to provide national security with information when the need arises falls short” (Asante, 2010).

Indeed, even where the National Security apparatus had a court warrant to intercept telecommunications, the legal basis for holding a person liable for communications on a particular phone number was weak where legal ownership had not been established prior to a charge, suit or investigation. It was on this basis that the National Security outfit pushed for mandatory SIM registration and instructed MNOs to register their subscribers by the end of 2009 (Daily Graphic, November 2009). However, the NSC and NSCS have no such practical legislating powers under Ghanaian law. As such, their SIM registration order was questionable (Ankomah, 2009).

In June 2010, the Ministry of Communications, and the National Communication Authority pushed more strongly for mandatory SIM registration. For them also, containing security threats was a key argument. The then Minister of Communications, Haruna Iddrisu argued in parliament that SIM registration was “necessary and/or relevant to help eliminate the growing incidence of anonymous threats and insults emanating from phone calls made from mobile phones whose owner’s identity is unknown” (Parliament of Ghana, 2010: 760). Here, I note the very personal and basic nature of the early rationales for SIM registration, while remembering the story of the rumor and the earthquake hoax in a similar light. The Minister of Communication added that the SIM registration exercise would “help enhance security and fight crime” and curtail “fraud, crime and threats perpetrated by unidentified callers” (ibid.).

In February 2012, when parliament debated the proposed SIM Registration Regulations, the Minister of Communications stated that “the more worrying phenomenon has been the increasing incidence of SIM fraud or illegal SIM bypass in the country, where we have persons terminating calls” (Parliament of Ghana, 2012: 353). Here, while the Minister had stayed on the security tangent, there was an increasing shift to SIM Box fraud, as a key reason for mandatory SIM

registration. The centralization of SIM Box fraud in the conversations was the beginning of a trend in which the security argument was being tied to financial crimes, and to an economic logic. I discuss this trend later in this chapter.

When the Subsidiary Legislation Committee advanced their support for the proposed SIM Registration Regulations, they also made the security argument: “some unscrupulous people have taken advantage of this modern technology [mobile telephony] to commit crimes and carry out other antisocial acts” (Parliament of Ghana, 2012: 347). The committee added that “the coming into force of the instrument would augment the efforts of law enforcement agencies in combating crime in the country” (op. Cit., 348).

The NCA also emphasized how the SIM registration exercise would “help law enforcement agencies to identify the mobile phone SIM card owners”, “track criminals who use phones for illegal activities”, and “curb other negative incidents such as; loss of phone through theft, nuisance/hate text messages, fraud, threats and inciting violence” (NCA, 2016: 9). In a September 2011 press statement, the NCA hinted at a possible integration of International Mobile Equipment Identity with the SIM registration exercise. The NCA asserted:

The IMEI number is used by communication networks to identify valid devices and therefore can be used for stopping a stolen phone from accessing the network. For example, if a mobile phone is stolen, the owner can call his or her network provider and instruct them to "blacklist" the phone using its IMEI number. This renders the phone useless and makes phone theft unprofitable (NCA, 2011).

IMEI registration augments SIM registration regime by making phones without SIM cards traceable. In 2020, the state hurriedly passed Executive Instrument 63, exploiting COVID-19, to instruct MNOs to establish permanent SIM and IMEI registries, thus tying individuals to both their SIMs and their phones. The state, in the name of generating stronger capacity to fight future public emergencies designed the E.I. 63 to get telecom companies to establish databases with IMEIs and also mandated these MNOs to share their databases with the state where there is a public emergency (Oduro-Marfo, 2020). Curiously, public emergency was not explicitly defined in the instrument. Elsewhere, I have framed the E.I. 63 as exploiting a transient crisis to institute permanent registries (ibid.).

Similarly, state actors have drawn on the security argument to push for other surveillance-oriented telecommunications laws that are more meaningful with a SIM registration in place. For example, in 2015, the National Security Coordinator pushed for the passage of the Interception of Postal Packets and Telecommunication Messages (IPPTM) bill which sought to grant his office the power to, without a court warrant, verbally order real-time interception of telecommunications (Privacy International & Article 19, 2016). The IPPTM bill, dubbed the ‘spy bill’ by its opponents, was eventually withdrawn by the state after heavy public criticism. But the Common Monitoring Platform has been instituted in the name of monitoring international calls for purposes of revenue assurance. Additionally, for the 2020 SIM re-registration exercise, the Ghanacard has been pushed as the acceptable ID. Together, these appendage policies and systems show the centrality of SIM registration in constructing an assemblage of surveillance systems for the Ghanaian state.

“We do not want any big brother State in this country”

Some state actors have framed SIM registration as useful for protecting consumer interests. The first dimension of this is about how the exercise in itself would not exclude certain persons from benefiting from the potential usefulness of SIM registration. For instance, the National Communication Authority argue that they have promoted citizen inclusiveness by delaying the deactivation of unregistered SIM cards; undertaken nationwide publicity in local languages to encourage subscriber registration; and rolled out the #400* shortcode to help subscribers confirm their registration themselves.²⁰ To encourage a broader subscriber, buy-in for SIM registration, the NCA quickly moved to quell growing public fears that the SIM registration project is for state surveillance, taxation, or is fee-based.²¹

The second dimension of consumer interest relates to the potential benefits of having a SIM registration regime. The Minister of Communications in 2010, has argued that subscriber databases would help the NCA to “carry out its mandate” which includes “the protection of consumer interest” (Parliament of Ghana, 2010: 761). The minister added that mandatory SIM registration “would facilitate the deployment of Mobile Number Portability (MNP) that allows mobile phone

²⁰ NCA, interview, April 16, 2019.

²¹ Ibid.

users to retain their numbers while shifting to a different service provider, to have choice and better quality of service” (ibid.).

While Ghana’s telecommunication industry is vibrant and competitive, subscribers have traditionally had concerns about the inconsistency of service quality. Yet, mobile subscribers would hardly change networks due to the fear of losing their present phone number. The MNP system ensures that mobile users can change networks and still keep their phone numbers. With SIM registration, there would be more definitive evidence of ownership of a particular phone number. This was power to the consumer, and could potentially push MNOs to improve the quality of their service in the interest of subscribers. The NCA (September 2011) has similarly highlighted the consumer interest argument:

... the aim in undertaking the exercise [SIM registration], among other things, was to empower subscribers as bona fide owners of their telephone numbers and in turn, strengthen them to demand better services. By registering their numbers, subscribers improve their chances of seeking replacement of their SIM cards in the event of loss. The registration was also aimed at increasing subscribers’ power of choice in a more competitive market noting that one of the reasons for the registration exercise was to pave the way for the introduction of Mobile Number Portability which has since been launched with a good degree of success.

According to the NCA, SIM registration would enhance “social cohesion” and “consumer trust” as people would be more certain about who they are communicating with.²² Together, the goal of using SIM registration and mobile number portability to enhance consumer trust and choice, and the associated target of creating a “competitive market” smacks of a neoliberal aspiration.

In contrast, some parliamentarians early on, argued that SIM registration could undermine consumer interest by enabling the invasion of personal and data privacy. This argument was made especially because the initial state directive had come in the absence of a Data Protection Act. The Data Protection Act was passed in May 2012, but the initial order for SIM registration was in 2010. While the Minister of Communications (Parliament of Ghana, 2010: 760) had suggested that “the privacy of the consumer is paramount” in the implementation of SIM registration, Joe Baidoo-Ansah, a parliamentarian, in 2010, wondered why in the absence of a data protection act, any personal data should be collected by private telecom companies.

²² NCA, interview, April 19, 2019.

Probably forgetting that the MNOs are private, the Minister responded that his ministry was “unaware of any activity of a private entity undertaking this exercise” (Parliament of Ghana, 2010: 766). He then added, “The beauty of this exercise is that we are not looking for too much information, just your name and probably a picture may be sufficient for this purpose” (ibid.). But does the state need more information than a person’s photo, name and phone number to infringe on personal and data privacy rights? Moreover, with the benefit of hindsight, we can now appreciate how subsequent appendages such as the mandatory registration of IMEI could nullify the supposed “beauty of this exercise.”

Another parliamentarian, Wiafe Pepera, wondered whether in the absence of a data protection law, the SIM registration directive was “rather putting the cart before the horse” (ibid.). The minister replied that a data protection bill was being drafted and would be presented to parliament soon and added:

But nonetheless, when you give out information on your National Health Insurance... we are already doing it, it is not protected. So, the government will make sure that a law comes to protect all data being held (Parliament of Ghana, 2010: 767).

While the foregoing statement implies a government aware of the need for data protection law, it also was trivializing genuine data privacy concerns by suggesting that people were already submitting personal information to the state in the absence of a data protection law. On their part, the NCA (November 2016: 9) assured that, “all information [from SIM registration] will be kept confidential by all MNOs in a secure database. The information collected shall not be disclosed to any person unless required by any written law.” Positively, the privacy assurance by state actors was eventually backed by both the passage of the Data Protection Act, and the inclusion of access and non-disclosure provisions in the SIM Registration Regulations.

However, the privacy concerns lingered, especially as the government had been simultaneously promoting the Common Monitoring Platform (CMP) (Dowuona, May 2012). The CMP was to be used for monitoring international calls to Ghana, to supposedly ensure that the MNOs paid the right revenues to the state. This was another appendage that could, with a SIM registration regime, deepen the state’s surveillance apparatus. However, the government argued that the CMP was to

monitor only the call detail records including source, timestamp and duration of calls but not the content of telecommunications (ibid.). However, some parliamentarians still feared that the CMP and the SIM registration regime could together help the state to monitor private calls and messages. In the foregoing context, a parliamentarian, Hackman Owusu Agyeman asserted, “we do not want any big brother State in this country. We have freedom, let us have freedom but within the confines of the law” (Parliament of Ghana, 2012: 357).

“Towards a formalised digital economy”

The economic value of SIM registration has been a major frame in parliamentary debates. In defending SIM registration, the Subsidiary Legislation Committee asserted that mobile telephony is “playing a significant role in the socio-economic development of the country” (Parliament, 2012: 347). In the foregoing context, SIM registration was presented as necessary for safeguarding the economic benefits of mobile telephony. The Committee’s report discusses how certain “illegal activities” such as SIM box fraud, which could be prevented with SIM registration, resulted in “huge loss of revenue to the state and the service providers” (ibid.). The Committee added that SIM registration would help “protect life and property” to create the “enabling environment necessary for socio-economic development of the country” (Parliament of Ghana, 2012: 348). In essence, the security justification had over time evolved to serve a larger socio-economic utility. The argument is now rarely about personal or national security for its own sake, but how such security safeguards and promotes economic relations and activities. In this sense, how SIM registration is centered as a tool for development particularly of the economic kind, starts getting clearer.

State actors have communicated ‘user trust’ as an additional dimension of the relationship between the security function of SIM registration and the economic function. While the NCA frames ‘consumer trust’ in the narrow sense of knowing who is at the end of a call, ‘user trust’ as used here is more about subscribers’ confidence in/about the integrity of digital commercial platforms.²³ The logic is that if SIM registration can make the use of mobile services secure, then more subscribers will trust and partake in the mobile/digital economy. In a press statement on pre-registered SIM cards, the Ministry of Information (March 2019) indicated:

²³ NCA, interview, April 16, 2019.

These deficiencies [relating to SIM registration] give way to fraudulent activities to be perpetuated through the use of mobile phones such as mobile money fraud, illegal SIM swap, termination of international traffic (SIM-boxing) leading to loss of revenue to the state, impersonation and cyber-crime. With the government's commitment to migrate towards a formalised digital economy as part of the Digital Ghana Agenda (DGA), it is important for the communications industry to ensure the integrity of an integrated database and systems. This will also build security, trust and confidence for the use of digital services.

From 2017, the government has made the Digital Ghana Agenda a key part of its socio-economic development strategy. The rhetoric is based on the belief that ‘digitalizing’ the economy will spur financial inclusiveness and economic growth. The Mobile Money Interoperability (MMI), National Digital Property Addressing, and the Ghanacard are the three main pillars of the Digital Ghana Agenda.

MMI is the “service which allows direct and seamless transfer of funds from one mobile money wallet to another mobile money wallet across networks” (GhIPSS, n.d.). Ghana’s Vice President, Mahamadu Bawumia, argues that the MMI will help to “improve financial inclusion by bridging the gap between the banked and unbanked. It will also enable free flow of funds between and among all three platforms [mobile money wallet, bank account and E-Zwich account]; allowing the banked and the unbanked to interact at the same level” (Yeboah, 2018). In a country with about 40% of its population without formal bank accounts, the World Bank (June 2019) believes that the growth of the mobile money industry in Ghana could help enroll more people into formal economic structures leading to ‘financial inclusion’.

SIM registration is seen as critical to the MMI as it helps to assure the correct identification of accounts with persons. The current Minister of Communications, Ursula Owusu-Erkufu (2019) has argued that “SIM registration enables subscribers to be properly identified for the use of value-added services such as mobile banking, mobile money and electronic payment services.” The October 2019 order by the MOC for a SIM re-registration exercise adds: “we will start with the Ghanacard and all those with the Ghanacard will use that for the SIM re-registration” (Dogbey, October 2019). Practically then, accurate SIM registration is to help tie a person to a phone number, mobile money account, bank account, digital address and the Ghanacard. The NCA (2011) similarly makes this link between SIM registration and the ‘digital economy’:

As industry regulators, we are enjoined by law to ensure that operators [MNOs] maintain a reliable database of all telephone subscribers. This provides a platform for the efficient functioning of other electronic communications services including mobile money transfer and other such services since the identity of SIM card owners can easily be verified.

Thus, SIM registration is central to the government's economic development vision. Such economic rationales for SIM registration envision the latter as key to tracing individual profiles across various databases. The Bank of Ghana, for instance, indicates that there are draft regulations before parliament that would oblige MNOs to submit transaction data of their subscribers to credit reference bureaus (Citi, August 2019). MTN (n.d.), the largest mobile network operator in Ghana, as part of the terms and conditions for using its 'Mobile Money', requires subscribers to consent to having their data submitted to credit reference bureaus. It is very likely that most mobile money users do not even know this, assuming they have ever seen and read the contract.

In sum, the SIM registration regime is framed by state actors as central to the vision of an effective integration of citizen databases that would supposedly serve the purposes of security, consumer protection and ultimately, the economy. State actors have promoted SIM registration as critical for Ghana's development and presented arguments that suggest that an effective SIM registry is needed to enhance the state's capacity to identify and care for its citizens, rein in criminals and promote a mobile-based economic landscape that allows financial inclusion and also secures economic transactions and assets.

Private corporate actors

"Non-existence of verification by a national database"

The MNOs have been concerned about the difficulties with verifying the identity documents of subscribers at the "point of sale" or "point of activation".²⁴ Per the SIM Registration Regulations, subscribers can register their SIM cards with a passport, National Health Insurance card, a driver's license, a voter's ID card or the Ghanacard. Of these cards, it is only the Ghanacard that is mandatory for citizens. The rest are functional identification documents acquired on personal

²⁴ Ghana Chamber of Telecommunications, interview, April 5, 2019.

volition. Thus, pending the completion of the Ghanacard project, there is hardly a reliable universal database to support the verification of the IDs persons present when acquiring a SIM card.²⁵

As there has been no ready way of verifying ID cards during SIM registration, the GCT points out that like even the Ghana Police Service, they must resort to a visual check of an ID: does the ID look like what it should look like? Is the face in front of you like that on the ID? Is the name on the ID what we are supposed to be dealing with? (ibid.).²⁶ As such, the GCT believes the SIM registration mandate was premature and rather difficult to successfully implement (ibid.).²⁷

For a long time, agents of the MNOs and private SIM vendors have often captured the ID details of subscribers in notebooks. The MNO then attempts to verify the ID in their back office. Initially, the various functional state agencies including NHIS, DVLA, and the EC sought to charge the MNOs for using their databases for the verification of subscriber IDs.²⁸ The NCA intervened and put in place modalities to do the final verification themselves and ensure that the MNOs were not charged.²⁹ The MNOs at their end, use products like GVIVE³⁰ for their back-office verification.³¹

For the MNOs, the key question was whether they could turn away citizens who did not have any of the functional IDs (they are not required by law to have), nor the mandatory Ghanacard which was still being distributed then? Thus, the MNOs argued the potential of excluding some citizens from using a mobile phone and related services, if the SIM Registration Regulations were to be fully followed.³² The Ghana Chamber of Telecommunications has emphasized the verification challenge:

Without the Ghanacard, the mobile operator or its agents or merchants cannot single-handedly verify the multiple approved IDs shown to them on a daily basis, to deny the customers their right to communicate using a SIM card (GCT, 2019).

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

²⁸ NCA, interview, April 16, 2019.

²⁹ Ibid.

³⁰ GVIVE is a repository of the functional ID databases. Apparently, in operating their GVIVE platform, BSystems has had to pay fees to various state agencies for access to functional registries (Citi, June 2019).

³¹ MTN official, interview, March 8, 2019.

³² Ghana Chamber of Telecommunications, interview, April 5, 2019.

Curiously, an initial suggestion by the MNOs for dealing with the verification problem was to take photos of subscribers during SIM registration. The GCT argued that if cards could not be verified, then at least, a record of the SIM owner's face tied to the phone number could help, especially with criminal investigations (ibid.).

The NCA indicates that very early on in the registration exercise, MTN even went ahead to take photos of subscribers.³³ However, the NCA and the MOC rejected the photo collection idea. Interestingly, the state actors deemed it as an attempt by the MNOs to delay the implementation of the registration mandate, and not primarily as the MNOs' way of navigating the verification problem.³⁴ After almost a decade, the Ministry of Communications publicly admitted to the verification challenge during their announcement of the SIM re-registration exercise:

Even though the SIM registration regulations are still in force, it is not being enforced due to the lack of an acceptable, fake proof, identification card and non-existence of verification by a national database to ensure the traceability of the individual who registered the SIM card (Yeboah, October 2019).

Patricia Obo-Nai, the Head of Vodafone Ghana, the second largest telecom company in Ghana, agrees with the utility of a reliable universal database to SIM registration. She asserts “without that, the purpose of the SIM re-registration will be defeated just like its predecessor was” (MyJoyonline, November 2019). Here, ‘predecessor’ refers to all the different botched attempts by the state from 2010 to register mobile subscribers. Despite their concerns about the registration exercise, the MNOs have still implemented the mandate.

“Not here to take away from the pie but to create and enlarge it”

No matter the identity document a person registers a SIM card with, MNOs immediately could know the subscriber's name, age and sex. If a subscriber goes on to use the MNO's products, more information can be known about the subscriber. If a subscriber signs up to use mobile wallet products such as Vodafone Cash, AirtelTigo Money or Mobile Money, the MNO can know how much money a subscriber has in the mobile account; who the subscriber sends money to or receives money from; and what products the subscriber spends money on. With the potential of helping

³³ NCA, interview, April 16, 2019.

³⁴ Ghana Chamber of Telecommunications, interview, April 5, 2019.

accrue such specific subscriber information, SIM registration could help MNOs with profiling and targeting subscribers; a capacity which could be exploited for economic gain.

The economic benefit of profiling comes in two main forms. First, having more specific information on subscribers helps MNOs to better target customers with their digital services. Thus unsurprisingly, the Ghana Chamber of Telecommunications argues that as MNOs deploy more commercial products and services, the essence of the SIM registration for them, heightens.³⁵ In veiled terms, a Tigo (now AirtelTigo) executive expressed that SIM registration would enable “the company to disseminate information to its customers” (GNA, May 2010). In plainer terms, an MTN executive frames SIM registration as enabling the delivery of “the distinct customer experience” (Graphic Online, August 2019).

Second, with a credible database of subscribers, the Ghana Chamber of Telecommunications argues that telecom companies would be better placed to fight threats to the fintech platforms they own or host (Graphic Online, October 2019). Currently, MTN, for instance, offers mobile-based products such as Mobile Money, Y’ello Save Account³⁶, Qwik Loan Account³⁷, Milife insurance³⁸, and My Own Pension³⁹. The MNOs appreciate that any sense of digital insecurity could undermine the confidence subscribers have in these fintech products (Graphic Online, August 2019). The MNOs thus see an effective SIM registration regime as key to safeguarding their fintech products; an argument that state actors also advance. For example, scammers exploiting gaps in identification and verification have made mobile money fraud a serious impediment to public trust in Ghana's digital economy. The MNOs center an effective SIM registration regime as the panacea to the question of fraud:

Many people have provided inaccurate information for their SIM card registration which was making the tracking of such individuals and fraudsters difficult. (GNA, September 2018).

³⁵ Ghana Chamber of Telecommunications, interview, April 5, 2019.

³⁶ This is a mobile-based savings account offered in partnership with Fidelity Bank.

³⁷ A mobile-based loan system offered in partnership with Letshego Ghana Savings and Loans PLC

³⁸ An insurance package covering death and permanent disability.

³⁹ A package for income security upon retirement.

Also, the MNOs center the objective of financial inclusion in their push for SIM registration. MTN, for instance, states “provision of mobile financial inclusion” as one of its business services (Scancom, 2019: 12). In an October 2019 announcement, MTN indicated that it would block all SIM cards that remained inactive three days after registration. This was a way to “beef up its KYC [Know Your Customer] activities to support the national financial inclusion agenda” (Graphic Online, August 2019a). MTN asserts that due to “the digital and data financial services migration, it would not be of any benefit for any customer to use a SIM card that is not registered in his/her name” (Ghana Guardian, April 2018). In other words, dodging the SIM registration regime will mean that a person cannot effectively participate in national economic life.

The positive correlation between an effective SIM registration and a vibrant fintech ecosystem, and how this in turn, benefits capital accumulation is already evident on the balance sheets of telecom companies in Ghana. MTN’s annual financial statements for 2013 and 2018 show the increasing value of fintech to revenue margins. In 2013, *Mobile Money* accounted for 0.8% of MTN’s revenues (Scancom, 2014); and digital services were not reported as a distinct revenue stream (ibid.). In 2018, Mobile Money was responsible for 17.7% of MTN’s customer-derived revenue; and digital services distinctly contributed 7.7%. (Scancom, 2019). Together, the two streams in 2018, contributed 25% of MTN’s revenue accrued from services to its customers. As a finance director with Vodafone asserts, “... mobile money is not here to take away from the pie but to create and enlarge it” (Biztech Africa, September 2015). This was the director’s attempt at assuaging the fears of banks in Ghana about the increasing participation of the MNOs in the financial services sector.

In sum, the MNOs accept an effective SIM registration regime as key to the promotion of the user trust that is needed for subscribers to buy into their digital products and financial offerings. Also, SIM registration is a needed foundation in knowing and targeting “distinct” subscribers with “distinct” products. Interestingly, MNOs have situated themselves as key players in the Ghana government’s development narratives such as ‘Digital Ghana Agenda’ and financial inclusion.

Civil Society and Media

“Using unidentified phone numbers to engage in dubious activities”

Some civil society actors in Ghana have supported SIM registration on the basis of fighting crime. In the arguments of such actors, the concern of rising crime and untraceable criminals has been major. In January 2010, the Consumer Protection Agency (CPA) became one of the earliest civil society organizations (CSO) in Ghana to publicly support SIM registration drawing on the security argument. CPA (2010), in a petition to the Ministry of Communications, and copied to the Office of the President framed the poor state of SIM registration in Ghana as a “national security threat...” as “many people were using unidentified phone numbers to engage in dubious activities.” Revisiting the introduction of this chapter, January 2010 saw the infamous earthquake hoax in Ghana. CPA securitized the incident and argued that if SIM registration was working perfectly, whoever spread the rumor via text messages would have been apprehended (ibid.). CPA threatened to take the MNOs to court if they would not ensure full implementation of the SIM registration directive.

On their part, the Consumer Advocacy Centre (CAC) has probably been the most consistent CSO in tracking the SIM registration project, exposing gaps and holding the implementing actors accountable. In doing this, the CAC often stresses that the project would “allow the tracking of individuals” and that the regime is needed for “security reasons” (CAC, 2013: 4). The CAC argues that the SIM registration exercise would not fully serve its security function if the sale of pre-registered SIM cards continues (ibid.). According to the CAC, some consumers buy pre-registered SIM cards to avoid the stress of the registration process. The Minister of Communications, Ursula Owusu-Erkufu confirms CAC’s assessment and concerns about pre-registered SIM cards:

Reports received from some subscribers indicate that some agents registered SIMs without taking subscribers’ ID details, while others presented valid IDs for registration but later checks indicated their SIMs are registered in the names of other persons they do not know. Others indicated that some agents gave them an option to either buy a pre-registered card or queue to register and some subscribers obviously opted for the pre-registered SIMs to save time (Appiah, October 2019).

After a number of appeals and a few threats of court action, the CAC filed a suit at the High Court of Ghana in May 2019 against the NCA and the four major MNOs: MTN, Vodafone, AirtelTigo

and Globacom. CAC, in their press statement on the court case, highlighted the security imperative for SIM registration:

Consumers in Ghana are losing millions of cedis to criminals who have invaded the telephony market via fraudulently acquired SIM cards, which are activated by the network providers to enable the criminals contact and dupe unsuspecting consumers within the market. The lives of others are being threatened on a daily basis by criminals with such illegally registered SIM cards, without a trace to these criminals. It is our considered opinion that these criminal activities are possible as a result of violations and sidestepping brought about by the flagrant disregard for LI 2006 (CAC, 2019).

It is noteworthy that CPA and CAC, as civil society actors pressurize state and corporate actors to fully implement the SIM registration regime notwithstanding the possibility that such a regime may be exploited by the state and even MNOs for adverse sorting, targeting and surveillance practices.

“A chance to formalize an informal economy, digitally”

The economic utility of SIM registration is also central in the rationalization by civil society actors. For example, when state actors initially mooted the idea of SIM registration, Edward Kutsoati, an academic and associate of African Liberty, an advocacy platform, argued that the security rationale for the exercise was rather narrow. In an article titled, “SIM card registration: A chance to formalize an informal economy, digitally”, he asserted that crime control was missing “the big picture” as the project was a “golden opportunity to develop a good database that could become the building blocks for stronger institutions and economic transformation” (Kutsoati, 2010).

Kutsoati cited the argument of Prince Amoabeng, a top private player in Ghana’s banking and financial sector, that “information about the people; proper home and business addresses; proper identification makes it possible to collect appropriate taxes that will fund projects” (ibid.). Kutsoati suggested that the country should be broken down into various zones and each assigned an administrative code. The code will then be linked to the SIM card when residents register to provide an easier means of extracting and tracking taxes. Here too, it is noteworthy that civil society actors make recommendations that expand the granularity of the surveillance capacity of the SIM registration regime.

Conversely, Franklin Cudjoe (2011) of Imani, a leading think tank in Ghana, presented the adverse economic implications of the SIM registration exercise. He argued that “in a poorly networked society like Ghana, registering these SIM cards means a huge cost outlay for telecom operators, since they bear the costs” (ibid.). Accessing rural areas and hinterlands to register subscribers would be costly for the MNOs. He added that if the subscribers in rural areas were to have their SIM cards deactivated because they could not be reached to be registered, it would affect their “access to telecommunication facilities and hence development” (ibid.).

The other dimension of Cudjoe’s economic argument is the cost of deactivation to the MNOs and the state. He argued that an eventual mass deactivation of subscriber accounts would mean less revenue for the MNOs, and in turn, lower corporate tax revenues for the state (ibid.). He connected his concerns to the Communication Services Tax (CST) regime, a 9% direct tax on all phone communications in Ghana at the time, and pointed out that there would be lower CST revenues with reduced subscriber numbers. He suggested that instead of embarking on an exercise with such adverse cost implications, it would be more beneficial if the resources “rather strengthened structures to ensure a broader base of infrastructural development in the telecommunication sector” (ibid.). In effect, the economic implications of the SIM registration exercise are used both as a rationale for, and against, SIM registration by civil society actors.

“Registration data of subscribers is also a very worrisome issue”

Another key theme for civil society and media actors has been consumer protection, particularly as related to personal and data privacy. The first challenge is with the credibility of the database as tied to the difficulty with verifying the credentials of enrollees. As a former executive with the Data Protection Commission argues, “one of the biggest flaws we have had with our SIM registration has been with the accuracy of information collected”.⁴⁰ In addition to the verification problem, she argued that the inaccuracy was also because enrollment was mostly done “initially by persons who had not been adequately trained to collect data accurately”.⁴¹ She was concerned about the dangers of a “database that is full of inaccurate information” including how it could “inconvenience an innocent person during criminal investigations”.⁴²

⁴⁰ Former executive of the Data Protection Commission, interview, April 5, 2019.

⁴¹ Ibid.

⁴² Ibid.

The other challenge raised about the SIM registry is privacy. The think tank, Imani Ghana has been concerned about the inadequate clarity about “who handles the collected information; what the information is used for; what the guiding rules are; and whether the database will be used to target people wrongly”.⁴³ Similarly, Kojo Annan Ankomah, a prominent lawyer and advocate with the Independent Civil Advocacy Network, and also with OccupyGhana, has registered concerns about the access and use of personal data accruing from the SIM registration project. Ankomah (2010) has been particularly suspicious of how SIM registration was being pushed by the state alongside the Common Monitoring Platform. As discussed earlier, this suspicion was shared by some parliamentarians. However, in the case of Ankomah and the Independent Civil Advocacy Network, the government's assurance that the CMP could only monitor call records and not call content was not enough (ibid.). He queried whether through SIM registration;

- “the Government will know who we are, who we call, and how often we call, at the time we are calling;
- the Government may not be able to decipher the actual words of voice calls, [but] it will be able to read every single SMS coming into and leaving networks, and know every website that a person visits on his/her phone or mobile internet device;
- by simply maneuvering the signaling channel messages, the Government will be able to interrupt, process, intercept, block and/or divert calls, so that the Government can then eavesdrop and know every single detail of happenings on the intercepted calls, without our knowledge and/or the involvement of any competent judicial authority in Ghana;
- the current proposed implementation will allow the Government, not only to know who is phoning whom, but also from where to where (with accurate location placement), and whether a person is roaming and in which country and on which network ...?”

Imani's Franklin Cudjoe (2011), raised similar concerns:

Registration data of subscribers is also a very worrisome issue. At the moment, there is uncertainty about who owns proprietary interest in the subscriber data gathered, as well as what uses to which it will be put. The extent to which private corporate organizations have access to such confidential data is also a cause to worry.

While supporting SIM registration, certain actors have been cognizant of how the flaws in the implementation of the regime in themselves, undermine personal security and privacy. For example, the Consumer Advocacy Center claims that criminal syndicates that pre-register SIM cards before selling them, clone these SIM cards and later hack them for nefarious ends

⁴³ Imani Ghana, interview, April 5, 2019.

(Agbenyega, 2014). This observation has been central in the calls by CAC for a consumer protection policy in addition to a rigorous implementation of SIM registration.

Some media actors have argued that the roots of the flaws of the registration regime must be addressed to protect consumers. The Daily Graphic, the biggest newspaper in Ghana, suggests that the sale of pre-registered SIM cards and its adverse consequences for subscribers may persist, as the challenge has economic roots. The Daily Graphic points to the initial decision by MNOs to pay a commission of about 0.2 cedis to private vendors for each SIM card they sold. To the Daily Graphic, the practice encouraged vendors to cut corners to sell more SIM cards. On the other hand, MNOs were mainly interested in getting as many people as possible to subscribe to their network, whether they registered or not. Daily Graphic, after embarking on a SIM card mystery shopping, concluded:

It was visibly clear that most of the vendors were going against the law because of their quest to sell more [SIM cards] to increase their commission on the sales they make for the telcos. With this struggle for survival, it is evident that the telcos are likely to relax their rules or turn a blind eye to the situation on the ground to allow the illegality to persist (Okine, September 2016).

In a similar report by the Al-Hajj Newspaper (March 2013), their journalist had been able to register five different SIM cards on different networks with different names. Their report highlighted how flaws in the SIM registration process were also undermining the Mobile Number Portability (MNP) project. Their reporter, aided by a SIM card vendor, was able to port a particular phone number he did not own, from one network to another, in order to take control of that number — what is called SIM jacking (*ibid.*). Earlier in the chapter, I mentioned that state actors marketed SIM registration as paving the way for implementation of MNP, and MNP was to serve consumer interest by providing them with the option to switch networks and maintain their phone numbers. However, SIM registration is rather occasioning the exploitation of the MNP regime and the claimed consumer protection it was to assure. SIM jacking also raises questions about how foolproof the security argument for SIM registration is if the latter is being weaponized by criminal elements in society. On the whole, the threat to consumer interest, and to data and personal privacy is approached with ambivalence by civil society and media actors. Some present the threats as a reason to curtail SIM registration, while others frame them as the reason to rigorously implement the regime.

International Actors

The external sources of surveillance technologies

Earlier in this chapter I discussed the technological engineering that makes SIM registration necessary and valuable. I mentioned, and noted that every phone has an International Mobile Equipment Identity, and every SIM card has an International Mobile Subscriber Identity. The IMEI and IMSI are surveillance enablers that become more meaningful when SIM registration is also in place. Such surveillance-enabling identifiers reflect international influences in themselves; the standards for their formatting and deployment are guided by the recommendations and systems of international bodies. The GSMA (n.d.), for example, allocates IMEI number ranges to mobile phone manufacturers, and also keeps the global IMEI Database on mobile devices used around the world. All the telecom companies in Ghana are members of the GSMA. Also, Study Group 2 of the International Telecommunication Union (ITU)'s Telecommunication Standardization Sector allocates IMSI ranges and standards (ITU News, 2018). Ghana is a member of the ITU.

All the major telecom companies in Ghana are originally foreign companies. Also, several of the appendages to SIM registration in Ghana that deepen the state's surveillance capacity are tied to foreign-sourced technologies and firms. As an example of the foreign-sourced appendages that deepen the surveillance utility of SIM registration, the NCA purchased an 'eavesdropping' software from the infamous Israeli software company, NSO (Dogbevi, 2019). Also, the Common Monitoring Platform project is contracted to Kelni-GVG; the Global Voices Group (GVG) is a Haitian company. Kelni, which had no prior work history in telecom due diligence, is the domestic partner of GVG, thus satisfying local content laws. The fact that the major private technology players mentioned here are foreign brings up the question of where the corporate profits from procurement opportunities related to SIM registration and its surveillance appendages, end up.

“A common practice in the telecom world”

The increasing operationalization of SIM registration regimes around the world may be contributing to the gradual normalization of the regime as some sort of global practice. This claim of SIM registration as 'global norm' in itself, is offered as justification in Ghana for the regime. For instance, the National Security apparatus justified SIM registration as something “done all

over the world” (Daily Graphic, November 2009). The former Minister of Communications, Haruna Iddrisu similarly asserted:

... registration of SIM cards is a common practice in the telecom world. It is mandatory in countries such as India, South Korea and now Nigeria, South Africa, United Kingdom to mention a few (Parliament of Ghana, 2010: 759).

... nowhere in the world do you just walk into either a market or a street and acquire a SIM [card] for the purpose of mobile telephony. In many parts of the world such as England, India and others, you necessarily must register before you can own a SIM (Parliament of Ghana, 2012: 354).

Some parliamentarians also deployed the ‘global norm’ frame in their support of SIM registration. For example, Ahmed Ibrahim made the submission below in parliament:

I think in many countries or jurisdictions, you buy a SIM card and you are made to register it before it becomes activated. However, in our part of the world, you buy a SIM card and the moment [you buy it], you insert it into your phone, off you go and you start talking... I had the opportunity to go to Trinidad and Tobago. When I bought a SIM card there, my passport was requested. I had to tender in my passport for them to use it to activate my phone and to register the phone as well (Parliament of Ghana, 2012: 349-50).

While many countries may have SIM registration, it is curious that state actors in Ghana project SIM registration as global practice, as it is really not. Indeed, in several countries, it is mostly subscribers on a postpaid contract that are registered by telecom companies. Consequently, the debates in other parts of the world about why prepaid subscribers must not be registered, or even the ineffectiveness of the regime, were silenced in the Ghanaian debate by the ‘global norm’ claim. Yet, it is important to appreciate how frames such as “all over the world”, “nowhere in the world”, and “in many countries” reflect a rhetorical practice that is often deployed in countries like Ghana, during policy making debates, to suggest an urgent need to catch up with the rest of the world.

“Transform services and innovate for socio-economic development”

The National Communication Authority insists that the SIM registration exercise was the product of an independent decision, made and operationalized by the Ghanaian state.⁴⁴ However, the World Bank, through the eGhana project, had supported the SIM registration project in Ghana. The eGhana project (from 2006-2014) was funded with a credit facility from the International

⁴⁴ NCA, interview, April 16, 2019.

Development Association, and sought to help Ghana “generate growth and employment by leveraging information and communication technologies and public-private partnerships” (World Bank, 2015: ii).

In the Implementation Completion and Results report for the eGhana project, the SIM Registration Regulations is noted as one of the “legislative accomplishments of the [eGhana] project” (World Bank, 2015:12). The SIM Registration Regulations is further discussed in the report under the component titled, “Creation of Enabling Environment” (World Bank, 2015: 15). The goal of this component is to aid the “establishment of the legal frameworks” that are “prerequisite for the development of telecommunications and IT sectors in Ghana, and, therefore, growth and employment in the sector” (ibid.). The economic utility of Ghana’s SIM registration is stressed in the context of contributions to liberal capitalism:

The competitive environment was further strengthened with the Mobile Number Portability Regulations and Subscriber Identity Module (SIM) registrations which improved user confidence and choices (ibid.).

The promotion of mobile-owner identification as some foundation for economic progress has been deepened not only by the World Bank but also by bodies such as the ITU, of which Ghana is a member. The ITU has helped promote the concept of mobile identity (m-ID), for example. With m-ID, the SIM card is not just framed as needed for communication but also as a tool for peculiarly identifying SIM card owners, which could in turn, enhance economic participation and the recently-popular goal of financial inclusion. While the ITU has not promoted SIM registration as mandatory for its members states to implement, it has elevated the idea that mobile identity must be a necessary part of contemporary development thought and practice:

Mobile ID is one link in the chain to connect the unconnected and thus connect the world through ubiquitous services beyond e-Government and m-Government where the private sector and citizens are fully engaged players that help transform services and innovate for socio-economic development. (ITU, OECD, & DESA, 2011: 5)

“Integrity of the international financial system”

Like domestic actors, international inter-governmental actors also provide the security argument as justification for SIM registration. The World Bank (2015: 88) highlights how SIM registration can help “address challenges associated with the use of mobile phones to commit various crimes”

in Ghana. As is seen in the narratives of state and civil society actors, the security argument is often tied to an economic end.

SIM registration is promoted by various inter-governmental actors as needed for securing the global financial architecture. International banking regimes such as Know Your Customer (KYC), Customer Due Diligence (CDD), and Anti-Money Laundering and Counter-Terrorist Financing (AML/CTF) highlight the utility of SIM registration (FATF, n.d., FATF, 2019). KYC and CDD processes seek certain personal information on clients, especially of financial institutions, to help secure the financial system. On the other hand, the AML/CTF regime seeks to monitor transactions to ensure that the financial system is not used as a tool to undermine national and global security. For these regimes, the ability to accurately identify, verify and authenticate users is central.

MTN Ghana similarly has justified their renewed commitment to SIM registration as necessary for KYC purposes and in turn, “to support the national financial inclusion agenda” (Graphic Online, August 2019a). The ITU also draws on KYC to justify SIM registration:

The purpose of the SIM registration policy is to enable the identification of a person using a mobile service by verifying existing identity documentation. As the identity of the person has been verified through a Know Your Customer process (KYC), and the mobile device/SIM can be attributed to the person, it is then possible to use this information for digital authentication, knowing that the person is who they say they are, and enabling that person access to various services (ITU, 2018: 14).

KYC and CDD systems are key to the AML/CFT regime. Ghana is a member of the Inter-Governmental Action Group against Money Laundering in West Africa (GIABA). GIABA is a specialized body within the Economic Community of West African States (ECOWAS). GIABA is an associate member of the Financial Action Task Force (FATF) which “sets standards and promotes effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system” (FATF, n.d.). As Ghana makes mobile platforms a major part of its banking sector, it is expected to ensure that the FATF’s recommendations are implemented in the mobile economy.

The FATF's Recommendations 10, 11, and 12 are on customer due diligence and record keeping (FATF, 2019: 12-14). The FATF, through its country performance appraisals, reminds states about the need to uphold the former's recommendations. GIABA and FATF, for example, have asked Ghana to improve its CDD systems as they relate to SIM registration:

A major weakness noted by the assessors [GIABA] is that there is no limit to the number of SIM cards an individual can acquire and use, which results in abuses and fraud given that some of them have not been registered. For example, data provided by MTN, the largest telecommunications network in Ghana, in its AML/CFT report for 2014 revealed that cases of fraud and cases of use of multiple accounts (SIMs) were up by 20% and 60% respectively. Furthermore, the MVTS providers [MNOs] use third parties in the form of agents who register clients on their behalf. (GIABA, 2018: 67).

The quoted recommendations of GIABA and FATF evidence how global accountability systems relating to the AML/CTF regime encourage SIM registration at the state level. The central bank, Bank of Ghana's (2015: 12) 'Guidelines for E-Money Issuers in Ghana', which regulates the mobile money industry, discusses SIM registration within the FATF's AML/CTF frame:

- "E-money issuers that have already collected and retained customer ID information, e.g. during registration of SIM cards or bank accounts, are allowed to directly use this information to satisfy relevant CDD requirements across the various account tiers outlined in Sub-Paragraph (2) above, without requiring the presentation of the same documentation again. In cases relying on information from SIM registration, EMIs must validate the data against the database of the National Communications Authority within 48 hours of account opening. Accounts where discrepancies are identified must be suspended until such time as these discrepancies have been eliminated.
- E-money issuers are in all instances under strict obligation to conduct such verification of customer information as is necessary to appropriately manage material risks of error, fraud and breaches of applicable rules and principles with regard to AML/CFT."

In sum, the framing of user identification and authentication as important for economic expansion, financial inclusion and the security of the global financial architecture seeps from international bodies such as the World Bank, FATF and ITU into state-level policymaking. These logics are also very present in the justifications for SIM registration by local actors.

Conclusion

Generally, SIM registration enjoys state and non-state support in Ghana. The general consensus has been that SIM registration engenders a more legible society and boosts the capacity of the state and its institutions in performing their functions especially as they relate to promoting security and the economy. For civil society actors, their support of SIM registration has mainly hinged on how

the regime could enhance citizens' security by making criminals traceable by the state. Such justifications by non-state actors is practically a verdict on the performance of the state in promoting personal security, over the years. Thus, civil society groups have generally challenged the state and mobile network operators for a more rigorous implementation of SIM registration, despite the adverse surveillance uses the state and MNOs could put SIM registration to. In effect, citizens are practically asking to be made more legible to the state, if that is what will get the state to protect them. This 'call' for visibility exemplifies the impracticality of conceptions of surveillance as inherently bad, or even as a pursuit only beloved by an authoritarian or anti-democratic state; citizens may genuinely want to be surveilled too if that is what supposedly strengthens the state's capacity to perform its duties and to care for citizens.

Notwithstanding the popular support, various actors in Ghana have called for data protection laws and practices to ensure that SIM registration does not lead to arbitrary privacy breaches by state actors and MNOs. These concerns, as well as the eventual passage of a Data Protection Act, and the inclusion of data privacy and security provisions in the SIM Registration Regulations speak to the acceptance of the need for data protection and privacy even as SIM registration is implemented. Together, SIM registration and related statist pursuits such as the Common Monitoring Platform, the botched 'spy bill', mobile number interoperability, purchase of the NSO eavesdropping software, E.I. 63, and making Ghanacard the ID for registering SIM cards, encourage a more surveillant state and could endanger privacy rights. Yet, having a more surveillant state and a more legible subscriber/citizen may not be deemed as threatening especially where notions of development are linked to them.

Earlier concerns of especially state actors, about unfounded rumors, and anonymous texters and callers, have over time, ceded center stage to narratives that present SIM registration as a key cog in Ghana's pursuit of a stronger economy. Increasingly, SIM registration is framed as central to the growth of the mobile economy, the formalization of the economy and financial inclusion; three key goals of the government's Digital Ghana Agenda. The framing of SIM registration as important to socio-economic development is shared and promoted by inter-governmental actors such as the World Bank and ITU. SIM registration has also been tied to KYC and CDD processes in banking and finance, and insisted upon by international bodies such as FATF and GIABA.

All told, the SIM card is being transformed from just a communication tool into a technology for enhancing state capacity and general societal progress. While we may be sure that SIM registration and its appendages will lead to a better-seeing state and a more legible society, what we cannot be too sure about is whether the claimed goal of economic progress would actually result, and if it does, how inclusive it would be. The state's objective of using SIM registration to provide firm foundations for Mobile Money interoperability, and in turn, financial inclusion is not in itself an adverse end. Formalizing the economy by banking the unbanked, or in the words of ITU, "connecting the unconnected" can have some positive implications for citizens. Yet, Keeanga-Yamahtta Taylor (2019) reminds us of what she calls "predatory inclusion." Does inclusion necessarily mean a bigger pie for all, or as one of the MNO executives put it, it is just a bigger pie, but only for MNOs and banks?

To conclude, the need for a SIM re-registration exercise almost a decade after initial efforts to register mobile subscribers in Ghana is curious. Considering the general support SIM registration seems to have in Ghana, it is curious that the state is struggling to institute an effective and reliable SIM registry. A major challenge to SIM registration in Ghana has been the difficulty with ID verification; which is tied to years of having state-held citizen registries with suspect integrity. In the absence of a universal and mandatory state-issued ID, citizens mainly resorted to using the voter's ID card for SIM registration, as the former, has for years been the most popular ID in Ghana. However, as indicated in Chapter 3 and Chapter 6 of this dissertation, the voter's ID suffers reputational challenges tied to citizenship contestations.

It is therefore confounding that in the parliamentary debates about SIM registration, there was hardly any discussion of possible challenges with verifying the identity of subscribers during enrolment and authenticating subscriber identities after. Similarly, the initial directives by the National Security outfit, Ministry of Communications, and the National Communications Authority ignored or overlooked the certainty of this verification problem which in turn, affected the accuracy of the eventual SIM registry leading to the call for a re-registration exercise. It is the same verification challenge that led MNOs to initially see SIM registration as a threat to their subscribership and profit margins, and as such became lax in implementing the regime. Private

SIM card vendors in turn, embarked on the illegal sale of pre-registered SIM cards to navigate the challenge of verification.

Overall then, the deleterious ‘pre-registration regime’ must also be read as a form of resistance borne out of the age-old challenge with citizen identification and verification in Ghana. Again, the culture of pre-registration shows the challenge with statist efforts to resolve social concerns by passing laws and trusting technology, notwithstanding institutional realities. In the end, there is the threat of a vicious cycle: the verification challenge and the ‘pre-registration’ problem leading to a SIM registry with inaccurate data, and as such, may still leave society less legible, the state not as capable as preferred, and all the heralded goals of SIM registration in peril.

Chapter Five

THE NATIONAL DIGITAL PROPERTY ADDRESSING SYSTEM: TYING CITIZENS TO GPS COORDINATES

Introduction

While there have been house numbers and street names in certain areas of the country, somehow, these addresses have hardly been connected enough to get activated in everyday usages. Many people use vendors and movable structures as landmarks when giving directions; ‘When you get to the blue kiosk, there should be a fruit seller there. Ask him to show you where the Catholic church is. Your destination is about three buildings to the right of the church.’ The running joke questions what happens if the blue kiosk is moved, or the fruit seller is not present on a particular day? As a journalist stressed to me, the directions people get in Ghana are often difficult to follow and tend to land people in wrong destinations.⁴⁵

Such complexity of geography tames the legibility of society to both state and corporate bodies. It is in this context that the National Digital Property Addressing System (NDPAS) was rolled out by the Ghanaian state. In this chapter, I present and reflect on the debates about the NDPAS. While various actors justify the addressing system as needed to better track criminals and for stronger delivery of emergency services, the project’s utility has also been more situated in a very economic context. Despite the general support for the NDPAS, there have been criticisms about the cost of the project, and the potential for privacy breaches, as well as corruption allegations. In the rest of this chapter, I provide an overview of the project and also present and discuss the perspectives of various stakeholders as they relate to the NDPAS.

Overview

Beginning in 2003, the Ghana government pursued the Land Administration Project (LAP) backed by funds from the World Bank and USAID (GSDF 1, 2015: 21). LAP had “street addressing and property identification” as a key objective, and its implementation was led by the Ministry of Local Government and Rural Development. The National Street Naming and Property Addressing

⁴⁵ Daily Graphic reporter, interview, May 2, 2019.

Guidelines (2011) was also developed to support a uniform physical addressing system. Yet, by 2015, most of the metropolitan, municipal, and district assemblies (MMDAs) had not fully implemented the Street Naming and Property Addressing mandate (Local Government Service, 2015).

While the implementation of the physical addressing system stalled, the NDPAS and the associated GhanaPost GPS app were launched by the government in October 2017. About \$2.5 million was initially expended on the project including the cost of the app, publicity, servers, firewalls, database licensing and the operating system (Class FM, November 2017). The government's publicity campaign for the NDPAS project was dubbed, "Jack, where are you?" This was an allusion to a popular game in which a blindfolded person attempts to catch evasive game-mates. When the blindfolded person calls out, "Jack, where are you?", the game-mates respond with "I am here" to help the blindfolded person find them. The publicity bliss sought to make digital addresses 'cool'.

In terms of legislation, there is no specific Act or Legislative Instrument backing the NDPAS project. However, the need for property addressing and street naming has basis in Ghanaian law. The Local Government Instrument, 1994 (L.I. 1589), mandates sub-regional authorities including urban councils, zonal councils, town councils and unit committees "to recommend to the District Assembly the naming of all roads in its area of authority and cause all buildings in the streets to be numbered."⁴⁶ The law grants power to District Assemblies to undertake property-addressing, but also promotes local agency and decentralization by involving governance structures below the District Assembly. Also, the National Identity Register (Amendment) Act 2017 makes it compulsory for every person registering for the Ghanacard to submit a digital address.⁴⁷ Thus, by extension, the digital address is legally required for the attainment of the citizenship rights that the Ghanacard is meant to assure.

⁴⁶ In the late 1980s, district assemblies were introduced in Ghana as a way of decentralizing power. These assemblies are tasked to oversee local development in districts and consist of other lower governance structures such as the town councils and the unit committees.

⁴⁷ See its section 1(a)(xxi)

In terms of technology, the NDPAS converts the longitude and latitude coordinates of a location into an address based on a nationally uniform format. The NDPAS utilizes a 5x5 demarcation of Ghana, and gives each demarcation a unique digital address. Thus, the entire country is said to have as many as 16.1 billion digital addresses. For localization purposes, the eventual address shows the region, district and postcode of a location.⁴⁸ The NDPAS utilizes digital maps sourced from Google, Open Street, Environmental Systems Research Institute, and Microsoft. The GhanaPost GPS app is for generating the digital addresses; it is downloadable from Google Playstore or Apple Store. Users submit personal details including name and phone number, in order to generate the digital address of their present location. The NDPAS has an open Application Programming Interface to allow third parties to plug in and integrate the system with their own programs.⁴⁹ The app allows emergency messages to be sent to the Police, the Fire Service and the Ambulance Service. There is a panic button on the app to automatically send an SOS message along with the sender's digital address, to request emergency services.

The main implementing actors for the NDPAS are the Office of the Government Machinery (OGM), Ministry of Communication, Ghana Post and Vokacom. Publicly, the Office of Government Machinery, basically the Presidency, has owned and promoted the digital addressing project. Vice President, Dr. Mahamadu Bawumia, has often discussed and defended the NDPAS project in his public speeches and even chaired the technical committee that designed the implementation framework for the project (Ghana Civil Service, 2017: 124). In essence, the digital addressing project is of high importance to the incumbent government.

Typically, an addressing project should fall within the mandate of the Ministry of Local Government and Rural Development (MLGRD) yet the Ministry of Communications has been the 'home ministry' for the digital addressing project, probably due to the centrality of the internet,

⁴⁸ For example, the address, AK-039-5028 is for the Kumasi Main Post Office. For context, AK-039 is the postal code for the area. 'A' refers to the region of the location (Ashanti Region), while 'K' refers to the district (Kumasi District), and 5028 is the unique address within the postal code. The Postal Code and the unique address together form the unique digital address (Ghana Post, n.d./a).

⁴⁹ "An application programming interface, or API, enables companies to open up their applications' data and functionality to external third-party developers, business partners, and internal departments within their companies. This allows services and products to communicate with each other and leverage each other's data and functionality through a documented interface." <https://www.ibm.com/cloud/learn/api>

mobile devices, and Ghana Post in the project. Ghana Post ‘owns’ and operationalizes the GhanaPost GPS app, and awarded the contract for the development of the app. Their direct interest is in using the system to improve their package delivery services. Vokacom, a Ghanaian company, is the software developer and vendor for the project, and has had a licensing contract with Google for the usage of Google Maps in the NDPAS. Vokacom was chosen from 28 competing software companies and has a five-year contract with the government.⁵⁰ Vokacom is responsible for all the software, and technical aspects of the NDPAS project.

Debating the NDPAS: Justifications and Contestations

State actors

“Effectively open up the economy”

The NDPAS has been presented by state actors as a key cog in the government’s ‘Digital Ghana Agenda’, especially as linked to the government’s efforts to formalize the economy. In a parliamentary submission on the NDPAS project, the Deputy Minister of Communications asserted:

NDPAS will facilitate the formalisation of the economy as it provides a unique digital address for properties and businesses for easier identification and tracking by relevant institutions (Parliament of Ghana, 2018: 326-7).

Generally, state actors have argued that the NDPAS would boost the economy by increasing tax revenues and creating jobs. At a sensitization forum organized for local government administrators, the Deputy Minister of Local Government and Rural Development, Kwasi Boateng Adjei said the NDPAS would “effectively open up the economy”, “have tremendous implications in terms of revenue mobilization”, and that;

The vision of the [NDPAS] initiative is to achieve nationwide use of spatial data information for good governance and socio-economic development through the development, management and dissemination of a Property Addressing system (GNA, December 2017).

The (now former) Greater Accra Regional Minister, Ishmael Ashitey also explained that the digital addressing system would help local governments to address new properties, and have an up-to-

⁵⁰ Vokacom, interview, April 9, 2019.

date database of properties which could then be converted into a tax database (ibid.). The emphasis on the link between the NDPAS and taxation at the local government level is unsurprising as the challenges with property rate assessment and collection have traditionally weakened the financial base of the MMDAs (Local Government Service, 2015).

Beyond taxation, state actors have marketed the NDPAS as enabling financial inclusion. As mentioned in the preceding chapter, the financial inclusion narrative often draws on bifurcations such as the banked/unbanked; and formal economy/informal economy. In Ghana, most of the players in the economy are in the informal sector, and without formal bank accounts (Osei-Boateng & Apratwum, 2011). Thus, the President of Ghana, Nana Akufo-Addo, during the launch of the NDPAS advanced:

The *koko* seller can now open a bank account, as he or she will be able to meet the basic requirement to access loan facilities from a bank. The *koko* seller, like many other small businesses, can also grow his or her business (Daily Guide, October 2017).

Here, the President used ‘*koko* seller’ or porridge seller to represent micro-scale vendors who are unbanked, and cannot access formal financial services. He then advanced that, with digital addresses, such people can now “meet the basic requirement to access loan facilities from a bank.” In the context of his speech, the President’s understanding of ‘financial exclusion’ ties it to the lack of an identifiable and traceable address. Elsewhere in the same speech, the President notes, “Once your address can be located, the risk premium charged by banks will be lower. Businesses can now produce at lower costs, and will have enough funds for reinvestments” (ibid.).

I understand the President’s analysis in two ways. First, the President was linking his earlier point on financial exclusion to the high cost of accessing credit in Ghana. The absence of a uniform and easily verifiable address makes it more difficult for Ghanaian banks to track loan defaulters. This risk in turn, attracts a general premium on loans. Thus, with the NDPAS, the President believes the cost of credit will be reduced and bank loans would become more attractive to small business owners. Similarly, the Minister of Communications, Ursula Owusu-Ekuful has suggested:

[the NDPAS] would enable table-top owners [micro-scale vendors], ‘*koko*’ (porridge) and plantain sellers to access credit to expand their businesses at the banks. It would also improve revenue mobilization and generation, as well as promote certainty in bank transactions. (Danso & Abbey, 2017).

The second dimension of the President's statement relates to the general assertion that the NDPAS would be a boost for local businesses. In this sense, the President suggests that the reduced cost of credit would become savings business owners could use to expand their trade; potentially creating more jobs, accruing more revenue and in turn, paying more taxes. Also, increased access to credit means financial service providers can expand their customer base and in turn, accrue more revenue, employ more, and pay more taxes.

The believed connection between the growth of private business and the NDPAS, goes beyond access to credit. Private businesses have been admonished by state actors to integrate their systems with the NDPAS. On one hand, government functionaries including the Vice President, Bawumia have mentioned the utility of an effective digital address system in strengthening e-commerce (Ghanaweb, November 2017). Also, the NDPAS supposedly will make private businesses more visible to, and traceable by potential customers.

Again, the NDPAS is intended to boost the business of the state-owned Ghana Post by reducing failed and multiple parcel deliveries (GNA, November 2017). Ursula Owusu-Ekuful, the Minister of Communications concludes that, "technological advancement has become a rejuvenation and salvation for Ghana Post today" (Danso & Abbey, 2017). The Managing Director of Ghana Post also asserts that the digital addressing system would make Ghana Post a "major revenue driver" (ibid.).

Along these lines, Ghana Post has made business arrangements with entities such as Standard Chartered Bank, as well as the Driver and Vehicle Licensing Authority (DVLA) to deliver bank cards and licenses respectively to customers' using digital addresses (Modern Ghana, May 2019; Graphic, December 2017). Ghana Post has a similar arrangement with the e-commerce company, Jumia for parcel delivery (ibid.). In effect, the state has been quite entrepreneurial in its adoption and deployment of the NDPAS. Further, the embossing of buildings with address plates was originally envisioned by the government as an additional revenue driver. Initially, citizens were to pay about \$10 if they wanted Ghana Post to send them a number plate with their digital address and businesses were to pay \$20 but the policy was later revised to make embossment free for residential facilities (Ministry of Communication, December 2018: 9).

While no official explanation was publicly given for the revision, low citizen uptake was a likely factor. For example, Ghana Post officials who had gone to Koforidua-Asokore, a town in the Eastern Region of Ghana, to generate digital addresses and tag houses at a fee were almost lynched. An angry resident told reporters, “We noticed they want to cheat us because this address system is supposed to be free. We will not pay, they should tell the government we don't even have what to eat” (Starr FM, November 2018). Another resident complained, “We are not paying anything, nobody will pay, this government wants to kill us with taxes, there are no jobs here yet we are being taxed anyhow, there is hardship” (ibid.). Such reactions by citizens should point to a re-imagination in which citizens appreciate ‘Jack, how are you?’ as a more useful frame, than the government’s ‘Jack, where are you?’. In the said incident, the Ghana Post officials had reportedly threatened to fine citizens who would request an address plate in the future, if they did not do it at that present time (ibid). This was not the state’s policy and shows the threat of poor policy education and implementation to the state’s policy goals.

Another economic dimension of the NDPAS project relates to how the state has used the digital addressing system to directly create jobs, as seen in the connections with the Nation Builders Corp (NABCO). The NABCO program is a state intervention aimed at providing temporary jobs for unemployed tertiary-level graduates. Many graduates have been tasked with the generation of digital addresses and tagging of immovable properties with addresses across the country (Mynewsgh, November 2017). On one hand, the free tagging of address plates was to navigate the challenge of poor internet service in certain areas, as well as the fact that some Ghanaians may not have smartphones nor the digital know-how to generate their digital addresses. However, it was also about helping reduce the graduate unemployment challenge. According to NABCO, they have deployed 12,750 people to tag 4,000,000 properties (Smith, 2019). While the national tagging exercise was to be done in six weeks from late July 2019, as at September 2021, the exercise had not been completed without any public justification by the government.

“You could easily be identified by the police or the emergency services”

State actors have also promoted the digital address system as necessary for enhancing citizens’ access to public services and utilities. Here, speedier emergency services and responsiveness to crime have been stressed. For example, Ghana Post frames the GPS app as “resourcing the emergency service providers to respond promptly to distress calls that hit their devices with digital addresses for easy location” (Ghana Post, n.d.). In launching the NDPAS, President Akufo-Addo also assured:

Through this system, the Government can now move to strengthen the health and safety of citizens. Law enforcement agencies can also easily access addresses more effectively in order to deal with crime. Health, fire and ambulance services can effectively identify property locations in order to save lives at a faster rate (Daily Guide, October 2017).

Ibrahim Anyars, the head of NABCO, also asserts:

If you look at your household, if there was an emergency required because of some kind of security concern, you could easily be identified by the police or the emergency services [with the digital address] and this can only be a good thing for the householders and so we are counting on everyone to support this (3News, July 2019).

As mentioned earlier, the Ghana Post app has a panic button, which when activated, automatically alerts emergency service providers. The responding agency will receive the accompanying digital address, and can promptly provide the needed service, if it actually works. Designers and promoters of the app assert that even outside of the app, once a person making an SOS call can provide a digital address, the service providers will stand a better chance of pinpointing and dispatching to the exact location. Ghana Post has thus trained various emergency service providers for this purpose (Modern Ghana, May 2018).

In November 2019, a story headlined, ‘GhanaPost GPS on robbery victim’s phone aids police to track down armed robber’ appeared in the news. According to the story, the police received a call upon a robbery, and “within 30 minutes, one of the armed men was arrested using the digital address of phones which they took away” (MyNewsGh, November 2019). While this story seemed framed to promote the app and its emergency service function, it really left questions as to how the digital address can be tracked beyond where it was generated. One could either dismiss the story as false, or wonder whether the surveillance function of the digital address is stickier than publicized, and that it is actually a perpetual location tracker once downloaded.

Beyond emergency services, other public utilities are being linked to the NDPAS. Persons applying for driver's licenses can now have them delivered to their digital addresses. The Registrar General's Department has also asked all prospective businesses to submit a digital address before they are registered (Bokpe, 2018). Importantly and controversially, having a digital address has been made a requirement for accessing the Ghanacard and state-issued insurance. As Vice President Bawumia has warned:

Increasingly, the digital address is being required for you to be able to register for SSNIT or for national ID. If you do not have your digital address you will not be able to register for national ID (Citi Newsroom, November 2018).

The Vice President has even encouraged foreign embassies in Ghana to consider making the digital address a requirement for Ghanaians that deal with them.

We are going to be using it, and I am sure even the embassies that are here will increasingly require the National Digital Address of anybody, in applying for a visa (ibid.).

Overall, by arguing the NDPAS as helping the state to more easily provide citizens with much needed services in a targeted and timely manner, the connection between stronger state capacity, legible society and the welfare of citizens, is emphasized. In effect, the ability of the state to care for its citizens is tied to the digital addressing system, and has consequences for the experience of citizenship.

Private corporate actors⁵¹

“Nothing better in a developing country than having an effective address system”

Vokacom, the developer of the GhanaPost GPS App argues that, “there is nothing better in a developing country than having an effective address system” and that “these are things they take for granted in industrialized countries.”⁵² Thus, for Vokacom, an effective addressing system is necessary for, and a marker of development. Vokacom's logics mirror those of the state in two main ways: how the NDPAS will promote service delivery, and boost the economy. According to Vokacom:

⁵¹ Ghana Post is the lead corporate player in the context of the NDPAS app. However, as it is state-owned, I have discussed Ghana Post in the context of state actors and not in this section. Rather, I mainly discuss the perspectives of Vokacom, the developer and vendor of the NDPAS and the associated app.

⁵² Vokacom, interview, April 9, 2019.

Its [NDPAS'] enormous benefits will begin to play out loud when the system is fully integrated with the work of essential services, including crime fighting, banking, firefighting, ambulance services, land registration and courier services (Andoh, 2018).

When this digital addressing system is fully deployed, it will not only help to give accurate direction to specific locations, but will also help to track data on people for essential purposes. (Ngnenbe, 2017).

Vokacom echoes the state's argument that the digital addressing system would boost service provision by the private sector. They note for instance that, with the NDPAS, "the banks do not have to go through the hustle of trying to locate their clients as is the case now" (Bokpe, 2017). Vokacom proudly points out that private service providers are already designing products that tie in with the digital addressing system:

There is an online medical practitioner. They have come to us [Vokacom and Ghana Post] to integrate their systems into ours so that if you want the doctor to visit you directly at home, he or she can do that. It will connect doctors, nurses and pharmacists. There is also a taxi service provider that wants to sit on our system to deliver services that are equal to what Uber is doing. The banks will not need to spend time and fuel going around in the name of Know Your Customer (KYC). There is already a database where they can easily do verification before approving loans (ibid.).

In addition to boosting service-based commerce, Vokacom asserts that the NDPAS could curb corruption by altering the way citizens interact with the state.⁵³ Vokacom argues that digital addresses could foster more online state-citizen interactions thus reducing the human contact which often occasions corrupt practices:

In the advanced jurisdictions where similar systems are used, people apply for services and bid for contracts online and the products or documents are delivered to the provided digital addresses and so there are few human contacts to demand financial favors before services are delivered or after (Andoh, 2018).

Re-imagining the place of local firms

Vokacom asserts that their overarching objective is to "improve lives" in addition to two other motives.⁵⁴ The first was that Vokacom has ambitions of becoming one of the biggest information technology companies in Africa. They believed that having an effective addressing system in Ghana is important to their ambition, as the former broadens the scope of businesses Vokacom

⁵³ Ibid.

⁵⁴ Ibid.

could partake in. Thus, Vokacom does not only see how the NDPAS “improves lives”, but also how it eventually could improve their corporate interests. The importance of an addressing system to Vokacom’s fortunes is based on a distinct experience they shared with me. Vokacom has an additional business interest in real estate financing through a company called Vokacom Realty. Vokacom Realty pre-finances residential or office rents and charges an interest. At some point, one of their estate managers left without notice, and suddenly they faced a real challenge in locating the clients who owed them, or their residential facilities. As a result, Vokacom lost some properties and capital. Thus, the fact that the state has not developed a uniform and working address system had real adverse consequences for Vokacom and the latter developed Asaase GPS as an in-house software solution to the challenge of locating people and places. Asaase GPS was the foundational software upon which the NDPAS and the GhanaPost GPS app were built.

Vokacom’s second motivation is to prove that local IT companies could successfully undertake major public projects. Vokacom has been concerned that many major IT contracts in Ghana were being awarded to foreign companies.⁵⁵ As Ayaanore (2018: 3) hints, attempts by Ghanaian governments to attract foreign investments and also to promote market liberalization, could leave local businesses less competitive. Foreign companies eventually take their profits away and local companies have less opportunities to grow in terms of capital, skill and experience. This trend could have adverse implications for socio-economic development as local companies are then unable to employ more, or pay more taxes. Thus, Vokacom saw the NDPAS as an opportunity to prove a point, and to influence the state’s future procurement choices in favor of local firms.

Resolving exclusionary dynamics

Overall, Vokacom believes that they were chosen for the project because of how their product considers local peculiarities.⁵⁶ As an example, they pointed to how the digital address is rendered in a format that shows region, district, and city. According to Vokacom, such address localization could get people to be more connected to their addresses, instead of a random representation as found on Google Maps or with What3Words.

⁵⁵ Ibid.

⁵⁶ Ibid.

Importantly, Vokacom recognizes that not every Ghanaian has a smartphone or internet access to download and make use of the GhanaPost GPS app. To help mitigate the possible exclusionary implications of this challenge, Vokacom, working with Ghana Post, rolled out an offline version of the GhanaPost GPS app. Once the app has been downloaded, a user will not need internet access to generate a digital address. The challenge however is that the app will first have to be downloaded; making access to the internet and a smartphone still central.

In terms of broader public buy-in, Vokacom explained that they hoped that the app would benefit from the communal ethos of the Ghanaian society. According to them, their “best case scenario” would be for one person to download the application, and for the person to help the rest of his or her community to generate their own addresses. Vokacom’s appreciation of communality as a resource for promoting identification systems is laudable. Yet, it is concerning that Vokacom’s immediate “best case scenario” in terms of product distribution is one that does not stress the responsibility of state actors to make access to digital addresses as inclusive as possible.⁵⁷

Navigating data collection challenges

Immediately the GhanaPost GPS app was implemented, some members of the public raised concerns about the personal nature of data required during registration, as well as the acceptance of dummy data by the app. Vokacom explained that originally, data points such as phone numbers were not “mission critical.” Users did not need to input their telephone numbers to generate a digital address. However, the government’s plan to link the digital address system particularly to the Ghanacard project, led to the insistence on phone numbers as a requirement.

The requirement in turn, led to two challenges. People could use fake phone numbers to generate the address, and others without phone numbers to input, could not have an address at all. Vokacom reacted to the public brouhaha by scrapping the requirement of a telephone number during registration and instead, built a ‘skip option’ into the app.

In our interview, Vokacom shared their belief that eventually, when digital addresses are fully operationalized as part of public service access and delivery, citizens will have no choice than to

⁵⁷ Vokacom, interview, April 9, 2019.

generate and submit accurate digital addresses. For example, Vokacom believes that if the Passport Office or the Driver and Vehicle Licensing Authority make it mandatory for passports or driver's licenses to only be delivered to clients' digital addresses, clients will ensure that the digital address they submit to various agencies would be accurate.

Vokacom is also counting on the fact that registration forms for the Ghanacard are statutory and legally-binding. As such, the threat of punishment could deter citizens from submitting fake information, including digital addresses, when registering for the national ID card. As the National Identification Authority warns, the submission of wrong information is “an offence: you have misinformed the public official” (The Probe, June 2019). In the medium to long term, Vokacom is hoping for a system that can reliably verify registration details, before users can generate digital addresses. For now, Vokacom hopes to draw in as many users as possible, as a first step, and then clean up the data as a second step through data matching. But must the state and its partners ever settle for potentially inaccurate data, even if it is just for the short term? It is dangerous to make policy or allocate public goods and services based on inaccurate citizens' data.

Civil Society and Media

“Lower the cost of business”

Media and civil society actors also highlight the economic utility of a digital addressing system. For instance, Imani Ghana stresses the value of the NDPAS to property rate assessment and private sector commerce.⁵⁸ The Daily Graphic newspaper has provided similar justifications in support of the NDPAS. In an editorial entitled, *‘Download digital address App to speed up development’*, the Daily Graphic in an activist mode, made a very economic-centric argument. As Herman and Chomsky (2010) have argued the media plays a role in helping manufacture public consent for the state's pursuits. Below is an excerpt from the Daily Graphic (December 2018) piece:

We are particularly happy at the fact that the digitisation of properties will also lower the cost of business. This is so because once an address can be located, the risk premium charged by banks will be lower. Businesses can also produce at lower cost and will have enough funds for reinvestment. It is a fact that 88% of the country's employment is reliant on the informal sector. A large informal sector usually means that the government will struggle to collect income tax from workers. So, the digitisation will help the government identify potential taxpayers for the necessary collections. Again, it will be the basis for all

⁵⁸ Imani Ghana, interview, April 5, 2019.

e-commerce platforms, so that people can now sit in Ghana and buy things from abroad and have them delivered directly to their homes.

The Daily Graphic's arguments about lowering the cost of doing business, reducing the risk premium for bank loans, broadening the tax net and boosting ecommerce, align with the logics of state actors. Other parts of the editorial stress the fact that the GhanaPost GPS app is a "home-grown mobile app" by the "home-based Vokacom" (ibid.). Interestingly, this emphasis on local ownership appeared in many of the Daily Graphic's reports on the digital addressing system. In my interview with the Daily Graphic reporter, he explained this consistent use of "home-grown" and "home-based" as a form of economic nationalism on the part of the media house; their own way of celebrating and promoting local innovations. In the aforementioned piece, Daily Graphic also touched, albeit briefly on the utility of digital addressing systems to the delivery of emergency services; another argument that state actors have espoused.

Despite the general support for having an effective addressing system, there have been critical perspectives regarding the NDPAS project. These critiques have been presented by a range of actors including think-tanks, political parties, pressure groups and individuals in their capacity as social commentators. I classify the criticisms into four main strands: cost, design, access, and linkages to the Ghanacard project; and discuss them next.

"Somebody must account for 15 million, given away free of charge"

The cost argument has two main dimensions with the first being that if Google Maps was for free, then the digital addressing system was not necessary. After all, Google Maps could get people to places they wanted to go. Imani Ghana argues that even beyond Google, other local developers had already launched open-source mapping systems that the government could have used freely: "we disagreed with the business model around it. Why did we have to pay so much for it, when there were alternatives that would have cost almost no money to use... Even other Ghanaian developers already had similar systems that were open and free".⁵⁹

⁵⁹ Imani Ghana, interview, April 5, 2019.

The second related argument was that if the GhanaPost GPS app is basically rendering latitudes and longitudes sourced from Google in a more recognizable format, then spending \$2.5 million on the project was outrageous. After all, it was not as if Ghana Post and Vokacom had built a new GPS. The Strategic Thinkers Network Africa (October 2017) for instance queried:

STRANEK will also like to know categorically if there is anything proprietary about this project that warrants the cost currently being bandied about by government sources because if this project is structured on existing platforms that are provided freely by various third parties, then what amount of work accumulated into the GHS15m contract price?

In the end, these concerns about cost morphed into corruption accusations against the incumbent government and especially the Ministry of Communications. The corruption allegations were mainly spearheaded by leading members in the National Democratic Congress (NDC), the main opposition party in Ghana. For example, John Mahama, former President of Ghana, in an NDC campaign rally complained: “When we talk about accountability, this is where the President should show that he is serious about corruption. Somebody must account for 15 million, given away free of charge” (Ibrahim, November 2017).

There have also been concerns about procurement. There was some significant interest in which technology firm got the contract and how. The pressure group, Coalition for Democratic Governance in a press statement, asked the government to “come clear on the procurement process leading to the purchasing of the said app” (Hayford, November 2017). One accusation against the government, made for example by Mahama Ayariga, an NDC Member of Parliament, was that another local company, Subah, had started building an addressing system for Ghana and as such, should have been given the contract (Awal, October 2017; Ghana Politics Online, October 2017). Thus, it was not enough that the contract had gone to a local company, due process and fairness were important.

The public’s focus on cost and corruption may have been excessive, marginalizing other major concerns like data privacy and social exclusion as they relate to the GhanaPost GPS app. However, these accusations curiously had the positive effect of getting governmental actors and partners to be more transparent about the details of the project. For example, Vice President Bawumia took ex-President Mahama’s corruption charge personally, and dedicated a whole speech in response.

Bawumia's 'response' speech remains the most detailed public exposition on the NDPAS and GhanaPost GPS app. The speech covered issues ranging from data sources, procurement, cost, product uniqueness, to intellectual property and provided an insightful response that showed the exact cost components of the project (GNA, November 2017b). In a country where such details could be hard to come by, the concerns about cost and corruption may have been positive in pushing through more governmental transparency and accountability about the project.

Data minimization and accuracy

Some of the criticisms by civil society and media actors decried aspects of the product architecture. The NDPAS was designed to basically rely on citizens to populate a national address register. The addressing system was only going to be comprehensive if citizens generated addresses for their homes and workplaces. This suggested a blank slate to be filled. The Imani Ghana official I interviewed argued the 'blank slate' approach was not the best, as it ignored the cost-saving utility of first drawing on addresses that already existed in the country. Moreover, there were people who were accustomed to their old house numbers and street names.

Franklin Cudjoe, Head of Imani Ghana, was also a proponent of utilizing existing physical addresses and street names (Citi FM Online, October 2017). For instance, I used to live at Plot 24, Block 8A, Dadiesoaba-Kumasi, as a child, and by Cudjoe's logic, the NDPAS should have initially generated the digital version of such addresses and made them publicly available. Consequently, fewer new addresses would have been necessary to generate and the cost of the project may have been reduced. This way, citizens may have seen the digital addresses as an 'enhancement' of the system they were familiar with; and not as some new complex system.

The other concerns about the NDPAS related to information collection, as earlier mentioned in this chapter. Some critics have been suspicious about why the generation of a digital address required information like the user's name, telephone number and ID numbers. Must it be necessary to submit one's phone number, for example before generating an address? (Kuuire, October 2017). As a former executive of the Data Protection Commission argues, this was a case of "collecting more user information than was needed for the purpose of an address system".⁶⁰ The former

⁶⁰ Former Data Protection Commission executive, interview, April 2, 2019.

executive was concerned that “one was not informed of who was collecting or using the collected data... Moreover, I looked for the privacy policy and there was nothing there except the suggestion that the collection was permissible by the Data Protection Act, and no clarity on the privacy rights of enrollees were being protected.”⁶¹ Again, the fact that Vokacom, at the time, had not registered as a data controller was in contravention of the Data Protection Act (Dotse Jr., October 2017). Concerns were also raised by actors such as Coalition for Democratic Governance about the dangers that come with storing citizens’ data on Amazon cloud servers outside Ghana (Hayford, November 2017).

Ghana Post and the Ministry of Communications both responded to the concerns about data privacy by announcing countermeasures, and providing assurances. State actors conceived the threats to data privacy narrowly as external and the potential adverse use of citizens’ biodata by state actors was not addressed. The Head of Ghana Post, James Kwofie, for example assured:

You [citizens] are very protected, like all other software, security considerations are ongoing and even Microsoft today keeps upgrading their software... there is an inter-ministerial security force which includes national security and Ghana Post and also the institution which houses the software is in a secured facility so purchasers should have no worry about their privacy or security being breached (Azumah, October 2017).

The Minister of Communications, Ursula Owusu-Ekuful similarly asserted:

The proper firewalls and security features are being built into the system prior to it going live to protect against the very things that we all fear happening. I don’t know what someone else is doing to try to breach the defenses that are currently being built – they say the criminals are always one step ahead of us – but the knowledge on cyber security defenses currently available today, wherever it is in the world are what we are employing in the system we are deploying (Citi FM Online, October 2017b).

Beyond privacy breaches, there were questions about data integrity. The app’s initial architecture did not verify the registration information of users. If users for privacy or other reasons, submitted incorrect information, their ‘fake’ profiles could undermine the provision of emergency services or public policy making. This concern about inaccurate data was raised by civil society actors like Imani (Citi FM, October 2017). An interviewee used the expression “garbage in, garbage out” to frame the non-utility of inaccurate registration details.⁶² The interviewee was worried that “in the

⁶¹ Ibid.

⁶² Former Data Protection Commission executive, interview, April 2, 2019.

absence of a verification system, one could stand anywhere and generate an address and proceed to register for the National ID and other services with that”.⁶³ The interviewee stressed that “it is an obligation for the data controller, by law, not the data subject” to ensure an accurate database, and as such, “the government could not simply keep trusting that data subjects will be truthful”, lest it leads to “a field day for criminals”.⁶⁴

“I am a lawyer and I have been denied. What about the ordinary person on the streets”

The Ghana government’s decision to make the digital address a requirement for accessing the Ghanacard, did not sit easily with sections of the media and civil society. First, organizations like the Centre for Socioeconomic Studies (CSS) were concerned that persons in some geographical areas were not in a position to generate their own digital addresses due to challenges such as the lack of internet access, digital illiteracy and limited access to smartphones (The Publisher, November 2018). Realistically, where some citizens may not own smartphones, or may be living in areas with poor internet access, making the digital address a requirement for getting a Ghanacard could mean excluding people from accessing their citizenship rights (ibid.). A woman who had been to a registration center complained; “My grandmother doesn’t know anything about this [digital] address so how do you force her to get one before receiving her card?” (Starr FM, November 2018).

The government and Vokacom, in response to concerns about exclusion, invested in an offline version of the application, as well as a team to generate addresses and tag properties for free. Consequently, the right of many citizens to access the Ghanacard and the associated access to public services were being safeguarded, to some extent. However, having an offline version of the app, or people moving around to help generate addresses, would still not solve the challenge for many others who are homeless. This argument is made by Bright Simmons, a leading social commentator and honorary Vice President of Imani Ghana:

There are 120,000 homeless people in Accra alone. And an estimated 5.4 million slum dwellers in Ghana. Most of these people have “no fixed address.” How do you then tie a national ID system to an untested “digital address”? Do these decision makers understand their own country? (Nyabor, November 2018).

⁶³ Ibid.

⁶⁴ Ibid.

Such concerns about the potential exclusion from accessing citizenship rights, and essential public services, were central in a suit against the state by a private lawyer, Francis Kojo Kwarteng Arthur.

In a radio interview, the plaintiff asserted:

I am a lawyer and I have been denied. What about the ordinary person on the streets... My research indicated that there is no Act, there is no principal enactment operationalizing the digital address code, hence I want the court to declare that the digital address code is an illegality and, hence, prospective applicants or Ghanaian citizens who are willing and present themselves at the NIA to be registered should not be denied the Ghana Card, on the basis of not having a digital address code (Class FM Online, November 2018).

While the digital address has been legislated as a requirement for the Ghanacard, the contention by the lawyer, Kwarteng Arthur was that the digital address on its own, was not by law, mandatory for citizens to have. Yet, the digital address was being used to shape who can access what every citizen should be entitled to.

International actors

International tech systems

Vokacom drew on the mapping systems of international tech giants including Google, Microsoft and Open Street in developing the NDPAS. Google Maps has the most comprehensive digital navigation map of Ghana, thus Vokacom paid to use Google's licensed services. For the first year, the estimated fee was reported to be \$400,000 (Class FM Online, October 2017). Vokacom indicates that the contract with Google was a temporary measure as the plan was to continuously populate and enhance the digital map of Ghana on OpenStreetMap which was "technically free".⁶⁵

OpenStreetMap is an international collaborative project that seeks to create a world map that is editable. Once Ghana's navigation map on OpenStreetMap is comprehensive enough, Vokacom intends to end its usage of Google Maps. According to Vokacom, they had already moved from paying Google about \$10,000 a month to just over \$1000.⁶⁶ Additionally, Vokacom indicated that the GhanaPost GPS app and user data were stored on Amazon cloud servers, and the National Information Technology Agency's servers (Ultimate FM, November 2017).

⁶⁵ Vokacom, interview, April 9, 2019.

⁶⁶ Ibid.

Such international private sector collaborations extend the state's capacity for building citizen identification systems. On one hand, the international corporate exchanges could broaden the distribution of critical goods and services, and even reduce the cost incurred by Global South governments in providing public goods and services. In this specific instance, the government of Ghana practically has avoided the cost of research and development towards its own digital mapping system. Also, using Amazon cloud services forestalls the cost of building and operating a cloud server. On the other hand, there are questions regarding data sovereignty and privacy if citizens' biodata will sit on foreign-owned and foreign-stationed systems.

Importantly, the private arrangements between Google and Vokacom, as well as between Vokacom and Amazon, are intriguing as they had citizens' biodata as the substantive content. With governmental actors and Vokacom striving publicly to distance the government from these 'private arrangements' (Class FM Online, October 2017), I wonder whether the critical decision of where to use and store citizens' data including names, ID numbers, phone numbers and addresses, was a decision to be made by Vokacom.

Bilateral and multilateral support

In 2011, the USAID signed an agreement with five local governments in Ghana, to provide them with technical and material support including computer equipment, satellite imagery and training in geographical information system (GIS) mapping. The donated gadgets were to help the local governments "to digitally assign unique identification numbers and issue permits for specific parcels of land, making it easy to track who owns which parcel, and for what purpose" (Fricker, 2015: 40). This was complemented by a street addressing exercise at the district level. In 2012, this collaboration was expanded nationally through the Street Naming and Property Addressing Project, supported by USAID under its Local Government and Decentralization Program. The USAID's reasons for supporting this project centered economic goals:

The new street names and property identification will have another economic benefit beyond helping customers and business connect — the addresses will be digitally integrated into a tax-collection database with future taxes slated to help sustain district development and growth. USAID, in fact, predicts a 30-percent increase in tax revenues once cities begin using GIS databases to assess property taxes. The effort will save on property valuation as it will no longer be necessary to produce new base maps (op. Cit., 41).

The World Bank through the Secondary Cities Support Program is also helping with the implementation of addressing systems in Ghana. The program which is financed with a \$100m credit facility from the International Development Association seeks to promote decentralization and urban development (World Bank, September 2018: 5). As part of this project, municipal assemblies were provided funds to pursue specific targets including “urban economic development and competitiveness.” In order to achieve the said target, municipal assemblies are to have spatial databases that include street names and property addresses. For purposes of property rate administration, a “property rate/valuation roll” is to be “matched (cross-referenced) with property addressing database” (World Bank, September 2018: 62). Similarly, a “Business registry data is matched (cross-referenced) with a property addressing database” (World Bank, September 2018: 63). This particular program is designed such that funding is proportional to the performance of municipal assemblies in attaining the associated targets.

Thought leadership

First, the World Bank has been a thought leader and financier in promoting addressing systems in Global South countries. In the World Bank’s publication, *Street Addressing and the Management of Cities*, the following interventions by the Group are noted: “financing for street addressing initiatives in several sub-Saharan African countries”; and “meetings to promote an international exchange of ideas... fostering a deeper understanding of how to make street addressing initiatives more effective” (Farvacque-Vitkovic et al., 2005: vii). Also, the Ghana government’s justifications for the NDPAS are mirrored in the World Bank publication, *Future of African Cities: Challenges and Priorities for Urban Development*:

Addressing is intended to make it easier to (a) locate residents and their homes by means of an address system that can be used by the people themselves and by government officials, concessionaires, and other service providers; (b) operate urban services (ambulances, fire trucks, taxis); (c) enforce collection for user-pay services, in particular those provided by utility concessionaires (Farvacque-Vitkovic & Godin, 1998: 133).

In a blog post on address systems in Accra, Linus Pott (2017), a member of the World Bank’s *Global Land and Geospatial Unit* similarly asserts:

The absence of street names poses not only challenges for orientation, but also for property tax collection, postal services, emergency services, and the private sector. Especially new

economy companies, such as Amazon or Uber, depend on street addressing systems and are eager to cater to market demands of a growing middle class.

Thus, the framing of addressing systems as pivotal for socio-economic ends is pushed by some of the central actors in international development, including the World Bank, and USAID. These actors are particularly influential in terms of development planning in Global South countries.

Conclusion

The NDPAS is a classic illustration of James Scott's argument of how states pursue simplification in pursuit of a legible society, and in turn, state capacity and maybe, an improvement in the human condition. By dividing Ghana into 5 by 5 grids, and tying citizens to corresponding digital addresses — basically, techne — the state believes that the consequence would be economic progress, and an enhancement in its ability to provide public utilities and emergency services to citizens. All these justifications are consistent with those provided by international actors such as USAID and the World Bank in their support of addressing projects in Ghana. Overall, there exists consensus amongst state and non-state actors about the need and usefulness of a uniform and effective addressing system. The product design and its implementation, as well as stakeholders' perspectives on the project, encourage reflections on economic progress, citizenship and surveillance.

First, the claimed utilities of the digital addressing system, such as formalization of the economy, financial inclusion, boosting the private sector, and improving tax extraction mirror the economic logics that underpin SIM registration. However, the debates about the NDPAS further deepen the economic argument. For example, in the implementation and rationalization of the NDPAS, we do not only see a state that is interested in creating an enabling environment for the private sector, but also an entrepreneurial state that is interested in business returns. This can be seen in the initial fees charged for address plates, but also in how the digital addressing system is to revive Ghana Post and give it a competitive edge in the package delivery industry. This is a trend that shows up again in the next chapter on the Ghanacard.

Also, the matter of local business interest is made more pronounced in the discussions about the NDPAS. While digital addressing is framed as a boost for private sector businesses, that is only in

the context of using the technology. There remains the question of who the technology's vendor is, as tied to concerns about international firms often landing big tech contracts advertised by the government. As raised in my interview with Vokacom, the interest of the latter in the project was also to prove a point that local innovators were capable and worthy of major government contracts. The Daily Graphic newspaper also stressed the fact that both Vokacom and the NDPAS are 'Ghanaian'. If citizen identification systems are framed as useful for economic transformation, then it is important that the increasing investments in the accompanying technologies by Global South governments do not mirror the longstanding practice where project funds end up with mainly Global North companies. While local firms may be limited in their access to resources and certain technological skills, it is important for the Ghanaian government to be intentional about supporting local firms with resources and opportunities.

It is useful to have a political economy around citizen identification systems that promotes local innovations, develops local talents and keeps project funds mostly within the country. Indeed, it was interesting to note how thousands of graduates were employed to carry out address generation and plate embossment. Of course, this is a case of under-employment, but it is also a way of dealing with the issue of graduate unemployment in Ghana, no matter how temporary.

Another political economy dimension relates to corruption allegations. The interest in transparency issues related to the NDPAS contract do show a societal alertness to the reality that projects framed by the state as serving development ends, may end up undermining the stated ends if accountability, transparency and probity are not upheld. While the corruption allegations were never proven, it is noteworthy that it drew more public attention to the NDPAS project. In the end, the allegations inspired a deeper governmental transparency about the project that was absent initially.

The second main theme for reflection relates to the implications of the NDPAS for citizenship. In drawing attention to how digital addresses can allow the state to provide better, speedier and targeted service, the Ghanaian state is appreciating its role of caring for citizens. While the foregoing argument is also an admission of the state's prior shortcomings in that regard, the state's alertness to its role of care can deepen the experience of citizenship. However, the continuous

placing of digital addresses as requisite for accessing private and public services could also undermine citizenship as a status and experience. For instance, by requiring enrollees to have a digital address before they can access a Ghanacard, enrollees are being impeded from getting a critical national ID document that allows them to function as citizens. This impediment was unnecessary considering the fact that some citizens were bound not to have smartphones, know how to navigate the GPS app, or even have internet access. After all, house numbering by law is the responsibility of the state, and citizens should not be punished for not generating one. Thus, it was laudable that the state eventually embarked on an exercise to generate addresses and emboss houses with digital addresses, for free.

Finally, concerns about data collection as they relate to the GhanaPost GPS app show a keen awareness on the part of non-state actors about the threats posed by collecting excessive personal data, but also of collecting potentially inaccurate data. Indeed, while the acceptance of dummy data during registration may serve citizens' privacy interests, where the registration data are drawn on by state agencies in their work, there is a significant chance of undermining the performance of state agencies, and eventually, citizens' welfare. Data quality and accuracy matters for effective governance.

The concerns about data privacy are also well-placed, especially considering the fact that the digital address and the registration data are increasingly being tied to other state services including social security and business registration. Providing one's address in a transaction in itself is not uncommon around the world but where citizens were expected to provide some personal information to generate their digital address, and with their phones, there could always be the danger of being exposed to a tracking system that ties a digital address not only to a specific property, but also a specific phone.

While there have not been any indications that the GhanaPost GPS app tracks beyond the point where an address was generated, the news story on how a thief who had stolen phones was tracked successfully post-event, aided by the victim's digital address, raises concerns. Also, the penchant for state actors to respond to the public's privacy concerns by framing privacy breaches as caused by private criminals, while holding the state up as some sort of cyber-security defender, smacks of

either a misunderstanding or deliberate disregard of the public's fear that the state itself may end up abusing its enhanced surveillance capacity.

In the next chapter, I discuss the perspectives of state and non-state actors on the Ghana Card. As is shown, the Ghana Card is the most impactful project out of the three identification projects I studied as it is at the center of citizenship contestations. While the Ghana Card is supported by various actors for its contributions to development planning, efficient taxation and financial inclusion, the project is an attempt to finally settle a longstanding debate on citizenship and as such, whoever cannot access the card is likely to be challenged in accessing critical goods and services.

Chapter Six

THE NATIONAL IDENTIFICATION SYSTEM: TYING CITIZENSHIP TO A CARD AND BIOMETRICS

Introduction

In the second half of 2020, the Ghana government deployed military officers to border towns. According to government officials, the military officers were to help ensure that foreigners did not sneak into Ghana in breach of COVID-19 border closure directives. However, the National Democratic Congress (NDC), the leading opposition party, believed it was no accident that the deployment was mainly to areas they considered their electoral strongholds, and was timed to coincide with the national voter registration exercise (MyJoyOnline, June 2020). To the NDC, the deployment was to dissuade their supporters from partaking in voter registration.

Fiifi Kwetey, a member of Parliament, and leading member of the NDC, for example, asserted that the military deployment was proof that “as far as the NPP [party in government] is concerned, the people of the Volta region are foreigners; the Ewes⁶⁷ are not Ghanaians” (ibid.). He added that institutions like the National Identification Authority (NIA) were being used by the NPP, in the name of laws, to further the latter’s political interests. Situating the aforesaid deployment within historical identity politics, Fiifi Kwetey advanced that the leaders of the NPP have historically seen themselves as the “proper Ghanaians” and “owners of Ghana” (ibid.).

The foregoing assertions by the NDC exemplify the enduring contentions about citizenship, identity and identification in Ghana, as well as the partisan politics that extend them; a milieu that the Ghanacard project has to navigate. This chapter focuses on the Ghanacard. I present an overview of the project and discuss how the Ghanacard has been justified or challenged by various stakeholders. As I show, the Ghanacard has increasingly been framed by various actors as an opportunity to resolve the longstanding contestations about the citizenship question. Yet, the support for the card is not just about knowing who is who but also very much about knowing who

⁶⁷ The Ewe ethnic group dominates the Volta Region, a region bordering Togo and has traditionally been the strongest support base for the NDC.

does what. Overall, the Ghanacard has been promoted as critical to development planning, resource allocation and economic participation and expansion. Various non-state actors, even in their support for the project, have still raised concerns about its exclusionary and privacy-breaching risks.

Overview

In 2003, the Government of Ghana set up a secretariat to undertake the National Identification project. The Secretariat was placed under the Office of the President, sidestepping a row between the Electoral Commission and the Ministry of Finance and Economic Planning over the project's supervision (Chronicle, February 2003).⁶⁸ In 2006, Act 707 was passed to establish the National Identification Authority (NIA) and to replace the National Identification Secretariat. Per media advertisements in February 2003, the first registration phase was to “last up to March 31, 2004” during which time “all Ghanaian citizens aged sixteen and over, living in Ghana and abroad will be registered” (Fontana et al., October 2003: 36).⁶⁹ The French company, Sagem, later renamed Safran Morpho, was the private vendor chosen to execute the project. Between August 2008 and July 2009, there were mass registration exercises in the Eastern, Western and Volta Regions (ibid.). While the plan was to complete the registration exercise nationwide by March 2009, it was only at the end of August 2013 that the nationwide target was met (ibid.).

At the end of the first registration drive, about 15 million Ghanaians of age 6 and above had been registered. However, about 50% of those registered could not get their cards because their details could not be processed by the NIA; their information was “either totally rejected or hanging in some error queue” (NIA, October 2014). For the other 50% whose information could be processed, the cards for about half of them, could not be printed as at October 2014 (ibid.). Even for those whose cards were printed, distribution challenges meant that a good number of them could not access their cards (ibid.). Other impediments included technological failures and difficulty in verifying the accuracy of submitted citizen data. An MP, Matthew Opoku Prempeh blamed the

⁶⁸ Both the Ministry of Finance and the Electoral Commission initially jostled to be made the host body for the national ID project. The Ministry of Finance claimed jurisdiction because the national ID idea became more concrete at a National Economic Dialogue they organized. The Electoral Commission claimed it had more experience in producing IDs.

⁶⁹ The government's plan was to extend the second registration phase to “six-year olds to under 16-year-old Ghanaian citizens and foreign residents from 6 years and above” (ibid.).

challenges on “severe underfunding of the NIA” (Parliament of Ghana, November 4 2011: 684). The NIA has similarly complained about how poor funding had traditionally hindered their operations.⁷⁰ Owusu-Oware et al. (2017: 8) have explained the early underperformance of the NIA as due to the instability of/in project leadership, created by partisanship and inconsistent political will — what they call “opposing cognitive political institutions.” In April 2018, the NIA and a private firm, IMS entered into an agreement to reset and restart the National Identification project (NIA, May 2018).⁷¹ As of January 2021, 15.5 million people had been registered in this new/second registration exercise, with 13.8 million printed cards issued (N.D., NIA).⁷²

In terms of legislative backing, the NIA Act (Act 707) (2006) established the NIA and was the first explicit law on the National Identification project after the Citizen Identity Card Decree was passed in 1972. In 2008, the National Identity Register Act (Act 750) was passed to regulate the nature and use of the National Identity Register. Act 750 provides details and directions regarding issues such as data capture; the use, retention and disclosure of personal information by the NIA and other user agencies; and citizens’ access to, and correction of their personal information.

In 2012, the National Identity Register Regulations (LI 2111) was promulgated to provide more specific directions on the application for the national identity card, mandatory uses of the card, biometric verification of cards, and access to and use of enrollees’ personal information. LI 2111 revoked the National Redemption Council Decree 129 (1972) which legislated the citizen identification project in 1972. In 2017, the National Identity Register Act was amended. The amendment, passed under a certificate of urgency, expanded the data points to be collected from citizens during registration. While section 4(2) of Act 750 required registrants to provide about 12 different categories of information, the amendment asks for 31 different classes of information; including height, eye color, hair color, passport/voter ID/driver’s license numbers, tax identification numbers and the digital address of one’s residence. More controversially, the

⁷⁰ NIA, interview, May 9, 2019.

⁷¹ This was after the NIA had contracted Margins Group from May 2012, the NIA for the delivery of the Foreigner Identification Management Systems (FIMS) (NIA, June 2018). Margins Group, through its subsidiary, Identity Management Systems (IMS), provides non-citizen Ghanacard to foreigners permanently resident in Ghana or have resided in Ghana for 90 days or more. The non-citizen card is compulsory for all foreigners who meet the stated criteria. IMS proved to be more successful in registering foreigners than Sagem was, in registering citizens.

⁷² Ghana's population is about 30 million. See <https://www.nia.gov.gh/>

amendment provided that the voter's identity card was not acceptable as proof of citizenship, when registering for the Ghanacard.

The core technology underpinning the national ID system is the Automated Fingerprint Identification System (AFIS). As a smartcard, the Ghanacard can hold 14 different institutional ID applications including the ECOWAS passport application. It has a 140 kilobytes storage chip, and a Public Key Infrastructure (PKI) for data protection and the prevention of unauthorized access.⁷³ The national identification system is designed store up to “40 million facials, 80 million irises and 400 million fingerprints in order to cover growth of population” (ibid.).

The National Identification Authority is the main implementing body for the Ghanacard project. Before 2017, the NIA was under the Ministry of Communications, but now falls within the oversight of the Office of the Government Machinery (OGM) which comprises the Presidency, Vice Presidency and the Office of the Chief of Staff. This suggests the priority that the government has placed on the project. Under the OGM, the Minister for Monitoring and Evaluation was made responsible for the national ID project but there have been recent suggestions that the oversight will be moved back to the Ministry of Communications. The private partner for the current project is Identity Management Systems II (IMS II), a special purpose vehicle incorporated in Ghana. IMS II is part of Margins Group and has both local and foreign ownership. Sagem/Safran Morpho was the private partner for the initial and eventually botched version of the national ID project.

⁷³ A public key infrastructure is the “technology behind digital certificates. A digital certificate fulfills a similar purpose to a driver's license or a passport – it is a piece of identification that proves your identity and provides certain allowances. A digital certificate allows its owner to encrypt, sign, and authenticate. Accordingly, PKI is the technology that allows you to encrypt data, digitally sign documents, and authenticate yourself using certificates.” (Entrust, n.d.). See <https://www.entrust.com/resources/certificate-solutions/learn/what-is-pki>

Should there be a Ghanacard? Stakeholders' positions on the national identification system

State actors

“We have not really gone to the bottom of who the Ghanaian is”

A take-away from Chapter 3, the historical chapter, is that the challenge of documenting citizens in Ghana is tied to: the arbitrarily-imposed borders of the colonial era; the initial post-independence liberal migration regime; loose borders; as well as the fact that the state has not instituted a foolproof citizen documentation regime. The foregoing factors and the challenge they cumulatively pose, have been highlighted by state actors in promoting the Ghanacard project. Here, there are two main dimensions; the first, and more controversial, is proving citizenship, and the other is in terms of experiencing citizenship.

First, as the National Identification Authority (n.d.) explicitly notes, “the Ghanacard makes it easy to prove your identity or citizenship.” Similarly, in the parliamentary discourses on the Ghanacard, the utility of the project to proving citizenship is highlighted. For example, an MP, Emmanuel Armah-Kofi Buah notes:

The issue of who a Ghanaian is, is very critical in this century, especially because of the challenges we face. I have always said that I come from the border with La Côte d’Ivoire, and on a daily basis, we know how many foreign people come to Ghana. I have seen some of them hold our own National Health Insurance Card and we always talk about how high the cost of insurance is. The issue is that there is not much that could be done because we have not really gone to the bottom of who the Ghanaian is. Mr. Speaker, I believe if we look at the efforts being made here in terms of the identity [Ghanacard project], it would indeed get to the bottom of it (Parliament of Ghana, November 2017).

Here, the Member of Parliament draws on his experience from living in a border town, to highlight the challenge posed by fluid borders and cross-border ethnic ties to citizenship. He then illustrates adverse implications of this challenge as seen in foreigners laying claim to Ghanaian citizenship in order to enjoy the associated social welfare benefits.

For state actors, a primary concern about false citizenship claims relates to the socio-economic burden it could create for the state and 'actual' citizens. As another MP, Ahmed Ibrahim adds, “if we do not register Ghanaians, and have our citizenship identification cards, to know who a Ghanaian is or not, taking national development decisions sometimes becomes a problem”

(Parliament of Ghana, November 2017). Indeed, accurate identification of citizens could help provide targeted public and social services to those who are entitled to it and this deepens the experience of citizenship. In entreating Ghanaians to not allow foreigners to register for the Ghanacard, President Akufo-Addo has also said:

I believe it is also generally accepted that the terms of our National Health Insurance Scheme make it attractive to our neighbours, and many have signed on to benefit from the free healthcare provided under the Scheme... It should not be in the long-term interest of anybody that we enlist as Ghanaians, people whose loyalty to our nation is limited to access to our free healthcare system (New Crusading Guide, June 2018).

The President's concerns do not end on the note of the economic burden to the state resulting from false citizenship claims, but also touch on how registering foreigners as citizens may undermine collective patriotism and civic responsibility. As shown in Chapter 3, such emphasis on non-citizens is consistent in the history of citizen identification in Ghana.

The use of the Ghanacard project to address the longstanding question of citizenship has had in the first place, to navigate the practical challenge of 'who to register'. Connected to this challenge, the voter's ID card and the National Health Insurance Scheme (NHIS) card have been legislated as not valid for proving citizenship during Ghanacard registration. The decision not to accept the NHIS card for the Ghanacard, results from a Supreme Court decision: *Abu Ramadan and Another v The Electoral Commission and Another* (2014); and *Abu Ramadan and Another v The Electoral Commission and Another* (2016). In the aforesaid cases, the court ruled that the NHIS card could not be used in registering for a voter's ID card, because non-nationals are not barred from legally possessing the former.

The NIA has extended the above court ruling to the Ghanacard, and as such, the voter's ID card is also not accepted as primary proof of citizenship for the Ghanacard because over the years, there has been the belief that many voters in Ghana are not actually citizens. Thus, the NIA only accepts birth certificates and passports as proof of citizenship, and any person without any of the two documents are to find a registered relative, or two registered non-relatives to vouch for him or her. Such vouching could be read as an inclusiveness measure to navigate the problem of non-documented citizens.

A related point is the experience of citizenship where the Ghanacard is seen as a way of improving how citizens access their rights and responsibilities, and generally experience the state.⁷⁴ According to the NIA, for example, the National Identification system “offers tremendous opportunities for all Ghanaians to harness their responsibilities and obligations, and to improve the manner and quality of providing and accessing various Government services through the use of the Ghanacard” (NIA, May 2018). While the Ghanacard’s utility to civic responsibility and improved governance is not often stressed in the communications of state actors, it is key to questions of inclusiveness and exclusion as related to citizenship.

“Cost efficient way to improve national security and public safety”

The argument that the national identification system will help improve national and personal security has been advanced by various state actors. In discussing the “development impetus” of the Ghanacard, the NIA lists the utility of the system to “crime control and effective policing” (NIA, May 2018). William Ahadzie, a former head of the NIA, asserts that “forensic examination and analysis linked to the NIS can help security services establish the true identity of persons present at crime scenes” (ID People, 2014). Similarly, in a parliamentary statement entitled “Rescuing the NIA”, an MP, Matthew Opoku Prempeh highlighted the positive security implications of an effective national identification system:

Public and private institutions are increasingly turning to biometrics to provide secure, convenient authentication for their employees and customers... [Biometrics] has come a long way in addressing the security issues facing governments and businesses. It is no longer an over-hyped technology of the future but a reality. By its nature, biometrics capture human characteristics that are typically never lost, impossible to forget and hard to copy. Thus, biometrics are now recognised as an accurate, convenient, privacy-enhancing and increasingly cost-efficient way to improve national security and public safety, as well as reducing illegal immigration and reducing markedly, the incidence of identity fraud... Aspects of the NIS also have criminal applications — fraud detection, apprehension of criminals (when fingerprints are collected at crime scenes) and controlling illegal immigration (Parliament of Ghana, 4 November 2011: 682-684).

Here, the MP argues in favor of the Ghanacard by playing up the utility of biometric systems to “national security and personal safety.” He highlights user verification and authentication, and how they help in reducing identity fraud, illegal migration, and help with criminal investigations. While

⁷⁴ NIA, interview, May 9, 2019.

the usefulness of biometric systems may not be necessarily dubious, a careful reading of the above statement reveals an unfiltered optimism about the value of biometric-based technologies. For example, the MP presents privacy as a strength of biometrics, and does not seem interested in all the ways that criminals circumvent biometric systems, nor the potential contributions of biometric systems to privacy breaches, and to adverse profiling and social sorting.

Such faith in technology, without caveats, is also seen in the parliamentary submissions of the Minority Leader in Parliament, Osei Kyei Mensah-Bonsu:

It has been said that if we got it right, the banks will buy into the data provided by the NIA — Social Security and National Insurance Trust (SSNIT), Passport Office, the National Health Insurance Scheme, recruitment into various employment avenues — they could buy into the information provided by the NIA and generally help us to improve security within this country (Parliament of Ghana, 4 November 2011: 701).

Here too, the MP sidestepped the potential dangers of having citizens' data on a single roll, and did not engage the positives of having decentralized citizen registries.

“The engine that is going to drive this economic transformation”

As with the digital addressing and SIM registration projects, economic progress has been a big justification for the Ghanacard. Indeed, even the discussions on citizenship, and security tend to be linked to an economic imperative. For example, when the then minority leader in parliament argued for the need to integrate the various national functional databases, he tied it to the financial savings the state could make:

If we get our act right [with the Ghanacard], voter registration and the compilation of voters' register will become a thing of the past. Today, as we know, we as a nation had to cough as much as GH¢80 million, for the conduct of voter registration and that is just for people who are 18 years and above (Parliament of Ghana, 4 November 2011: 701).

The MP, Mathew Opoku Prempeh similarly argued:

Severe underfunding of the NIA has led to more calls on the public budget by all these user agencies that are creating their own smaller databases. This is a complete waste of public resources. There is also a risk that these smaller databases may not be able to communicate with the National Data Centre leading to further waste (op. Cit.: 684).

In my interviews, I noted that due to the positive budgetary implications of hosting an ID project, various functional agencies have not necessarily been enthused about deferring to the NIA, by

letting go of their own discrete ID projects. For instance, while the NIA project has been going on, there has been voter registration by the Electoral Commission, as well as the National Household Registry undertaken by the Ministry of Gender, Children and Social Protection. This long-standing duplication challenge with IDs and registration in Ghana, and the associated institutional turf wars were noted by Papa Owusu-Ankomah, then an MP:

I recall that during the time of the previous [NPP] Administration, when the decision was taken to set up this Authority [NIA], there was opposition from various organisations which were also dealing with identification systems in a much smaller way... As a result of turf wars, it seems as if we are not prepared to let the National Identification Authority work. (Parliament of Ghana, 2011: 685-6).

Thus, on the issue of cost-effectiveness, the ‘proof of citizenship’ argument is partly framed as cost-saving, as it would cut out those who are not entitled to certain public services. As earlier indicated, the NHIS is reported by state actors such as Ghana’s president, as undermined by the phenomenon of non-citizens enrolling as citizens, and paying substantially lower premiums than required. Thus, the efficient targeting of services meant for citizens, could save resources for the state, and the savings used for other services to improve the experience of citizenship.

Another key theme has been the utility of the Ghanacard to formalizing the Ghanaian economy. Indeed, this argument has been raised in Chapters 4 and 5. In addition to the digital addressing and mobile number interoperability projects, the Presidency sees the Ghanacard as a key foundation for growing the economy. To quote Vice President Bawumia, these are the “unwritten rules of the game.” He argues:

The government of Nana Akufo-Addo is convinced that the National ID scheme would help formalise the economy through the establishment of a national database, using the National Identification System as a primary identifier. This is something that we as a nation have been trying to do since 2007 and we have not quite done it yet. We want to do so this year. The national address system is also very key. The role of an address system is usually very underestimated. This is what I call the unwritten rules of the game. If you decide not to have an address system your competitors are not going to tell you to have one, or have a national ID system, they will let you wallow in your chaos, and this is what we have been doing, wallowing in informality, in chaos. But this year we want to do the national ID system, we want to do a digital property addressing system for Ghana. This will allow us to leapfrog even the advanced countries in the context of addressing, so that any space in Ghana will have a unique address... I think if we have the digital addressing system, the national ID system, and then you have interoperability in the digital payment space, you would have dealt with the engine that is going to drive this economic transformation. Those

are the unwritten rules of the game, and I think they will have a major impact as far as economic development is concerned (Ghanaweb, March 2017).

Vice President Bawumia, adjudged the ‘Digital Leader of the Year’ at the Ghana Information Technology & Telecom Awards in 2019, has been very forceful and key in the framing of projects such as the Ghanacard, as necessary for economic development. He was the Deputy Governor of the Bank of Ghana when the biometric E-Zwisch card, what Keith Breckenridge (2010) dubbed the “first biometric money”, was rolled out in Ghana. In the above quote, Bawumia is very bullish about how the so-called “unwritten rules of the game” form the “engine” for “economic transformation.” His theory that informality is chaos and undermines economic progress is worth noting, as it reflects an embrace of the simplification and modelling underpinning ‘techne’.

Similarly, other state actors, including the NIA have stressed the value of the Ghanacard in strengthening the economy.⁷⁵ The NIA asserts the project will be: “transforming and formalizing the Ghanaian economy”; stimulating “the economy towards higher productivity”; and contributing to “revenue mobilization” (NIA, May 2017). Ken Attafuah (n.d.), the Head of the NIA, argues the project serves as a “bedrock for the formalization of the economy”; can help the country move from “dependency to self-reliance”; and also move the NIA itself from being a “cost centre to a revenue centre.” Here too, it is important to note the envisioning of the NIA itself, and by extension, the state, as an entrepreneur exploiting an expanding global market for identification, verification and authentication systems to raise revenue for the state. On the matter of generating revenues from licensing and use fees related to the Ghanacard, one of my interviewee wonders, “by our laws, government bodies do not sell personal data. We must then be concerned with the question of what constitutes sale of personal data by the NIA, and how to ensure that there is no abuse of data protection rights”.⁷⁶

There is also the professed value of the Ghanacard to the recruitment processes of state institutions. According to the Head of Public Sector Reforms, Thomas Kusi Boafo;

The Ghanacard is going to be a prerequisite for people who want to be employed in the public sector or want to do government projects . . . beginning 1st September, 2019, all Ghanaians who want to be recruited into the police and the military but are without the Ghanacard will not be employed. Those already in the police and the military who fail to

⁷⁵ NIA, interview, May 9, 2019.

⁷⁶ Former Data Protection Commission executive, interview, April 2, 2019.

get the Ghanacard will be taken off the payroll because they will be considered as suspected ghosts on the government payroll. (Class FM, August 2018).

The Ghana government has traditionally complained about bloated public sector wage bills. This has been largely attributed to the phenomenon of ‘ghost names’: paid public and civil servants who are not actually at post.

The Government of Ghana in August 2019 launched another card, the GH-Dual Card for use by civil servants to “enhance transparency and accountability in the payment systems and eliminate “ghost workers” from government payroll” and to “eliminate the inconvenience in carrying multiple cards” (Ghana News Agency, August 2019). This is notwithstanding the fact that the Ghanacard has been marketed as the card to end the duplication of cards; a card that can hold 14 different applications including other functional ID systems, and as in Kusi Boafo’s quote above, a card to fight ghost names.

Overall, the ‘no Ghanacard, no government employment’ directive, when enforced, could ensure that certain sensitive positions restricted to citizens actually go to the latter. However, the said mantra when put into practice could serve exclusionary ends by limiting opportunities in the national economy for Ghanaians who cannot or have not accessed a Ghanacard. Curiously, the NIA is quite brazen about this potential exclusion and even uses it to market the Ghanacard:

Your [citizen’s] inability to establish your identity in the future could make life difficult for you in Ghana since government policy seeks to formalize the economy (NIA/b, n.d.).

If your personal information is not in the National Identification Register, you may be excluded from the formal economy of Ghana and lose out on several social, economic and political benefits (ibid.).

Private Corporate Actors

“Ghana commands the internal capacity to execute the project”

When it became clear in the early 2000s that the Ghana government would implement a national identification scheme, various local tech firms moved to take advantage of the opportunity. In 2002, five tech firms — Margins ID Systems Limited, Third Rail Limited, Sambus Company Limited, SOFT Company Limited and BlueChip Company Limited — formed a consortium to signal that “Ghana commands the internal capacity to execute the [Ghanacard] project” (Ghana News Agency, July 2012). In a press statement, the consortium asserted that:

the absence of appropriate local capacity had meant that previous major IT projects in the country were wholly undertaken by foreign companies with minimal local input, denying the country the practical benefits of technology transfer and direct project experience (ibid.).

Thus, for the local companies, the National Identification project was not only an avenue for making profits, but also a chance to prove the competence of local technicians, systems and to retain in the domestic economy, as much as possible, the technical surplus generated by major government projects. In 2003, a \$3 million company, Intelligent Card Production Systems was also set up to produce smartcards locally (Graphic, June 2003). The company was a joint venture between Margins Group Limited, Supercard Denmark, and Sage Research and Management Systems — owned by a Ghanaian and American (Ibid.).

The formation of these firms in response to the Ghanacard project, illustrates the vibrancy that state-led hi-tech projects could immediately bring to the local economy. While in 2006 the technology vendor contract for the national registration exercise was awarded to Sagem/Safran Morpho (Thiel, 2017:4), Ghana Identification Company, a consortium of local companies, worked with Sagem to satisfy local content requirements. The physical cards were produced by Intelligent Card Production Systems, a subsidiary of Margins Group (Welsing, June 2018).

When the Sagem-executed registration exercise was unsuccessful, the revamped project saw a public-private partnership between the NIA and IMS II. IMS I, also a subsidiary of Margins Group, is contracted for the non-citizen Ghanacard project. Beyond providing local tech firms with direct vending opportunities, the tech firms stress the need for an intentional investment by the state to support and invest in them. Margins Group for example argues that, having vibrant and innovative private sector and stronger public-private partnerships is key to economic growth:

If the best businesses are rewarded by the market, and the public purse is protected and vulnerable groups are given a safety net by the state, in such an environment the private sector will naturally expand. It will play its natural role of taking advantage of this digital age because it will focus and strive for excellence, performance competitiveness and hard work and productivity will follow naturally. The private sector should not, and will not be looking for handouts from the government... Critical to the exploitation of this digitized economy is regular collaboration between business and government. The lack of a serious public-private dialogue over the past 60 years to shape and deliver the economic transformation vision for the country, has been an unacceptable omission (Baiden Jnr., May 2017).

In such calls for stronger participation of the private sector, lie critiques of the kind of unfavorable environment local technology firms have had to contend with. Their proffered solutions center the private sector as a “natural” stakeholder in delivering socio-economic development. The solutions also highlight the supposed utility of capitalist competition, while appreciating the super significant path-clearing role of the state in countries like Ghana. Margins Group’s vision of national progress also entails a specific understanding of how the private sector must function in relation to the international environment:

A critical success factor for e-commerce in Ghana is to meet global standards in payment systems given the inherent security and universality that supports such transactions. Tapping into the growth promised by e-commerce in Ghana requires a wide-scale availability of cards certified to secure global standards. Europay, MasterCard and Visa (also known as EMV) cards remove the language barriers imposed by local and proprietary payment systems and make commerce without borders and growth truly realizable (Oye, 2015).

We are in the era of collaborative competition and most of our problems have already been solved by other nations. Let us collaborate with other enlightened and forward-looking countries in governance and in business, but as equal partners not as beggars, always looking first at our national interest (Baiden Jnr., May 2017).

Margins Group advocates embeddedness in the international system as necessary for local firms to progress. Thus, they encourage the acceptance of global standards by local firms as well as local-international corporate partnerships towards a “commerce without borders and growth.” This is least surprising as Margins Group and its subsidiaries are partly-owned by American and Danish concerns, and has also seen financial support by the Danish government. Margins Group’s approach to producing the Ghanacard has been to assemble local and international hardware, software, and finance, and this is an approach they deem important for local firms to thrive, and for the broader economic progress of Ghana.

“Doubling the Digitisation Index score... will move us to the first world in a decade”

Margins Group advocates a stronger digital economy in Ghana asserting that “doubling the digitisation index score for the poorest citizens over 10 years... will move us [Ghana] to the first world in a decade” (Baiden Jnr., May 2017). The Digitization Index Score “is a worldwide index that measures countries’ digital adoption across three dimensions of the economy: people,

government, and business” (World Bank, n.d.). Margins Group sees the National Identification System as well as the Digital Addressing System, as a “trust infrastructure so crucial to a modern-day digitisation economy” (Baiden Jnr., May 2017). The CEO of Margins Group, Moses Kwesi Baiden Jnr., frames digital and biometrics-based databases and channels as also useful for governance and the experience of citizenship:

Government services delivered efficiently and cost effectively to the citizens without frustrations, delays and time wasting and bribes, depend on a fundamental database with individual’s relevant data and biometrics attached to a unique number, from cradle to grave, identifying positively citizens and foreigners and delivering their rights, duties, privileges and obligations due them digitally in real time (ibid.).

While Margins Group believes in the positive implications of a digital economy for national development, the commentaries of Baiden Jnr., in general, reveal a framing of the Ghanacard as just one leg of the national development pursuit. The CEO of Margins Group emphasizes for instance the need to: “optimise the curriculum and make [formal] education more pragmatic and suitable for this digital age”; “improve internet access to cover all educational institutions”; and the “protection of intellectual property; respect, commitment and enforcement of contractual rights” (ibid.). To Margins Group (n.d.) thus, the national identification system should “afford the government and people of Ghana the ability to deepen and strengthen our foundations of democracy, economic and social inclusion by ensuring that no citizen is left behind.”

Such broader conceptions of development remind me of my interview with Vokacom, another local technology firm (discussed in Chapter 5). In both cases, I note how the everyday challenges faced by these local firms tend to foster a relatively more comprehensive understanding of the utilities and limits of an identification system in promoting national development.

Civil Society and Media

“Some Ghanaians become more Ghanaian than others”

Like state actors, civil society and media actors generally accept the utility of the Ghanacard in resolving the age-old question of citizenship. The Daily Graphic, the nation’s leading newspaper, for example, advanced the citizenship argument in an editorial promoting the Ghanacard. It argued the National Identification project as “one of the most fundamental developments in the country” by ensuring the “uniqueness of each Ghanaian and removing any doubt as to the true identity of

the Ghanaian” (Boadu-Ayebofo, March 2006). The editorial concluded that the Ghanacard project is “the chance to resolve beyond doubt the question of who a Ghanaian is” (ibid.).

On the other hand, some civil society actors have been interested in ensuring the Ghanacard does not become a tool for undermining the experience of citizenship. For example, the state’s decision to not accept the voter’s ID card for the purposes of the Ghanacard registration was heavily contested by civil society actors. While the original National Identification Register Act 750 (2008) permitted the use of the voter’s ID card as proof of citizenship, this was amended in 2017 by the Ghanaian parliament under a certificate of urgency.

The pressure group, Strategic Thinkers Network Africa petitioned the courts on the matter, arguing that if the voter’s ID card is only given to Ghanaian citizens, then it should be adequate as proof of citizenship (TheNewStateman, June 2018). They also argued that the National Identification (Amendment) Act should not be capable of amending constitutional provisions on citizenship (ibid.). When I contacted STRANEK about the case, they indicated that a court hearing is still pending, and rationalized the delay as a move by the state to frustrate their efforts. The NDC, the main opposition party has played a lead role in the aforesaid contestation:

The NDC has expressed its grave concerns about the limitation it [not accepting voter’s ID] will impose on ordinary Ghanaians who through no fault of theirs, own neither passports nor birth certificates, as well as the fact that this current dispensation will undermine the legitimacy of the voter’s ID card as declared by the Supreme Court in its ruling vis-a-vis the *Abu Ramadan case* in 2016. The NDC is of the considered view that this new exercise will not promote the stability of the State as it will only seek to make some Ghanaians become more Ghanaian than others in direct contravention of the 1992 Constitution (Nketiah, J.A, May 2018).

There have been media reports on the discomfort this provision has caused for persons hoping to register for the Ghanacard (Azumah, May 2019). However, political parties such as the incumbent New Patriotic Party, and the Progressive People’s Party, a smaller opposition party backed the NIA’s position (Citi News Room, June 2018; Ghanaweb, June 2018). The NDC, on the other hand, has framed this ‘de-legitimization’ of the voter’s ID card as a move by the NPP to “rig” future general elections (Nyavor, May 2019). This suspicion is based on the idea that an eventual goal of the Ghanacard project is for the card to replace the voter’s ID, a move that the NDC has vowed to resist (Kuzor, August 2019).

In proving their suspicion, the NDC has pointed to the transfer of two officers of the Births and Deaths Registry out of the Volta Region, as well as the replacement of the Head of the National Births and Deaths Registry; all three transferred hail from the Volta Region (Graphic Online, July 2018). The NDC argued that these transfers were meant to give the NPP control over the process of providing birth certificates to citizens in the Volta Region (ibid.). As a reminder, areas such as the Volta Region — now split into Volta and Oti regions — that share an international border with Togo, Burkina Faso and Côte d'Ivoire generally tend to be NDC strongholds and are major places for citizenship contestations due to the arbitrary nature of borders in many African countries.

Certain NDC sympathizers publicly announced that they would physically attack NIA workers were the latter to refuse registering people who presented their voter's ID card during enrolment. The NDC Constituency Chairman for Ashaiman warned, "We have our men on the ground and if they come and refuse to accept the voter's ID card, we are going to attack them and spoil their machines" (Daily Guide, June 2018). The NPP sympathizers in the same area indicated their readiness to protect the NIA workers from physical attacks: "We see that move by the NDC Chairman as a useless move. Who is he fighting for? Is he fighting for himself, for Ghanaians or non-Ghanaians?... It's an exercise that all Ghanaians are yearning for, and we won't sit down for this exercise to be disrupted by any hoodlum" (Citi News Room, June 2018).

While the NDC initially implored its members and sympathizers not to register for the Ghanacard, they later retracted the call, with the General Secretary of the party arguing that the "registration of citizens everywhere is the basis for development so let's look at it from that angle and not politics and voting... Denial of development starts from citizenship so let us all get involved and stop the frustration" (Ghana News Agency, August 2019).

The rejection of the voter's ID card by the NIA has caused some distress for persons who only have that as a proof of citizenship. What tames the adverse implications of not accepting the voter's ID card for Ghanacard registration is the other provision that a person without viable documentary proof of citizenship, could be vouched for by other Ghanaians who have such proof.

For some, even presenting the required proof has not been enough. For instance, Fulanis (even with a passport or a birth certificate), reportedly, have been turned away because they were not

deemed to be Ghanaians. For context, the Fulani people are traditionally transhumant and are settled across West Africa. Historically, their transhumance and nomadic lifestyle have saddled them with citizenship contestations in various West African countries. In a news report, a Fulani man, for instance, complained:

I was told I am a Fulani and all Fulanis are not Ghanaians and they confiscated my card and detained me and said they were calling the police to arrest me because I acquired it through illegal means (Class FM, October 2019).

The Chief of the Fulani people in the city of Tamale, Issa Barry has also complained about NIA officers preventing Fulani persons from registering even where there are qualified persons vouching for them: “an official went as far as threatening to seize a guarantor’s card; a person who registered in Accra because he was vouching for his colleague Fulani. I asked the officer whether he was the best registration officer in the country” (Ibrahim, October 2019). Alhaji Musah Yakubu, the General Secretary of the Fulani Welfare Group, has also protested:

Fulanis who have lived here for over seventy years, eighty years are being denied. This is a valid birth certificate, a valid passport of somebody and they're being denied the National Identification Card. I don't know why... Our forefathers were here long before independence, long before the Constitution. Then they should go and collect Samira's card. If Samira [wife of the Vice President] has a card and I'm being denied, it hurts. So, we're calling on the office of the Second Lady; she should come out and speak about this issue (ibid.).

The NIA always singles out Fulanis that they are not Ghanaians and they are not supposed to register. Citizenship is by law. You just see my face and tell me I am not a Ghanaian? No. If the Chinese can be a Ghanaian, a Lebanese can be Ghanaian, a Nigerian can be a Ghanaian why not the Fulani who toiled and defended this country before it became independent? (Citi News Room, January 2020)

Another key contestation relates to the decision to make an individual’s provision of a digital address mandatory for Ghanacard registration. Again, this requirement came into force upon the passing of the National Identification Register (Amendment) Act 950 (2017). As noted in Chapter 5, Bright Simmons, Vice President of Imani, opposed this provision by pointing out how it excludes homeless persons and slum-dwellers:

There are 120,000 homeless people in Accra alone. And an estimated 5.4 million slum dwellers in Ghana. Most of these people have “no fixed address.” How do you then tie a national ID system to an untested “digital address”? Do these decision makers understand their own country? (Citi News Room, November 2018)

Again, as mentioned in Chapter 5, Francis Kojo Kwarteng Arthur, a private legal practitioner has sued the National Identification Authority for not registering him because he did not present a digital address:

I am a lawyer and I have been denied, so what about the ordinary person on the streets. So, I decided to test it in court. My readings show me that there is no act operationalizing the digital address code so I want the court to declare that the digital address code is an illegality hence Ghanaian citizens who are willing and present themselves at the NIA to be registered should not be denied the Ghana card on the basis of not having the digital address code (ibid.).

While Lawyer Arthur's case was dismissed by an Accra High Court, the ruling did not really get at the substantive arguments. The court ruled that the plaintiff had not proven that other citizens accessed the Ghanacard without a digital address. The court's logic was to oppose the argument that Lawyer Arthur was discriminated against (Ghana News Agency, April 2019). Lawyer Arthur is currently appealing the High Court's decision.

The Centre for Socioeconomic Studies (CSS) also argued that the digital address requirement is:

discriminatory in the sense that it indirectly excludes the Ghanaian masses – that is the poor – from being registered and issued with a Ghanacard. This is because, as it stands now, a person cannot obtain a digital address code without access to a smartphone and reliable internet service; both of which costs a lot of money, and out of reach for a majority of Ghanaians (November 2019).

The CSS has lodged a petition with the Commission for Human Rights and Administrative Justice (CHRAJ), the independent state Ombudsman. In the petition, they point to the ruling in the *Arthur v NIA* case to ask that CHRAJ compel the NIA to produce a report on how they are consistently complying with the court's ruling (CSS, May 2019). The CSS seems to be arguing that NIA officials have been arbitrary and inconsistent in terms of the requirements they insist on, during registration.

Concerns have also been raised about how administrative aspects of the registration process could undermine the experience of citizenship eventually. These are partly informed by reports that some foreigners have been aided by certain NIA officials to register for the Ghanacard, including persons from Niger and Nigeria (Appiah, 2019; Tenyah-Ayettey, 2019). Thus, the concern about foreigners registering for a Ghanacard is not just a suspicion. A Nigerian caught in possession of a Ghanacard asserted; "I am a Nigerian who has been based in Ghana for a long time... I have been part of the

people and I made myself part of the people, so I decided to do everything [the people do]” (Graphic Online, August 2019).

The Ghana National Association of the Deaf has also complained that deaf persons have not had the needed support in the registration process (3News, May 2019). The NIA indicates that the training of their registration officers emphasized the proper handling of persons with disability, as well as anti-sexual harassment practices.⁷⁷ The NIA pointed me to the tactile features of the Ghanacard, as a sign of their commitment to supporting physically challenged persons. The NIA stressed their commitment to broader inclusivity by highlighting measures such as their intentional use of registration officials at places where they could speak the local language; attaching commissioners of oath to registration teams to aid citizens who are without the needed proof of citizenship; as well as their intention to visit asylums and hospitals to register the infirm.⁷⁸

Notwithstanding such inclusive efforts by the NIA, there have been complaints about long queues, technological hitches and general delays during registration (Appiah-Adjei, 2019; Ghana News Agency, October 2019). Some NIA officers embarked on night time registration with the excuse that internet connection was better at night (Abbey & Koomson, 2019). There have been reports of people passing the night at registration centers just so they can register in time. Other enrollees have also been told to come later for their cards although the process is supposed to lead to the instant issuance of cards (Ghanaweb, June 2019). In one case, a pregnant woman who had been in the registration queue for a long time, collapsed and died (Ghana News Agency, August 2019). Such challenges could deter people from registering, and in turn, undermine the citizenship of such persons.

Outside of the registration process, there have also been concerns about the negative implications associated with the intended uses of the Ghanacard. At the heart of this contention is the indication by state actors that the Ghanacard will be made mandatory for accessing various public services. Section 7 of the National Identity Register Regulations (2012) provides about 14 different transactions for which the Ghanacard would be required including: application for passport, driver’s license, bank accounts and insurance policies; the purchase, transfer or registration of

⁷⁷ NIA, interview, May 9, 2019.

⁷⁸ Ibid.

land; voter registration; registration of SIM cards; payment of taxes; transactions relating to pensions, national health insurance, or consumer credit; transactions with social security implications; and the “application for public or government services, facilities, approvals, permissions or benefits; and any other transaction which the authority may determine and publish in the Gazette”. Based on the foregoing legal provisions, the Deputy Minister of State in charge of Monitoring and Evaluation insisted in a radio interview:

No one can access any service in Ghana without the Ghanacard. You can’t get a driving license, you can’t open a bank account, you can’t go to school, you cannot join the National Health Insurance Scheme; you can’t do anything in this country that requires a form of identification without the Ghanacard (MyNewsGh, June 2018).

Imani (February 2016) has taken a counter position on the state’s intention to make the Ghanacard mandatory for accessing public services:

... if a citizen has another means of proving their citizenship (such as a passport or birth certificate) then they cannot be compelled to carry a particular card to access any privilege due them as a citizen. This logic may be reinforced by the fact that the law actually makes other identity documents the basis for one to show eligibility to receive the National ID Card. So, on what basis can one be denied services for preferring the existing documents to the National ID Card? And if one cannot be denied services for not possessing the card, then what does ‘mandatory’ mean?

“An urgent requirement for national and human security”

Civil society and media actors have also argued the utility of the Ghanacard to personal and national security. For example, the earlier-cited Daily Graphic editorial on the Ghanacard, argued that “in the case of the management of crime and fraud, no one can be in doubt about the benefits of such a system [national identification]” (Boadu-Ayebofo, 2006). Also, the Foundation for Generational Thinkers asserts that, “with the threat of terrorism on the rise in the ECOWAS sub-region, care must be taken that all applicants for the Ghanacard are properly scrutinized and all doubts allayed” (Kwafo, 2019). The think tank, Imani (February 2016) also accepts that having an effective national identification system can help control criminal and illegal activities. They add that such security is important for protecting national institutions and good governance:

In an era of heightened anxiety about terrorism and the activities of irregular migrants (some of whom have been implicated in vice cartels promoting illegal mining, human trafficking, and gambling rings), an effective national ID system is an urgent requirement for national and human security (ibid.).

Based on this security logic, certain commentators have argued for the expansion of the data points citizens must submit when registering for a Ghanacard. A columnist for example argued for the state to collect the DNA samples of citizens:

With a national DNA database and mobile phone numbers linked to national ID cards, security agencies will be in a better position to fight violent crime, whether it is armed robbery or terrorism (Antwi-Boasiako, February 2016).

In an op-ed, Professor Ernest Aryeetey, an economist and a former Vice Chancellor of the University of Ghana, linked the Ghanacard project to national stability. First, Professor Aryeetey argued that the “rise in terrorism presents a security challenge to states” and as such, “necessitates a national identification card system to improve on national security” (Aryeetey, 2006: 7). He advances that “national identification cards are acclaimed as one of the effective ways of winning the war against terror.”

Aryeetey quoted Denis Coderre — then Canada’s Minister of Citizenship and Immigration — who espoused a similar logic when Canada was debating the need for national identity cards in the mid-2000s. Here, it is important to note that Canada eventually never adopted a national identification card. Aryeetey argues that if a national identification system can lead to an improved targeting of vulnerable groups in the distribution of social and public services, then the system can help to forestall conflicts that could result from the grievances of vulnerable groups (ibid.).

“A deep surveillance or big brother situation”

There have been concerns about the potential of turning a national citizenship database into a surveillance tool, and about the associated threats to personal privacy rights and data protection. There is the argument that the central involvement of a private company, IMS II in the development of a national database with sensitive information on citizens is risky (Business World Ghana, September 2014). Along these lines, there was concern in the media based on suspicions that the German company, Dermalog, sub-contracted by IMS II, had “complete and unrestricted access to all registered citizens’ data including fingerprints and personal details of applicants” (TheNewStateman, November 2018).

Also, Imani (February 2016) has argued that the government’s plan to tie essential public services to the Ghanacard “means that one cannot evade the surveillance that can be enabled by the card.”

They frame the database integration rhetoric by state actors, as a harbinger of “a ‘deep surveillance’ or ‘big brother’ situation” where “ruling parties will deploy the systems to stalk and blackmail dissenters and activists” (ibid.). Imani thus suggests only centralizing “the most basic data of citizens and their biometric data” and not “other data related to sensitive aspects of citizens’ life, such as health, education, employment, revenue and tax, geolocation, travel history, marital status, etc.” (ibid.). The former executive of the Data Protection Commission argues that first, “even if the card has been designed to hold multiple databases, it was important for the databases not to be centrally held by the NIA” to protect both data privacy and national security.⁷⁹ Second, “contrary to existing practice in Ghana, it is important that third parties seeking to verify the Ghanacard should “put in one’s entire unique personal identification number before information can be retrieved” and a surname search should not lead to access to multiple persons’ profiles.⁸⁰

Imani also argues for a “mechanism for pre-emptive discovery of abuse and error” based on a system that tracks which institution has accessed which citizen’s file at any point in time (ibid.). They advanced that a “proper independent Information Ombudsman role is required at the very top of the Data Protection Commission to ensure that the system is subjected to rigorous, routine, and unannounced checks” (ibid.). The suggestion is based on their reading that the legal basis for an independent Data Protection Commission is weak, as the Commissioner and the board members are appointed by the President; thus, the institution has “zero autonomy” (ibid.).

“Massive, positive, macroeconomic benefits for the country”

In an open forum on the Ghanacard project, co-sponsored by Citi FM and the World Bank, a common point raised by various civil society actors was the cost of card duplication to the state (Citi FM, February 2016). As shown earlier, this argument has been made by state actors to the effect that the Ghanacard could save the cost of running parallel ID projects.

There is also the argument about formalizing the economy through the Ghanacard project. The NPP during their time in opposition promised to “formalize the economy through the establishment of a national database, using the National Identification System as the primary identifier” (NPP, 2016:6) if they were voted into office. The party promised to place:

⁷⁹ Former Data Protection Commission executive, interview, April 2, 2019.

⁸⁰ Ibid.

ICT, and especially data science, including analytics, at the centre of the national development agenda, by completing the registration of all residents in Ghana under the National Identification Scheme within the first year of taking office, establishing an integrated Data Warehouse of databases from key public institutions, using the National Identification System as the unique identifier for data items, and automating the processes involved in accessing public services at both national and local government offices (NPP, 2016:25).

The NPP was committed to using computation to mediate the experience of citizenship. This position was expected as the NPP was in power when the National Identification project was started in the early 2000s. Thus, the investments by the NPP in identification systems, upon returning to power in 2017, is unsurprising, likewise the quest to integrate various public databases.

Imani (February 2016) agrees with the economic utility argument. They assert that the Ghanacard project could lead to a “superior credit rating system that can transform the financial industry by minimizing risk and the costs of lending, thus expanding the availability of well-priced capital to businesses” (ibid.). They argue that the project could help with “widening the tax net and reducing tax evasion, with massive, positive, macroeconomic benefits for the country”, and that “many promising internet business models, such as e-commerce and subscription software, cannot fully take off in the present time due to serious problems with identity management” (ibid.). Imani Ghana advances that the Ghanacard project is important to mitigate the challenge of “financial risk profiling... which is poor in the country because it is very difficult to track individuals”.⁸¹ They add that the project will help the government “know exactly what a person is worth and their potential economic worth to society... then we can also further understand the economic challenges people face to design targeted solutions”.⁸²

“We are calling for a forensic audit into the operations of the NIA and its finances”

Despite these economic potentialities, there have been two counter arguments. First, there is the argument that the investments in the National Identification project could be rather used to serve more pressing developmental challenges. The leader of the peripheral Liberal Party of Ghana, Kofi Akpaloo has argued for expanding the utilities of the already-existing electoral register instead of investing in an entirely new citizenship database (Graphic Online, June 2018). Advancing a

⁸¹ Imani Ghana, interview, April 5, 2019.

⁸² Ibid.

relatively extreme form of this logic, Allotey Jacobs, a vociferous member of the NDC, asked during a radio show:

Why are we in a hurry to have Ghanacard?... Everybody is complaining about their roads. People are complaining about health facilities. People are complaining about schools under trees. So, [why] is our priority [the] Ghana card? (Adu Gyamfi, June 2018).

A policy analyst, Dr. Daniel Ato Aidoo also wonders:

There are more questions than answers, and one can only inquire whether this Ghanacard will also be examined at the "Gate of Heaven" to warrant such an expensive cost when the government has not done enough to expand the Livelihood Empowerment Against Poverty program, which can address short-term poverty and deepen long-term human capital management and development (Arthur, May 2018).

Those who make the second counter argument are not opposed to the national identification project. Rather, they are more interested in protecting the national purse by ensuring that the NIA and the Ghanacard project do not become avenues for financial impropriety. Strong concerns have been raised about the cost of the project. As Imani Ghana advances:

The modus operandi was generally inefficient. The methodologies did not provide enough value for money in terms of the chosen systems and software. The whole approach has been cost and process intensive. The NIA could have started by triangulating, merging and matching existing databases.⁸³

Imani Ghana assesses that generally “personal interest in procurement could prevent state bodies from adopting the most cost-efficient alternatives... but sometimes too, choosing the more process-intensive option is for visibility purposes so that institutions are seen as working”.⁸⁴

In 2014, when the Ghana government moved to contract the Chinese entity, CIDC, backed by a credit facility from EXIM Bank China, concerns were raised in the media. One headline read, “Ghana seeks another \$115 million for Ghanacard, \$21 million blown already” (Business World Ghana, 2014). Based on such suspicions of impropriety, the NDC has also called for a forensic audit of the NIA:

It has been reported that the National Identification Card would cost the state 1.2 billion dollars. Where is the NIA getting its finance from? That would mean that for a country with a population of 30 million, it would cost 42 dollars per person to do an ID card. India

⁸³ Imani Ghana, interview, April 5, 2019.

⁸⁴ Ibid.

with its population did not do an ID card for even 20 million dollars. We are calling for a forensic audit into the operations of the NIA and its finances (Agbenorsi, 2019).

Kennedy Agyapong, an NPP MP also accused the Head of the NIA of fraud for picking IMS II ahead of a Malaysian company the former fronted. According to the MP, the Malaysian company was supposedly ready to do the entire project for \$50 million, vastly less than the cost of the eventual contract (Frimpong, May 2018). The NIA and its Executive Director have publicly denied this allegation of inflated cost. They have argued that the estimated \$1.2 billion cost is for a 15-year life cycle of the project, and also that the actual money to be paid by the state and IMS are \$124m and \$169m respectively for the first year (Attafuah, June 2018). The remainder will be from “the revenues that NIA will be raking in by virtue of the daily use of the card” (NIA, June 2018).

Imani Ghana explained that civil society actors and the media have to make such corruption suspicions public as for example, in their case, “when we [Imani] use the media to raise such concerns, there are often more direct responses from the implementing bodies. The agitation we put in the media affects them and their reputation. Therefore, they feel the need to clarify issues publicly”.⁸⁵

International actors

Overall, the external influences on Ghana’s national ID is seen in the sourcing of technologies, as well as the material and technical support of inter-governmental bodies to the project. In this section, I highlight the main aspects of the engagements of both foreign private sector and inter-governmental actors. Although the Government of Ghana opted to take the Ghanacard project out of the eTransform contract with the World Bank, the latter through its ID4D program reports that it has supported Ghana’s national identification project by sending experts to carry out advisory functions (World Bank, 2017: 15), undertaking country diagnostics (p19), and providing support “including legal frameworks” (Desai, 2017: 8). According to the Head of the NIA, when in 2017, the Ghana government was searching for a new solution and private sector partner for the National Identification project, the World Bank made submissions in an advisory capacity on “relevant international best practices” (Attafuah, June 2018). In my interview with the NIA, they confirmed

⁸⁵ Ibid.

the technical involvement of the World Bank in the selection of private vendors for the Ghanacard project.

Sustainable development

At the global policy level, citizen identification systems have been tied to sustainable development as seen in target 16.9 of the Sustainable Development Goals (SDGs) which presents the provision of a legal identity for all as key to attaining SDG 16. SDG 16 seeks to “promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels” (UN, n.d.). Per the SDG target 16.9, the United Nations’ hopes that by 2030, all persons can be provided with some form of civil registration to legitimize their identity. This way, each person can equitably access their rights and freedoms.

The World Bank’s ID4D program draws on SDG Target 16.9 as the basis for its own work of promoting identification systems as necessary for development. In addition to protecting persons’ right to legal identity and access to rights and opportunities, the ID4D program argues that “identification matters for development” in two other ways. First, accurate identification and verification of persons’ attributes by governments and other stakeholders is “critical for delivering programs and services efficiently, effectively, and accountably” (ID4D, 2020: 6). Second, the ID4D argues that identification systems could “accelerate inclusive development” by enhancing “governance and service delivery, increasing financial inclusion, reducing gender inequalities by empowering women and girls, and increasing access to health services and social safety nets for the poor” (ID4D, 2020: 7).

In effect, the local and international justifications for the Ghanacard hardly differ, as a lot of confidence is placed in the utility of a national biometric ID system in sharpening the state’s ability to deliver development, as well as improving citizens’ ability to access public and private goods and services. The said similarity in narratives is unsurprising, as the World Bank and more so, through the ID4D program has been a thought leader in tying identification systems to development, and promoting the connection particularly in Global South countries. Indeed, the first “pillar” of the ID4D program is tied to thought leadership and analytics. In essence, the ID4D program seeks to construct and shape knowledge on why identification matters to development;

how a good ID system can be built; and assessments of gaps and progress of various identification systems. To do this, the ID4D draws on customized datasets including the Global ID4D Dataset, and the ID4D-Index Survey Data (ID4D, 2018). Through these datasets, statistics are generated to show the extent of the identity gap in various Global South countries, which then demonstrates the need for investments in stronger ID systems in various countries.

The second pillar of the ID4D program is in serving as a global platform and conveyer for identification-development issues. This basically involves promoting the utility of effective ID systems and related partnerships and standards. The third pillar is country and regional action which involves providing technical and financial assistance to countries for purposes of strengthening their ID systems. Admirably, the ID4D program adopts a broad conception of development by situating the character and utility of an effective ID system across governance, service delivery, gender, rights, data protection and social protection as seen in the ID4D's 'Principles on Identification for Sustainable Development'.⁸⁶ These principles generally promote ID systems that are inclusive, have a safe design, and geared towards good governance.

The ID4D program since its launch in 2014, has overseen the distribution of about \$1.5 billion of funding by the World Bank; over 20 countries are receiving legal advice from the program; and about 16 out of the 30 countries deemed to have the largest identity gap are receiving ID4D support (ID4D, 2021: 5). The global and multi-actor support for the ID4D agenda is seen in how the ID4D principles have been endorsed by about 30 different inter-governmental and private actors that are integral in international development circles (ID4D, 2021: 2).⁸⁷

⁸⁶ <http://documents1.worldbank.org/curated/en/213581486378184357/pdf/Principles-on-Identification-for-Sustainable-Development-Toward-the-Digital-Age-Second-Edition.pdf>

⁸⁷ These include African Development Bank, Asia Development Bank, International Organization for Migration, International Telecommunication Union, Norwegian Agency for Development Cooperation, Organization of American States, UN World Food Program, UNHCR, UN Refugee Agency, UN Capital Development Fund, United Nations Children's Fund, UN Development Program, and UN Economic Commission for Africa, Bill & Melinda Gates Foundation, Center for Global Development, Mastercard and Omidyar Network.

“eTransform Ghana” — Digital economy, Interoperable IDs

Through the Ghanacard project, international actors particularly, the World Bank seek the construction of a particular kind of society; one that is based on a digital economy and backed by identification systems. In the said economic vision, most public and private services can be digitally linked, and become accessible quickly and remotely. And where multiple IDs are not needed to access different services, the general cost of doing business as well as the cost of establishing, maintaining and accessing disparate ID systems is reduced. The digital and integrated economy vision can for instance be seen in the G2Px Initiative, a sister initiative of the ID4D, launched in 2020 in partnership with the Bill and Melinda Gates Foundation. The initiative seeks to draw on ID4D in “improving government-to-person (G2P) payments through digitization” (ID4D, 2021: 45).

As part of the *eTransform Ghana* project, the World Bank agreed to provide a credit facility of \$21.45m to upgrade the (initial) Ghanacard and make it interoperable (World Bank, September 2013). The Ghanacard was to be linked to an electronic passport project, backed with \$50m in total (World Bank, March 2013). In justifying the eID project, the World Bank asserted that:

Businesses can authenticate customer identity, and develop and offer new products and services through the internet or mobile phones. Citizens can gain access to a larger universe of online applications and services that can be used more securely in a variety of industries and public services. e-ID can have potential linkages with downstream applications to support a host of public and private services, including travel documents (such as passports), driver’s license, taxation, voter registration, financial accounts, health records, immunization records, etc... The multiplicity of ID systems is making it challenging for government agencies, businesses and financial institutions to properly authenticate citizens and their personnel data. This, in turn is contributing to the limited and high cost of doing electronic business in Ghana (ibid.).

It must also be noted that external funding permits actors outside of the state to have a stronger influence on the nature and outcomes of identification projects in countries like Ghana. When in 2014, the NIA sought a private partner in the Chinese company, CIDC, the World Bank reportedly chastised the Ghana government on the basis that the World Bank had already agreed to fund the project (Daily Guide, October 2014). If this is read as a gatekeeping role of a sort by the World Bank, then it illustrates the influence that external financiers may assume. Eventually, the Ghana

government did not go with CIDC but also withdrew the Ghanacard project from the *eTransform Ghana project* on the basis that the timelines of the two projects were not aligned.⁸⁸

Returning to the matter of interoperability, international actors push for integration not only at the national level, but also sub-regional, regional and/or global levels. One way of ensuring such international integration of ID systems is through the promotion and enforcement of compliance standards.⁸⁹ Here too, the ID4D has been a thought leader in promoting common technical standards as they relate to biometrics, card, digital signature, barcode and signature (Mittal, 2018: 9). As the ID4D argues:

Standards ensure the implementation of universally understood protocols necessary for operation, performance, compatibility, and interoperability, which are in turn necessary for product development and adoption. While the adoption of standards has a positive impact in market penetration and international trade, a lack of standards creates issues for the effectiveness and robustness of an identity system, including problems with interoperability, interconnectivity and vendor lock-in (Mittal, 2018: 7).

In Ghana's case, the World Bank deemed the initial Ghanacard produced by Sagem/Safran Morpho as not meeting international standards, and had to be replaced. The *eTransform* project appraisal document, for instance, noted:

The National ID system, in its current form with 2D barcode, has limitations in terms of durability and ability to store information. It also does not conform to some of the specifications provided by international organizations, such as ICAO, ISO and ANSI. The limitation is also preventing a number of potential user agencies, including financial institutions, from using the current ID card, the Ghanacard. The sub-component will therefore support the government of Ghana to complete implementation and deployment of a well-functioning national electronic ID system (World Bank, September 2013: 8).

The Sagem Ghanacard was deemed as needing an upgrade because it only took four fingerprints instead of '10', and also did not take a scan of the iris — the international standard (Boateng, March 2017). The fact that Ghana basically had to restart or at least, heavily revise its national

⁸⁸ NIA, interview, May 9, 2019.

⁸⁹ The global level standard-setting bodies include the International Organization for Standardization (ISO); International Labor Organization (ILO); and the European Committee for Standards (CEN), the International Electrotechnical Commission (IEC); ITU's Telecommunication Standardization Sector (ITU-T); the International Civil Aviation Organization (ICAO); Internet Engineering Task Force (IETF)/ Internet Society and World Wide Web Consortium (W3C) (Mittal, 2018: 7). These are in addition to regional and national standards organizations like the US's National Institute of Standards and Technology which practically exercises some global influence (ibid.).

identification project, despite the costs, in order to meet international standards, shows the weight placed on global interoperability. The ability to identify citizens with the Sagem card was not considered to be enough. Essentially, the ‘correct’ and ‘acceptable’ card was the one meeting international standards and interoperable with as many domestic and international ID verification and authentication systems and regimes as possible.

The Economic Community of West African States (ECOWAS) also makes it obligatory for its members to issue an ECOWAS National Biometric Identity Card (ENBIC) that meets certain specific standards (Odeyemi, May 2019). These standards regulate card properties such as the capacity of the contactless chip — not less than 32 kilobytes — as well as the nature of the substrate (Boateng, April 2017). The goal is to make national identity cards across ECOWAS member states identical and interoperable. Here, there is some insight on how supranational requirements could force or at least influence states into citizen ID projects they may not want, or cannot afford, or at least, of a kind they may not prefer.

For example, the World Bank, through the International Development Association, is working with ECOWAS on the West Africa Unique Identification for Regional Integration and Inclusion Project (WURI). The WURI seeks to provide biometric ID cards to citizens in La Côte d’Ivoire, Guinea, Benin, Burkina Faso and Niger based on “legal and institutional frameworks in keeping with regional standards and international good practices” and which “generates UNIs [Unique Identifiers], in keeping with international practices” (World Bank, 2018). In my interview with the NIA, they indicated that the Ghanacard is designed to meet the standards given by ECOWAS, and to fit into the WURI project, although the World Bank is not funding the Ghanacard project any longer.

“An important [future] market”

Increasingly, identification projects in the Global South, and especially in Africa are providing a great economic opportunity for private sector ID firms to explore. As ID4D statistics suggest, half of the over 1 billion persons without legal identity are in sub-Saharan Africa; that makes it one out every two persons in the region on average.⁹⁰ Thus, ID projects in themselves are viewed as an

⁹⁰ <https://id4d.worldbank.org/global-dataset/visualization>

opportunity to claim emerging markets, accumulate capital and make profit through the supply of software and hardware, as well as project management expertise. Just as local firms are interested in succeeding with their procurement bids, foreign firms are heavily interested. Exhibitions at the annual ID4Africa conference, for example, are dominated by non-African ID companies; the few African companies are mostly South African.⁹¹

Over time, the Ghanacard project has seen direct interest from a number of international ID firms. As has been noted, for example, the initial project had the French company, Sagem/Safran Morpho (now IDEMIA) as the private partner (Daily Graphic, August 2010). Other foreign firms including NIKUV (from Israel), Marpless (from South Africa) and Hewlett Packard in partnership with Printrak (US firms) submitted unsuccessful bids for the project (Breckenridge, 2010: 645). Also, the contract for the current Ghanacard project saw interest from a number of international firms including Multimedia Glory (Malaysia), Madras Security Printing (India), 4G ID Solutions (India), CIDC (China), EDAPS (Ukraine), Vlatacom (Serbia), and Safran Morpho (France) (NIA, June 2018).

Cryptovision, for instance, indicates that they most appreciated that the Ghanacard project was set up for partnerships with the private sector instead of it being entirely undertaken by the state via a civil registry department.⁹² As Cryptovision stresses in their public communication: “Electronic identity cards are a booming technology, especially in emerging markets like Africa” (Cryptovision, October 2017); and they describe Ghana as “an important future market” (Cryptovision, December 2017).

Foreign governments with stronger economies also provide varying types of support to their tech firms to take advantage of the ‘booming market’ for identification systems in countries like Ghana. When the President of Germany, Frank-Walter Steinmeier visited Ghana in 2017, the CEO of Cryptovision was part of the delegation, on the basis that “Cryptovision has been extremely successful on the African market for years – especially in eID projects in Ghana and Nigeria” (Cryptovision, December 2017). Also, when the Chinese Integrated Circuit Design Company

⁹¹ <https://id4africa.com/2020-exhibitors/>

⁹² Cryptovision, interview, May 8, 2019.

showed interest in the Ghanacard project in 2012, they were backed by a loan facility of \$115m from the China government through the Export-Import Bank of China (NIA, June 2018). Even Margins Group, which through its subsidiary IMS II, is the current private partner for the Ghanacard project, is partly Danish owned and has had some financial and technical support from the Danish government (Ministry of Foreign Affairs of Denmark, August 2015).

In most African countries, ID firms may be at a disadvantage when competing with foreign firms as the latter tend to enjoy first mover advantages congealed in patent rights for the relevant software and hardware. For example, the National Institute of Standards and Technology (NIST), has been a de facto authority on standards related to the automated fingerprint identification system (AFIS) and the automated biometric identification (ABIS). A glance at NIST's rankings and reports on the ABIS and AFIS shows a negligible presence of African tech/ID firms, if any at all (Watson et. al., 2012: 78-85). By not showing up on NIST's rankings and assessments, it is difficult for ID firms in countries like Ghana to be deemed competent enough and be contracted to supply any AFIS or ABIS they hold proprietary rights to, if any. It is estimated that the AFIS market alone will grow from "\$6.67 billion in 2017 to \$36.6 billion by 2025" (Fior Markets, 2020).

Even in the case of IMS II, upon winning the vendor contract for the Ghanacard project, it has mainly drawn on the services of a number of international technology vendors (NIA, May 2018). These include the Dutch company, NXP Semiconductors N.V., which supplies chips/semiconductors. Dermalog, a German company, supplies the Automated Fingerprint Identification Systems and Mobile Registration Workstations; Cryptovision, another German company provides "applications on the eID card, the backend certificate infrastructure, and middleware components used at the card issuance terminals" (Hoffmeister, April 2018). The American company, Entrust DataCard provides the software and printers for the instant issuance of the Ghanacard.

In effect, IMS II is more of an assembler and project manager; without contracting international firms, the Ghanacard may not have the technical competence to undertake biometric capture, verification and authentication; be issued instantly upon enrolment; satisfy international standards; and be able to connect with third party systems. In reviewing the narratives of the various

international firms sub-contracted by IMS II, it was interesting to note how they further market their utility by stressing how they add value to ID systems and make return on investments on these projects viable for governments, by tying them to payment systems, and reducing the cost of card production and distribution, for example (Entrust, 2018; Schmeh, 2018; X-infotech, n.d.). As the African Report puts it, “In a booming sector, international giants are winning most of the contracts related to digital and facial recognition. Pending the emergence of an African challenger” (Aït-Hatrit, June 2020).

Conclusion

Overall, as demonstrated in this and previous chapters, the Ghanacard has been framed by various actors as pivotal for Ghana’s development objectives and generally enjoys support from both state and non-state actors. The said development utility has heavily been situated in an economic context, with Ghana’s Vice President labelling the card as one of the engines for economic transformation. Stakeholders emphasize how the Ghanacard will promote tax extraction, efficient distribution of public goods, avert the cost in the deployment and maintenance of multiple card systems by various state agencies, accrue savings by expunging ghost names from the public sector roll, formalize the economy, boost the digital economy, and promote financial inclusion. Also, local technology companies see projects such as the Ghanacard as a great opportunity for the state to re-orient its investments by contracting domestic firms in order to retain technical and economic surpluses locally. These economic justifications are in addition to other expectations such as how the Ghanacard can help promote security, and importantly, help settle the question of citizenship.

Situating the Ghanacard as useful for economic development has meant the card inherits the traditional concerns in public policy analysis of the economy. It is thus unsurprising that concerns about corruption, transparency and probity as they relate to the project’s financing and procurement have been very pronounced. Also, civil society actors have raised concerns about the dangerous implications of having an identification system that aims to hold citizens’ profiles across multiple state agencies, and permits the state to more easily access the personal information and transactions of citizens. However, these concerns are quite overshadowed, if not marginalized, by the belief of media and civil society actors that citizens’ lives can be enhanced by a biometric-based identification system. Consequently, the major contention by non-state actors about the

Ghanacard project is about inclusiveness; if the Ghanacard will bring development, then are we ensuring that all categories of citizens will equitably benefit from the said development?

Positively, inclusiveness is at the core of the argument that the Ghanacard is needed to formalize and improve the economy. A basic attribute of a formal economy is where citizens, as economic actors, do not operate outside the surveillance of the state. Objectives such as ‘banking the unbanked’, and ‘financial inclusion’ are increasingly tied by state actors and their allies to the quest to formalize the economy, and eventually for socio-economic progress. If the state can see you as a citizen then you can be factored into the plans of the state whether it is for purposes of tax extraction or social welfare. The experience of citizenship is thus enhanced where citizens have stronger foundations to assert their rights, make claims on the state, and participate in the economy. However, the said socio-economic inclusiveness used to justify the Ghanacard, is only for persons who are permitted by the state to be visible to the state through Ghanacard registration. While the state wants to know its citizens in order to boost its own capacities, the citizenship debates surrounding the Ghanacard suggest that not every category of ‘possible’ citizens are easily permitted by the state and its agents to enroll and legitimize their citizenship claims.

While the Ghanacard is set up to shape citizenship, and the experience of citizenship, the contentions about citizenship in Ghana, as discussed in Chapter 3, are longstanding, subjective and complex. Thus, the belief that a card or biometrics-based technology and the associated regulations could be aptly used to get to the “bottom of who the Ghanaian is” is ambitious and curious. Rather, the project may be practically indulging the more comfortable task of legitimizing the citizenship of the large section of the population that already tends not to have doubts raised about their citizenship. For example, the more substantial complaints about being turned away from registration centers for not being Ghanaian, were by Fulani persons and Muslim residents in certain Zongo communities. These are the categories of persons who have had their (possible) citizenship challenged for years.

If their complaints about exclusion are valid, then presently, there are likely to be Fulani persons, Muslim residents in Zongo communities, and persons dwelling in border communities who could not access the Ghanacard, although they may be entitled to it. Worse, considering the fact that

these same groups generally have been politically tied to the NDC party, the citizenship contention has assumed political coloration and has become more sensitive. With such dynamics, the likelihood of a change in government leading to changes in Ghanacard registration regulations exists; this further destabilizes the boundaries of citizenship, and the project's ability in resolving the challenge.

Further, the contentions about citizenship have been deepened by registration regulations that barred the voter's ID as proof of citizenship (although it has for decades been the most accessible national ID), and also required enrollees to show a digital address (in a country where internet access and digital literacy is not equitably distributed). Consequently, the traditional polemics relating to citizenship have been expanded by project-related regulations, and consequently heighten the exclusionary potential of the Ghanacard. This exclusionary potential is worsened by implementation challenges tied to factors such as inter-agency turf wars, poor funding, partisanship, and mundane queues and tech malfunction.

Positively, efforts by the Ghanaian government and the National Identification Authority such as making the card free; allowing certain category of persons to vouch for the citizenship of enrollees without the required proof of identity; and deploying a team to generate digital addresses for homes across the country, have made the Ghanacard more accessible. Yet, such inclusive efforts are poorly matched by the rhetoric of major state and government agents who brazenly warn that citizens without the Ghanacard cannot adequately partake in the national economy. In official communication, the NIA for example, cautions about how non-registration could "make life difficult" for citizens, and get citizens "excluded from the formal economy." The uses of the Ghanacard, as presently mandated by law, mean participation in almost every major facet of national socio-economic life by law, can/will be tied to having the card. In effect, the inclusiveness agenda is really about the possession of the Ghanacard, and not simultaneously about safeguarding the citizenship rights of non-possessors. There is the real possibility that in the operations of the state and other private and public actors, the Ghanacard will be equated to citizenship, thereby undermining or even erasing the possibility and experience of citizenship outside of the Ghanacard. But, should the requirement that 'a citizen must have the card' be interpreted as 'citizenship is based on having the card'?

Another noteworthy dimension of the Ghanacard project is the significant involvement of international actors in providing thought leadership, funding and technology. The World Bank's support for Ghana's national identification system proves some high-level international efforts to situate identification systems in the context of development. The principles, reports, technical assistance, funding, standards and statistics emerging from for example, the World Bank's ID4D program together must be read as an attempt to institutionalize for Global South countries, a particular way of pursuing development; where state incapacity is deemed curable by citizens' visibility or transparency to the state.

By serving as a layer of global-level institutionalization, support and accountability, such international efforts to promote citizen identification, including for example, making the provision of legal identity for all, a target under the Sustainable Development Goals, positively safeguard citizenship and its experience in Global South countries. Yet, as the long delay in the completion of, and the contestations about the Ghanacard project suggests, existing local realities and institutions could tame the realization of the idealism in the emerging global thought on national identification systems. Identification systems may not successfully, if at all, navigate contentions about identity, politics, institutional inexperience, and corruption.

Beyond the tensions between the idealism and standardization in the international promotion of citizen identification on one hand, and local contextual realities on the other, there are also questions about what such efforts mean for citizenship as they relate to development and surveillance. Is a better experience of citizenship tied to the visibility of citizens? Is the mode of access between citizens and the state being altered by centering biometrics and other digital systems that leave traces behind? Is a globally transparent citizen really what is being created? These are the questions I explore and answer in the next and the concluding chapter.

Chapter Seven

“WE WANT GHANA TO BE LIKE HEAVEN” — FINDINGS AND CONCLUSIONS ON CITIZEN IDENTIFICATION PROJECTS IN GHANA

Introduction

In my interviews, one of the most memorable responses was when a Director with the Ministry of Communications buoyantly declared; “we want Ghana to be like heaven.” This was in response to my question about the endgame for all the various citizen identification projects in Ghana. The interviewee explained that projects like the Ghanacard and policies, such as the Digital Ghana Agenda, are to ensure that everyone will be connected, and that everything will be smart. While ‘heaven’ is a hyperbole, various stakeholders captured in this study have provided similarly optimistic takes on the utility of citizen identification systems. In this final chapter, I first present the key findings from my research. Second, I discuss the implications of framing identification projects as necessary for development and highlight the influence of historical legacies and prevailing institutions. I then emphasize the utility of surveillance for development as a frame to appreciate the complexity of citizen identification systems.

Overall, while there have been intense debates about citizen identification projects in Ghana, there tends to be a broad state and non-state support for such projects on the basis that some legibility and surveillance capacity permit the state to perform its control and care responsibilities, and that could be in the interest of citizens and the private sector. I show that citizen identification projects in countries such as Ghana have not merely been framed in such a way that their surveillance utilities are pitted against the protection of personal and data privacy. There is more at stake where identification projects are promoted as necessary for improving especially the socio-economic fortunes of a country. Thus, while various actors frame surveillance for development almost as some fact, I still approach surveillance for development as a question, because the positive implications of citizen identification projects for societal wellbeing cannot be assured and neither can we assume that the claimed development even if it arrives, will be inclusive.

Summary of findings

It is puzzling that despite the growing notoriety of surveillance technologies, citizen identification systems with a surveillance-orientation are being promoted in/to Global South countries. In understanding this puzzle, I first noted the growing place of development as a justification for surveillance systems. It was thus important to understand how development is articulated as a justification for surveillance systems, by which actors and what the debates signify. I was also interested in the critiques of these surveillance systems and what they say about the development narrative and about surveillance. The history of identification systems in Ghana also provided context for why citizen identification projects were deemed necessary in the first place, and how certain themes, especially citizenship contestations are offshoots of history. Overall, the debates about citizen identification systems in Ghana reflect articulations and understandings of citizenship as a status, citizenship as an experience, state performance, state transformation, the enduring influence of institutional legacies, and the influence of international actors. The aforesaid themes are reflected in the findings I discuss next.

General consensus on the need for identification systems

Overall, state and non-state stakeholders are supportive of the three citizen identification projects, and generally agree on their necessity and utility. The justifications for these projects across actors and projects include how they can promote a stronger economy; enhance personal and national security; safeguard citizenship; and also, legal compliance. In effect, even non-state actors generally agree with the viability of some form of surveillance for care or for good. Thus, citizens regard some form of visibility or legibility to the state as necessary and useful. The non-state actor support for surveillance-oriented projects is a reminder of Eric Stoddart's (2014) (in)visibility concept which argues that individuals and groups could exercise some agency in being visible or not to a surveillance system.

I have argued elsewhere that the agency of the surveilled is also shaped by and within power structures, and even in this study, statist legislation is one such overarching power structure as it suddenly makes surveillance legal and resistance to it illegal (Oduro-Marfo, 2018). Such non-state support for surveillance-oriented projects is curious considering the evidence of, and the persistent concerns raised particularly in Global North countries about adverse implications of arbitrary

surveillance practices by the state and its allies. Moreover, it is not as if these concerns about arbitrary state surveillance are lost in the Ghanaian debates. Yet, there are even instances where civil society and media actors press state actors to fully implement surveillance-oriented projects. An example is the Consumer Advocacy Centre's lawsuit against the National Communications Authority; and the MNOs asking for a rigorous implementation of the SIM registration regulations and the prevention of SIM pre-registration.

Keith Breckenridge (2010: 646-647), in his study on the initial national identification system executed by Sagem, similarly found an "optimistic interest in registration" on the part of citizens, in addition to the "warm consensus" among the political elite. Such broad support is also consistent with findings in other studies in Global South countries including those on India's Aadhaar system by Tomar et al., (2018), and Sharma and Sharma (2014). The said multi-actor consensus results from the belief that the Global South state is underperforming in its care functions because society is not legible to the state enough. Situating this belief in the context of (inter)national development then means that societal and citizen illegibility is increasingly becoming a go-to reason for development challenges. Thus, on the one hand, citizen identification projects backed and framed by state actors remedy society's illegibility and the other hand, non-state actors support these same projects and hope that surveillance can help remedy the state's poor performance in the context of leading development, to the benefit of citizens.

The dominance of economic development logics

Economic rationales dominate arguments supporting citizen identification systems in Ghana with emphasis on how these projects are needed for economic progress. State actors stress utilities such as tax extraction, savings from efficient resource allocation and distribution, eliminating compensation for ghost names, less costly loans and financial inclusion. For example, the personal identification number for the Ghanacard is now replacing the tax identification number as an easy way to expand the tax net; and as the Ghanacard is tied to digital addresses, tracking tax payers in theory, may be less difficult. Overall, the economic rationales are tied to the affordances of digital tools and how they can particularly help the state to do things it could not otherwise do or has not done in the past.

The Ghanaian case exemplifies what I call ‘statist identification capitalism’ which sees the state as a key player not only in terms of law-making but also as a major entrepreneur when it comes to identification systems. While Lyon (2009) situates the state as a key part of the card cartel triad, he does not highlight the entrepreneurial interest of the state in identification projects. The profit-seeking involvement of the Ghanaian state is evident in especially the Ghanacard and NDPAS projects. For the Ghanacard, a driving objective has been how the National Identification Authority by collecting and collating data on citizens can become a revenue agent for the state. The NIA plans to charge licensing and user fees from corporations that use the national registry for ID verification and authentication. Also, the NIA charges a fee of \$120 for the non-citizen Ghanacard, and \$60 for annual renewal, and has also designed packages including enrolling people in their homes at a fee.

For the NDPAS, the state-owned Ghana Post seeks to draw on the digital addressing system to revamp its business. Already, various Ghana Post and state officials have publicly suggested that the package delivery business of Ghana Post has improved upon the adoption of the digital address system. Also, Ghana Post’s original plan was to charge individuals about \$15 dollars and businesses \$30 for an address plate. Thus, there is a very entrepreneurial approach by the state to citizen identification projects in Ghana. In this context, the state sees resolving citizen/societal ‘invisibility’ not only as helping improve planning and taxation, but also as a business opportunity in itself. This aspect means Lyon’s (2009) framing of the state as a host and enabler of identification systems is not enough as in Ghana, the state tends to be an active participant in the capital accumulation enabled by surveillance systems.

My notion of statist identification capitalism is close but different from Kavita Dattani’s (2019) ‘goventrepreneurism’ and Hicks’ (2020) digital ID capitalism. In discussing India Stack, the state-backed application programming interface built on top of the Aadhaar system, Dattani operationalizes ‘goventrepreneurism’ to explain how the “Indian state’s adoption of a business-like model for its governmental functions, in sourcing information technology into the state itself” (2019:6) centers partnerships with certain corporate actors and creates wealth for the latter. Hicks’ (2020) with her digital ID capitalism idea makes a similar argument as Dattani and stresses that the very data that surveillance capitalism depends on in the case of countries like India are being

first collected by the state. My notion of statist identification capitalism agrees with Dattani and Hicks', but it is more about the profit-seeking or at least, revenue-seeking tendencies of the state itself and not just as an agent of or enabler for the private sector. As Hicks (2020) argues, it is important to appreciate the role of the state in ID capitalism as different from the surveillance capitalism argued by Zuboff (2018) which focuses on how private sector actors commodify personal data for profiling and marketing.

Furthermore, non-state actors also accept the various economic rationales argued by the state. For instance, both international and local tech companies approach these projects as a business opportunity. For local firms, citizen identification projects are also an opportunity to prove their competence to the 'procuring' state, as they have to compete with international firms that tend to have better resources, networks and experience. In effect, every new contract for the local firm is approached as some form of audition by the local firm with the belief that a good performance is what will bring them future contracts. Thus, it is laudable that local technology firms play a central role in the identification projects I studied. As various actors argue, this is a way of keeping capital and profits within Ghana and also an opportunity to develop local business competence.

Other justifications such as security also tend to be linked to the economy. For example, the SIM registration exercise is marketed as eventually increasing state and corporate revenues by helping clamp down on SIM box fraud and mobile money fraud. It is in this sense that citizen identification projects are justified as useful 'know-your-customer' and 'customer due diligence' tools that help protect the integrity of national and international financial architecture and systems. Beyond fraud, KYC and CDD have been centered as tools for fighting money laundering and the financing of terrorism. In the Global South, such focus on economic rationales in promoting citizen identification projects is similarly seen for example, in Nigeria⁹³ and India⁹⁴. In the words of Breckenridge (2010: 642), "Biometric identification is following the money." Thus, identification systems in countries such as Ghana are not just about identifying citizens but also doing so in such a way that databases are useful for the security of global economic regimes and infrastructure.

⁹³ <https://www.nimc.gov.ng/faqs/>

⁹⁴ <https://uidai.gov.in/my-aadhaar/about-your-aadhaar.html>

Identification as an International Development site

At the heart of the efforts to frame identification systems as development sites is the idea that development is tied to state capacity and performance. State capacity and performance are in turn tied to the idea that the state must be able to know and see citizens and non-citizens in its territory in order to plan development and extract the resources needed for development. As I find in my research, both local actors in the Global South and international development actors are constructing and framing citizen identification systems in the foregoing sense. The increasing investments in biometric and digital identification systems by Global South states speak to the power of development ideas and international development institutions. A narrative is being constructed that biometric and digital identification systems matter for development and that it is what states that seek development must do.

The tying of surveillance to development is seen in the nature of institutions that surround citizen identification projects. First is the type of actors typically involved in these projects including the World Bank, UNDP, USAID and the ITU. These actors are already situated as international development partners. Second, is the promotion of the development implications of citizen identification projects by the said actors. For instance, Target 16.9 of the Sustainable Development Goals elevates the need for all citizens to have a legal identity by 2030, which in effect means an acceptance of the idea that a person's identity as a person may not be enough in accessing public and private goods. After the SDG targets were set by the Inter-agency and Expert Group on SDG Indicators, the World Bank's ID4D program is investing in thought leadership, technical support, measurement metrics and statistics to promote the value of citizen identification systems to development in Global South countries to center, and reify citizen identification as a sine qua non for development.

The construction of citizen identification systems as sites for development is further strengthened by global standardization practices, and quantification. David Lyon (2009) notes software/technical standardization of identification systems as the third pillar of his card cartel theory and stresses the pursuit of global interoperability as the objective of the standardization efforts. In Ghana's case, the National ID project was significantly revised to ensure global interoperability — as encouraged by the World Bank and ECOWAS. Such standardization

invariably means an approach that makes Global South citizens not only visible or legible to their state but also to a transnational set of actors which could mean a higher risk of adverse profiling and targeting for Global South citizens.

On the role of quantification, identification related statistics are being generated and promoted as part of development metrics by various international development bodies. Statistics provided by the ID4D including results and trends from the FINDEX survey quantify and objectify identification institutions in the Global South in order to prove an identification gap that is then tied to development levels. As Buchanan and Byers (2018) have argued about international development, “what gets measured gets done.” Thus, while Global South states may claim to be undertaking citizen identification projects on their own volition, the influence of the idea that an identification gap is not good for development must not be discounted, likewise the growing financial and technical support being dedicated to remedying the said gap.

Contestations in favor of citizenship and privacy rights, and against corruption

Despite the general support for the citizen identification projects in Ghana, concerns have been raised by various actors including parliamentarians, and by civil society actors and the media through op-eds, social media, press statements and the courts. The opposition has rarely been about the necessity of the projects and mostly about how the nature of their implementation could undermine citizenship rights, deepen arbitrary surveillance and infringe on data/personal privacy, as well as how these projects become sites for corrupt government practices.

For instance, the initial move by the state to institute SIM registration without a data protection law in place was questioned. There were also questions especially by CSO actors about other telecom appendages such as the Common Monitoring Platform as well as the (withdrawn) Interception of Postal Packets and Telecommunication Messages bill. Critics argued that the CMP and IPPTM, when combined with personal data from SIM registration, could provide state and corporate actors with resources for granular surveillance of citizens.

There have also been concerns about where and how the data of citizens from the SIM registration, NDPAS, and the Ghanacard projects would be stored. Civil society actors raised concerns based

on suspicions that data from the NDPAS project was being stored on Amazon's cloud platforms and that a German firm, Dermalog had access to the Ghanacard data. As Bennett (2008: xi) notes, while the meaning of privacy is shaped by culture and history, "it is still the concept around which challenges to excessive surveillance get framed." However, Bennett was focusing on advanced industrial states. While privacy concerns have been raised in Ghana, the debates about citizen identification projects in Global South countries prove that there is a lot more at stake than the threat to privacy.

In terms of citizenship rights, the leading arguments have tended to be about how these projects could be exclusionary. For example, the decision to make the digital address a requirement for accessing the Ghanacard has been deemed by CSOs as exclusionary, as many Ghanaians may not have access to a digital address. Such access challenges could result from not having a smartphone, internet, or digital literacy. This concern is the basis of a court case against the state brought by an individual citizen. Similarly, there have been concerns about how homeless people may not practically have a digital address to register with.

The barring of the voter's ID card as proof of citizenship for Ghanacard registration has also been challenged as potentially sidelining Ghanaians who may only have the voter's ID card. Linked to this is the concern that such a decision delegitimizes the voter's ID card, a situation with potential consequences for future elections in Ghana. This particular contestation has been fronted by the leading opposition party, the NDC. The Strategic Thinkers Network Africa has taken the matter to the Supreme Court.

Concerns have also been raised by the Ghana National Association of the Deaf, as well as the Bono Region chapter of the Federation of Persons with Disability about how the Ghanacard registration process has not made adequate accommodations for the peculiar challenges of their members. The Fulani Welfare Group has also complained about how some of their members (even with proof of citizenship) are denied the Ghanacard because registration officers arbitrarily rule that these people are not citizens. Breckenridge (2010: 646) notes such practical reliance "on the temporary workers [registration officers] to make a decision about nationality." Where registration officers elect themselves as gatekeepers of citizenship, the threat of exclusion is high.

In their study of the Kenya ID ecosystem, Schoemaker, Kirk and Rutenberg (2019: 28) note the work of the Coalition on Nationality, Citizenship, Statelessness Empowerment (CONCISE) in advocating similar concerns about inclusion and citizenship rights. While state actors in Kenya have framed the National Integrated Identification System as a quest for a “single source of truth”, CSOs like Namati, Nubian Rights Forum and Haki Center have argued that the project would deepen “discrimination in the country, and further marginalize vulnerable minority groups, such as Kenyan Somali and Nubian communities” (Trivedi, 2019).

In Ghana, there have also been concerns about financial impropriety in the implementation of these citizen identification projects. These particular protestations are often partisan in orientation. For the same reason, they seem to gain more weight in the public sphere. The \$2.5 million cost of the NDPAS project was challenged by especially members of the leading opposition party, the NDC as dubious. The \$1.2 billion cost of the Ghanacard project over 10 years was also framed as dubious. Citing telecommunication surveillance projects in Kenya and Nigeria, Donovan and Martin (2014) note similar concerns about corruption. Again, such corruption concerns suggest that new technologies or not, citizen identification projects are still situated in old political economy institutions that may still undermine the success of such projects. This is then akin to a case of old wine in new bottles and suggest continuities that frames like ‘leapfrogging’ may erroneously ignore.

Overall, these concerns about privacy, citizenship rights and corruption indicate that inasmuch as non-state actors generally agree with the state on the utility of citizen identification projects, they are still alert to the dangers that these projects could pose to especially, civil liberties and political rights, and as such, push for mitigating these threats. Thus, such contestations dilute the largely economic development narrative that the citizen identification projects come with. In sum, there is a lot more at stake with citizen identification projects in Ghana as they are being designed to shape who is a citizen or not, and how citizenship can be experienced.

Governmental responsiveness to concerns

State actors in their implementation of citizen identification systems, have instituted various mechanisms to promote citizen inclusiveness. For example, SIM card registration, the generation

of digital addresses and access to the Ghanacard are all free for citizens. In this sense, nominal access fees which could have been a barrier for citizens in accessing these ID systems, is absent. When the National Communication Authority received reports that some private vendors were charging fees to register SIM cards, it immediately moved to warn such vendors and publicized the fact that registration is free. The National Identification Authority has also insisted that accessing the Ghanacard is free and cautioned registration officers who charge a fee to provide preferential treatment to some registrants. Here, it is noteworthy that the NIA is charging 250 Ghana cedis to provide premium services and such payment streams practically mean reserving a more expedient access to the Ghanacard to citizens who can pay as compared to those who cannot or will not (Citi Newsroom, September 2021).

Another positive response is seen with the digital address project. Accepting that some citizens may not be able to access the digital address app, the government worked with the Nation Builders Corps to generate addresses at no fee for homes across the country. The government is also using the Nation Builders Corps for the free tagging of homes. This is after the government's initial decision to sell the address plates. It must be noted that as at October 2021, many homes in Ghana have still not been tagged although the mass registration exercise for the Ghanacard has already been undertaken. Thus, in practice, it is likely that many citizens may have registered for the Ghanacard with inaccurate digital addresses and this could adversely affect their access to public and private services as well as the state's access to such citizens.

It is positive that state actors have shown some awareness of the long-standing challenge with accessing foundational ID documents, especially the birth certificate. This challenge (Breckenridge, 2010: 646), in addition to the fact that the most popular ID in Ghana (the voter's ID card) is barred from the Ghanacard registration process, practically frustrate attempts to prove citizenship and identity generally. However, the decision by the government to allow citizens with the required documentation to vouch for the citizenship of those who do not have, helps to mitigate the said challenge. Similarly, the decision by the NCA to allow those with the required ID cards to use their cards to register family and friends who do not have the required ID cards is useful.

Such provisions ensure that citizens are not punished for the state's inability to institute an effective birth registration system over time, or by the state's decision to 'delegitimize' the most accessible state-issued ID card in the context of Ghanacard registration. For other states in the Global South that are establishing citizen identification systems, such inclusivity efforts are worth noting. On one hand, exclusion from ID databases may mean avoiding arbitrary surveillance by the state and its allies but where citizenship rights are attached to the ID, then exclusion is dangerous. The arbitrary colonial borders across Africa, cross-border ethnic solidarities, loose borders and transhumance have meant that like Ghana, many African countries must continuously navigate the question of who a citizen is. Thus, in almost each African country there is a group whose citizenship is being contested and an associated risk of statelessness (Manby, 2015). For example, the citizenship of the Fulani people is not only challenged in Ghana, but in other African countries too (Ciavolella, 2010; Hickey, 2007). In that sense, state-led identification projects in Africa that start by fully embracing status quo conceptions of citizenship are bound to be exclusive as they will only be digitizing the existing status quo and will end up excluding certain groups from accessing citizenship rights. Such risk of reifying statelessness has for instance, been noted in the case of persons with Nubian and Somali roots who must prove citizenship in order to access Kenya's 'Huduma Namba' (Mutung'u & Rutenberg, 2020)

On data privacy concerns about the three citizen identification projects, state actors have not been unresponsive. While the SIM registration directive and the National Identification Authority Act were initially made in the absence of an explicit data protection law, the passage of the Data Protection Act in 2012 and the subsequent formation of the Data Protection Authority theoretically at least, provided some assurances about data and personal privacy in the implementation of citizen identification projects. Positively, the specific regulations guiding the SIM registration and the national identification projects also provide explicit directions on the collection, use and access of citizen data.

Again, the Interception of Postal Packets and Telecommunications Messages bill, which when combined with the SIM registration project, could have enhanced the state's surveillance capacities was withdrawn upon public protests. Likewise, social protestations about the Common Monitoring Platform system which could be dangerous when combined with SIM registration elicited

assurances from state actors that only call detail records and not content would be monitored. Also, for the NDPAS, initial concerns about the requirement of an ID card and a telephone number for the generation of a digital address led to the addition of a ‘skip’ function on the app. The skip function permits the generation of an address without registering with one’s personal information. Also, to deal with the dummy data problem, the system was re-engineered to send a verification code to the phone number of the person registering.

Despite the aforementioned ‘positive’ responses by the state to various concerns, there is still the challenge of using legislation to practically de-legitimize citizens’ concerns and resistance. On a number of occasions where the state’s directions and intended policies about various citizen identification systems were met with opposition, state actors moved to make laws to back their plans. For example, the initial SIM registration exercise in 2009 did not come with a law, and could thus not be obligatory for MNOs or for subscribers, and left room for legitimate resistance. Again, the possibility of escaping the state’s surveillance net through the sale or purchase of pre-registered SIM cards, was quickly de-legitimized through an amendment law. Also, during the COVID-19 pandemic, Executive Instrument 63 was passed to make SIM and IMEI registries obligatory, in the name of boosting state capacity during public emergencies.

Similarly, the laws governing the national identification register were hurriedly amended under the ‘certificate of urgency’ — quickly convening a parliament that was in recess — to ban the use of the voter’s ID card as proof of citizenship and to also make the digital address obligatory during Ghanacard registration. Again, the legislative instrument guiding the 2020 general elections made the Ghanacard the preferred proof of identity when enrolling to vote, and barred the use of the voter ID itself as proof of identity. This way, notwithstanding their underlying cogent reasoning, any possibility of challenging or resisting the state’s ID policies is shrunk, and pushed increasingly into the realm of illegality.

Surveillance for Development: Implications and Potentialities

The debates and practices surrounding citizen identification systems in Ghana provide useful evidence in thinking through the implications of promoting surveillance-oriented systems as necessary for development. In what follows, I discuss what it means for the Global South state and

its citizens if identification projects that are clearly surveillance systems are still promoted and embraced based on the belief that ‘it is the way to go’ if the state must perform its expected functions better, if the economy must be improved and if citizens must be better off. ‘This way to go’ could mean a free pass in building a surveillance state where narratives of progress are allowed to decenter valid critiques of, and fears about, surveillance systems.

Development decentering other critical concerns

The general consensus on the usefulness and necessity of citizen identification systems is tied to a real assessment of state performance and how this affects the experience of citizenship. For instance, when state actors argue that the Ghanacard and NDPAS projects will help them extract more tax revenues, the rationale is sourced from a real fact that the Ghanaian state has struggled with extracting tax revenues. For example, Ghana’s President recently indicated that by simply making the PIN for the Ghanacard also serve as the taxpayer identification number, the tax net is immediately increased from 3 million payers to about 15.5 million (Ansah, March 2021). Also, with the plan to make the Ghanacard PIN the social security insurance number, the number of SSNIT enrollees is boosted to 15.5 million from 4 million (ibid.). Theoretically, having a wider tax net and social insurance net should bode well both for citizens and the state.

In effect, the state’s limited ability to identify and target citizens is argued as adversely affecting its performance. It is in this context for example that certain stakeholders argue that with better identification and targeting, the traditional challenge of rolling out social welfare programs ‘en masse’ due to the state’s weak targeting capacity could be reasonably mitigated, leading to more savings for the state and a bigger pie for persons considered vulnerable. Similarly, when citizens take state institutions and the MNOs to court for not fully implementing the SIM registration regime, it is from a real experience of insecurity tied to the limited ability of the state’s security agencies to investigate crimes and track criminals.

Thus, the support for surveillance-oriented projects is simultaneously an unfavorable verdict by both state and non-state actors on state performance, and a quest to repair state performance. In the typical Global South state, citizen identification systems wield a surveillance utility that could viably be for care, or for good. This is more so the case where such identification systems are

frontally framed as development tools; the framing in effect is that the absence of effective identification systems reasonably hinders the state's capacity to lead development and the associated effects suffered by citizens. Eventually then, the real need for improvement in state capacity, the economy and social welfare may be so powerful and existential that they overwhelm critical perspectives such as arbitrary surveillance, global visibility of citizens, privacy breaches and adverse social sorting.

Then the surveillance state may be more easily built

Despite the state's attempts to foster inclusivity as well as privacy rights in these citizen identification projects, the reality is that a surveillance state is being built. The three projects covered in this study are seen by state actors as major foundations for constructing a hyper legible society. In the words of Vice President Bawumia, these projects are the "unwritten rules" of national development and that the state must be able to locate citizens with precision, know who owns what phone number, and be able to distinguish among citizens using their biometrics and other details, for the state to be effective. The Ghanacard alone collects about thirty-one different data points on citizens including their digital address, fingerprints, eye color and iris scans.

State actors especially, have tied the rhetoric of progress to the idea of an integration of all citizen databases. The SIM card is tied to mobile money accounts which can in turn, be tied to bank accounts. State actors are planning to make it legally mandatory for MNOs to submit individual mobile money records to the Bank of Ghana and credit bureaus. Additionally, the Ghanacard has already been legislated as mandatory for several bureaucratic processes including opening a bank account, as well as registering a piece of land, a business, a SIM card, a voter's ID card or for a pension scheme. The PIN for the Ghanacard is now to be a citizen's tax number and social insurance number. If the state's database integration succeeds, a total surveillance of citizens and the attendant risks will become more feasible.

While such a surveillance state is being constructed, adequate alertness and responsiveness by the judiciary and civil society to effectively protect citizenship and privacy rights cannot be automatically assumed. The judiciary in Ghana has generally been the source of critical constitutional interpretations that have served to protect the integrity of the country's democracy

and safeguard citizens' rights in the country's Fourth Republic. For example, in favor of inclusiveness, the Supreme Court ruled that voters without photo ID but holding a thumb-printed ID could still vote in the 2000 General Elections (Fobih, 2008: 184). In favor of database accuracy and the sanctity of democracy, the Supreme Court also prioritized the protection of citizen rights and democracy when it ruled that the NHIS card cannot be used in registering for a voter's ID card as foreigners could legally access the former.

However, in the context of the three identification systems covered in this study, the courts have been rather hesitant and unambitious. For instance, a High Court threw out Lawyer Kwarteng Arthur's case on whether digital addresses could be required for accessing the Ghanacard, reasoning that the complainant could not prove discrimination against him as no other person without a digital address had been registered. While the court also advised the case be taken to the Supreme Court instead, its verdict was rather disingenuous as it missed an opportunity to sustain a conversation on whether one's citizenship rights could be subsequent to possessing a digital address. Also, STRANEK's suit challenging the NIA's decision to not accept the voter's ID as proof of citizenship, has not yet been heard according to STRANEK. Where the court's thorough indulgence of such ID-related contestations cannot be assured, the state may have a field day in expanding its surveillance capacities. Positively, a High Court has recently ruled against provisions in E.I. 63 calling for SIM and IMEI databases on the basis that they threaten privacy rights. Yet, the Ministry of Communications immediately followed the ruling with an announcement of a SIM re-registration exercise beginning in October 2021. While there is no prior law obliging MNOs to have IMEI databases, the LI 2111, SIM Registration Regulations backs SIM registration and it will be critical to know whether the recent High Court ruling applies also to LI 2111 or only to the E.I. 63.

Moreover, there is also a challenge with the nature of anti-surveillance advocacy in Ghana. Anti-surveillance advocacy in Ghana is led by un-dedicated or non-specialist actors such as generalist CSOs and political parties. Consequently, the advocacy tends to be rarely sustained, hardly inter-linked and with a lot of focus on issues of financial misappropriation. As a result, there is often a fleeting character to anti-surveillance advocacy in Ghana. Such a 'flavor of the month' approach may hardly be as successful as consistent vigilance as it does not allow a continuous interest in,

and monitoring of the state's daily surveillance activities and their nuances. Again, possibly because advocates tend to be generalist, subtle but critical data protection issues rarely attract their interest. For example, there is still no explicit and publicly available privacy policy for the GhanaPost GPS app. The GhanaPost GPS app seeks certain permissions such as access to precise and approximate locations, reading/modifying/deleting contents of SD card, and viewing WIFI connections. However, there are hardly any challenges to these very invasive permissions. Also, while the initial and later botched phase of the Ghanacard project reportedly collected data on 15 million people, civil society actors have hardly asked questions about what the NIA did with that data.

On the other hand, the corruption-focused contestations (often led by partisan interests) tend to generate heated discourses on the excesses of citizen identification systems but are framed mostly for political points and for smearing the incumbent government. Partisans naturally move on to the next big scandal. This then limits the breadth and stickiness of such protestations. Importantly, the corruption allegations may also register with the public as mere political propaganda; they may undermine the credibility of such concerns and others that are not corruption-related, and likely to eventually permit even dangerous surveillance tools to stand. Admittedly, while the corruption allegations may marginalize other pertinent issues of data protection and exclusion, these allegations tend to lead to governmental transparency. Frank Pasquale's *Black Box Society* (2015) discusses the grave challenge with the opaqueness of surveillance projects and systems. In places like Ghana where the Right to Information architecture is not entrenched, states take advantage to obfuscate information about the specific workings, actors and funding for various government projects. In this context, it is useful that corruption allegations could eventually make the black box surrounding citizen identification projects more transparent. In the case of the NDPAS and the Ghanacard projects, for example, some of the most detailed information was provided by state and corporate actors when distancing themselves from corruption allegations.

Overall, there is more anti-surveillance advocacy than privacy advocacy in Ghana. Bennett (2008: 200) finds that in Western countries, privacy advocacy involves "a diverse, open-ended, and fluid range of groups and individuals" including those "established to promote freedom in cyberspace to more specialized groups involved with single issues." In Ghana's context, the anti-surveillance

advocacy is characterized by the generalist nature of actors, the general absence of a privacy-centered advocacy group or a group that has privacy as one of their core areas, the episodic approach to contestations, the utility of the corruption frame, and the lead role of political parties. Here, there is a real case to be made for a study on anti-surveillance advocacy in Global South countries, especially in terms of how these advocates navigate their peculiar cultural and political contexts. Notwithstanding such contextual socio-political differences, in the absence of a mature, dedicated and competent privacy and inclusion levers of accountability, the Global South state may have an easier route in installing surveillance systems. Even for Global North countries, Bennett (2008) has argued that it may take a ‘privacy Chernobyl’, a major privacy infringement scandal, to induce stronger protestations against state surveillance.⁹⁵ More so in the Global South, it is still necessary that the right anti-surveillance institutions exist to even identify, frame and take advantage of such a scandal. Even still, where such surveillance scandals are tied to citizen identification systems that are rationalized on the basis of development, it is curious the extent to which activism can change the surveillance foundations once the latter have been institutionalized and citizens may be sold on these projects.

Metis over techne?

Over time, the state’s implementation of various citizen identification projects in Ghana has been hardly successful. The Ghanacard project is now nearing completion although the first mass registration exercise started in 2010. SIM registration since 2009/2010 has been plagued by non-registration and the sale of pre-registered SIM cards leading to a few national re-registration exercises over time, with another registration exercise scheduled for the last quarter of 2021. Also, citizens’ uptake of the NDPAS cannot be assumed. When I was in Ghana for this study, my visitors typically asked me to generate and forward the GPS of my location using WhatsApp and not the NDPAS. Taxi operators used the maps that came with ride-hailing apps like Uber and Bolt and not the NDPAS. In practice, while the state had expended resources on a digital addressing system, citizens had ignored it or at least, not yet taken to it. Certain persons even admitted to me that in registering for the Ghanacard they had used a digital address that was not generated at their homes.

⁹⁵ The subsequent implications of Edward Snowden’s revelations in 2013 for privacy advocacy exemplified the power of such a privacy breach disaster.

Such persons just needed an address to satisfy the state in order to get their Ghanacard. Such project implementation challenges point to the limits of technological solutionism.

It is curious that despite the general consensus about the utility of these projects, the cross-actor support for these projects, a determined state and the availability of the required technologies, the Ghanaian state has struggled to succeed with the citizen identification projects it commenced in the last decade and a half. In explaining this gap, I argue akin to James C. Scott (1998), that technological tools in themselves may not successfully circumvent congealed social complexities and subjectivities. In Ghana, I see the stickiness of metis and the related challenges of techne in two areas: citizenship contestations, and the nature of prevailing state institutions and agencies.

First, the difficulties with citizen identification systems in Ghana can be traced to the unsettled question of citizenship. As Breckenridge (2010: 646) notes, a problem that “bedevils almost all African states’ efforts to draw a boundary line around their population” relates to having “a workable test of citizenship in the context of boundaries and centuries of migration.” The unsettled question of citizenship in Ghana can be traced to certain factors, mostly discussed in Chapter 3, including the arbitrary colonial borders; inconsistent post-independence immigration regimes; and the general absence of effective citizen identification systems over time. I discuss these three factors briefly.

The arbitrary borders imposed on African states during the colonial era ensured that people belonging to the same cultural groups were split across different countries. Practically, the ‘legal’ boundaries did not quench the cultural affiliations across borders. Neither did the ‘legal state’ eliminate the bonds of nationhood across borders. In this sense, people living in border areas in Ghana have remained fluid in their everyday livelihoods and conception of belongingness while statist definitions of citizenship have tended to be stagnant. Thus, there are several people who see themselves as Ghanaians even if the statist conception of citizenship may not back their claims. Unsurprisingly, major contestations about citizenship in the Ghanacard project tend to be situated in the context of borders. The Fulani case raised in Chapter 6 is an example of how the statist conception of citizenship struggles with a group of people who are traditionally nomadic. The state’s caveats on the voter ID card as proof of citizenship, and even its decisions relating to the

personnel of the Births and Deaths Registry have all been mostly contested in the context of the Volta Region which fluidly borders Togo. Over the last three decades, the historical contentions about citizenship have been deepened as the two largest political parties have been de facto tied to various regions and ethnicities. Thus, efforts to identify citizens are immediately framed as efforts by an incumbent government to strengthen its base by making it easier or more difficult for members of certain groups not to enroll.

Secondly, the immediate post-independent immigration policies in Ghana worsened the citizenship challenge. Governments of that era were more interested in identifying foreigners than documenting citizens. The foreigners that could escape the state's sorting efforts were possibly slipping into citizenship. It was only from 1972/3, under the Acheampong government, that there was a more explicit attempt to focus on identifying and documenting citizens; and in effect, build the required institutions. Also, the 'identification' of foreigners was often an 'othering' move that came with threats of economic barriers and deportation. These threats are still present in debates and practices relating to ID systems in Ghana and get some foreigners to attempt circumventing the state's identification regimes. An example is President Akufo-Addo's argument (in Chapter 6) that Ghana's NHIS scheme is attractive to foreigners and pushes the latter to register as citizens.

Ghana has a more stable economy and socio-politics compared to most of its West African neighbors. In addition, Ghana does not only provide highly subsidized healthcare for citizens, but also free basic and secondary school education; free meals and textbooks for public basic schools; and subsidized public university education. In this context, Ghanaian citizenship may be rather appealing to people from other parts of the sub-region who generally do not have access to similar utilities or as good. While Breckenridge (2010: 646) notes the problem of "large numbers of expatriates claiming dual citizenship" for Ghana, I would argue that it is not just the "expatriates" properly so-called, but also many 'lay' persons like the Nigerian who claimed: "I am a Nigerian who has been based in Ghana for a long time... I have been part of the people and I made myself part of the people, so I decided to do everything [the people do]." I surmise that the average profile of the foreigner complicating the Ghanacard process, may be one who is not necessarily in a position to let go of the benefits of Ghanaian citizenship, nor in a position to pay \$120 for a non-citizen card, or pay \$60 annually to renew it. Thus, Ghana's relative 'progress' in itself lends

credence to fears that non-citizens, stateless persons and persons living in communities that share a border with Ghana may want to claim citizenship, and this further complicates the existing contestations about citizenship as well as the matter of who benefits if identification systems actually lead to development.

The third point is about the rarity of a successful nationwide citizen documentation regime in Ghana's history. The first attempt under the Acheampong regime in 1972/3 had ended by the time the government was overthrown in 1978. Thus, there is hardly an existing institution to easily draw on for the citizen identification efforts today. The closest may be the voter registration institutions. However, voter registration is a very limited project compared to a citizenry register. Beyond a citizenry register, there is also hardly a successful nationwide addressing system that could have simply been converted into a digital address version along with their associated institutions. Thus, there is the legacy of a 'non-legacy' which makes the current citizenship identification efforts necessary but also challenges their effective implementation due to the absence of similar institutions and cultures that the state and citizens are familiar with. The Ghanacard project then becomes an attempt to resolve a complex and long-standing sociological challenge with technology and that has been challenging in Ghana.

Bennett and Lyon (2008: 17) have noted the correlation between identification projects and "the pre-existing legacies of past policies." They note the high cost of instituting a citizen identification system "de novo", and how "historical policy legacies which have produced inefficient but less intrusive systems of state surveillance... not only create customs for bureaucracies and citizens alike, but are also extremely expensive to replace." While Breckenridge (2010: 655) notes that the weak legacies of identification regimes in Ghana may undermine the present citizen identification projects, he makes the valid point that such non-legacy may also present opportunities as "the idea of leapfrogging... has a kind of power."

Indeed, by using rhetoric such as 'leapfrogging' to justify digital and biometric identification of citizens, state actors make such projects attractive by situating them as some form of shortcut that makes the pursuit of development easier and faster. While the claimed shortcut may seem adventurous and radical, it still suggests and accepts a linearity of development as traditionally

argued by modernization theorists such as Walt Rostow (1959). Practically, what state actors mean by framing biometric and digital identification of citizens as ‘leapfrogging’ is not necessarily to skip certain steps but to probably undertake them more quickly. For instance, using digital addresses from scratch instead of investing in physical addresses first. In the end, rhetoric such as leapfrogging, and also those about how Ghana is replicating what advanced countries do, serve to limit opposition to citizen identification projects by invariably framing criticisms as backward, not normal or anti-progress. Yet, as citizen identification projects keep proving in Ghana, existing institutions can hardly be leapfrogged, and can hinder any effective leapfrogging.

Another dimension of the *metis* over *techne* argument is in the influence or otherwise of prevailing identification institutions in Ghana. The influence of inter-agency partnerships on citizen identification systems has been noted by Bennett and Lyon (2008: 15) who argue that the absence of strong institutional synergy could work against “the development of multifunctional ‘smart’ identity cards.” They posit that such “cooperation will be more forthcoming in societies in which horizontal linkages are institutionalized across the bureaucratic divide.” In Chapter 6, I cited a parliamentary discussion emphasizing how functional state agencies held back on supporting the Ghanacard project. The National Health Insurance Scheme; Electoral Commission; Ministry of Finance and Economic Planning; Ministry of Gender and Social Protection; Social Security and National Insurance Trust; and the Driver and Vehicle Licensing Authority each oversee a functional database and associated identification card. Hosting identification projects and systems assure governmental agencies huge budgets and agencies make additional revenues from granting third parties access rights to databases. In effect, maintaining identification silos has assured significant resources and power for state agencies and thus hindered their overall commitment to a national identification project that has been marketed as ending ID card duplication.

Even as the Ghanacard project has gathered pace and seems to presently enjoy the political will needed for completion, the government has launched the GH Dual Card for government workers. The Ministry of Gender and Children is working with the World Bank and other international partners on the National Household Register, a project which is designed to collect similar information as the Ghanacard project. Also, the Electoral Commission got over \$75 million from the government to compile a new biometric voters’ register in 2020. In effect, resources that could

be used to support a successful national identification project, or importantly, provide other critical services and public goods to citizens are still being spent on duplicating ID projects. Eventually, the logic of the Ghanacard project as a cost-saving measure may be more rhetorical than practical as various state agencies continue to push for their own identification silos, and are only interested in rather linking their cards to the national identification system.

I also observe the implications of institutional debates on identification projects in Ghana. The depth and quality of parliamentary deliberations for example, have a lot of implications for the success or otherwise of citizen identification projects. While the parliamentary debates on the three identification projects presented some critical concerns especially on privacy, they needed more rigor and critique. For example, the Subsidiary Legislation Committee considered the proposed SIM Registration Regulations in the context of a defunct National Communications Authority Act. Parliament also passed the SIM Registration Regulations without raising the dangers in the absence of an effective ID verification regime; a challenge that has undermined the implementation of the legislation. Parliamentarians also echoed the argument that SIM registration was a normal global practice without any recourse to the fact that there is a distinction between postpaid SIM registration and SIM registration for prepaid customers, and how their logics for registration differ. For example, some countries including Mexico have repealed SIM registration for failing to live up to the popular narrative of reducing crime. Also, many countries do not have a SIM registration mandate at all for one reason or the other.⁹⁶ A more rigorous critique would not frame SIM registration as a global practice or even a marker or basis of advancement but center prevailing examples of the shortcomings and even absence of SIM registration regimes in other countries.

Again, Parliament passed the amendment of the National Identity Register Regulations under an urgency certificate. The thorough debate required on why the digital address (which was not legally mandatory) was being made a requirement for Ghanacard enrolment was in turn, basically shelved. Likewise, the provision in the said amendment to increase the data points collected on

⁹⁶ As at February 2019, Privacy International (2019) reports that these countries included: “Andorra, Bahamas, Bosnia and Herzegovina, Cabo Verde, Canada, Colombia, Comoros, Croatia, Czech Republic, Denmark, Estonia, Finland, Georgia, Hong Kong, Iceland, Ireland, Israel, Kiribati, Liechtenstein, Lithuania, Maldives, Marshall Islands, Mexico, Micronesia, Moldova, New Zealand, Nicaragua, Portugal, Romania, Slovenia, Solomon Islands, Sweden, United Kingdom, United States of America”.

citizens during Ghanacard registration to over 30, was hardly debated. In these examples, I see how the implementation challenges of the three citizenship identification projects could have been reduced by a more careful consideration of policy by parliament. Also, while it is laudable that the state is using democratic structures to legitimize intentions regarding ID systems, the nature of these democratic institutions and their workings shape what legislation passes. In a parliament where the incumbent party has a majority, and certain bills can pass with a simple majority, there could easily be a trend of the opposition having a say, and the government having its way. Eventually, partisanship, in addition to policymakers' lack of familiarity with this policy area, can undermine the possibility of deeper reflections on ID legislation. This threat must be considered especially by international development actors pushing for ID systems in Global South countries. Even the same identification system is likely to have different local effects as shaped by the nature of local institutions.

But really, a better economy for whom?

As various actors promote citizen identification systems as needed for economic development, the matter of who really gets to partake in an economic boon is an open question. The goal of financial inclusion is being dangled in front of citizens, and the NIA even plainly warns that those without the Ghanacard may suffer economic exclusion. Indeed, SIM registration, digital addressing and the Ghanacard together contribute to an economy where persons who were previously engaged in the informal economy could now engage in more formal economic activities. Mobile number interoperability means one could formally bank just by having a mobile phone. As the state reasons, digital addresses could make the tracking of loan defaulters easy, and in turn reduce the default premium on loans. This way, the credit market is alluring to most citizens.

While the financial inclusion objective is attractive, there should be real concerns about whether such inclusiveness is meant to change the economic fortunes of the vulnerable or to only extend the market and taxpayers for capitalists and the state respectively. Are these ID systems largely being used to enroll more citizens into a capitalist system marked especially by credit ratings? Already buried in the terms of agreement of MTN's mobile money product is the provision that users consent to having their transaction data forwarded to credit bureau agencies. Keeanga-Yamahatta Taylor's (2019) concept of 'predatory inclusion' pushes suspicions about what financial

inclusion means or tends to be for vulnerable persons. Mader and Sherratt (2020: 1) also warn about ‘philanthrocapitalism’, where corporate actors in the name of promoting financial inclusion, push their “financial products and services, particularly credit.” About financial inclusion, the authors observe that the “alleged pro-poor impacts generally do not materialise” and also “exacerbates inequality by creating new opportunities for financial service providers and philanthrocapitalists to accumulate capital” (ibid).

Indeed, there is a critical question about what financial inclusion will mean for those who do not have bank accounts beyond the fact that they will be banked. The answers to this question will go a long way to determine whether ‘financial inclusion’ is just about expanding capitalism or really about involving citizens in an economy where growth is equitably distributed. For example, Kenya has a fintech landscape praised for its immense growth in the last few years and for broadening financial inclusion. Yet, recent reports on Kenya indicate an influx of mobile-based micro loans and overdraft facilities with ridiculously high interest rates marked by “aggressive sales tactics, abusive debt collections, and unacceptable levels of debt stress” (Kessler, 2020). While fintech products tend to target the poor and vulnerable, many citizens are being blacklisted by the Kenyan Central Bank and barred from accessing any more credit facilities in Kenya (Kimani, 2020).

Another dimension of the ‘who benefits’ question relates to corruption concerns. Concerns about financial misappropriation relating to Ghana’s identification projects suggest that even where the technologies underpinning identification systems may be considered novel, the political economy that surrounds their deployment is longstanding. Like others, citizen identification projects may also be subjected to procurement politics that end up favoring a few elites and their corporate allies. The capitalism surrounding identification systems in Ghana is also enmeshed in local politics. Thus, this is not a pure conversation about science, technology and capital but an interaction that is mediated by socio-political forces. Procurement politics is one such mediating factor and could allow local power brokers to engineer project financing to benefit them as individuals or a group and in turn, increase project cost for the state and citizens. This is also noted by David Lyon in his theorizing of the card cartel. According to Vokacom, their initial decision to partner with a foreign firm to bid for the NDPAS contract was not successful because the latter felt Vokacom would not

be able to influence the local politicians leading the tender process. Of course, Vokacom itself sought the said partnership with the foreign firm suspecting how favorable it could be for their bid.

Also, I am intrigued about whether the increasing revenues and profits associated with identification projects will go to local or international firms. In theorizing the card cartel, Lyon (2009) explains that modern-day citizen identification projects can hardly be undertaken by the state alone. Often, these projects see the participation of both state and corporate actors, as well as software/technical standards. In Ghana's case, it is encouraging to see that the private partners for both the Ghanacard and the NDPAS projects are local companies. The resort to local vendors ensures that the capital and technical surpluses that arise from citizen identification projects are reasonably retained in the local economy. Despite the aforesaid central role of local firms, citizen identification systems tend to rely on foreign firms and their technologies. The NDPAS for instance, piggybacks on existing digital mapping systems belonging to international firms such as Google and Microsoft. The Ghanacard is also physically and technically an amalgamation of globally-sourced technologies. In this sense, international tech firms are effective subsidization agents for governments in the Global South that want to institute citizen identification systems. By drawing on Google Maps for the NDPAS, for example, Ghana has avoided the cost of instituting its own GPS. By initially saving NDPAS records on Amazon's cloud systems, some savings are made. By drawing on international software vendors for the Ghanacard, costly research and development investments are also circumvented.

However, these savings could also create a perpetual dependence on foreign firms and systems. Such dependence tends to be characterized by vendor lock-in situations that make it financially and technically difficult for Global South states to switch from one vendor and system to the other (Martin, 2021; van der Straaten, 2015). Thus, foreign tech firms could end up having an outsized influence on identification projects in Global South countries. Here, it is important not to only conceive of 'foreign' as Global North. As Martin (2021) points out, it could be Global South firms too, as countries like China, India, Singapore, Pakistan and Malaysia generally have stronger identification firms than most African countries. For instance, Ghana's national identification project was almost outsourced to a Chinese company at one point.

Regarding vendor lock-in, the NIA's Ghanacard contract with IMS II is for 15 years, based on the calculation that the firm should recoup its investments by then. For many other African countries undertaking citizen identification projects, the main private vendors are foreign and often from the Global North. Eventually, a substantial part of the funds for these citizen identification projects in Global South countries do not stay local. Thus, the increasing investments in identification systems, may like in many other sectors, lead to a scenario of capital accumulation by foreign entities. Thus, where biometric and digital citizen identification systems are framed as necessary for development in Global South countries, there is a subtle, at least, push for these countries to invest in such identification systems. Considering that these countries are often rated as relatively poor economies, the question of whether these complex identification systems must be prioritized must not be ignored especially where the funding may most likely end up with foreign companies.

Tied to the aforesaid concern about who wins the project contract is the issue of data sovereignty. Practically, foreign ID companies are likely to design, build and access critical personal information systems. As many Global South countries only have budding data protection laws, systems, and enforcement structures, the risk of data breaches by foreign actors and their allies cannot be discounted. Again, the stickiness of foreign technology firms leads to some 'hard-to-leapfrog' realities that potentially limits the legibility of society to the state. For example, the popularity of global telecommunication and social networking platforms such as Google, Facebook and Whatsapp means there is a natural competition that state-led projects such as the NDPAS and SIM registration must contend with in terms of citizens' buy-in and access to data. In other words, even if NDPAS and SIM registration are compulsory for citizens to access, citizens may often use Google Maps and also have a substantial part of their communications and transactions on platforms such as Whatsapp. Considering that Whatsapp, for example, is encrypted and Google and Facebook may not also readily share personal information with states, there is still a viable limitation on the extent to which the state can see society.

Conclusions: Seeing the good in a dangerous system?

The general consensus about the utility and necessity of citizen identification systems notwithstanding their potential surveillance dangers reflects an acceptance of state underperformance in its 'care' functions. In situating surveillance systems as necessary for development, the accompanying justifications suggest a verdict on state capacity, state performance and the experience of citizenship over time. The debates are not just about the identification systems in themselves; the stakes are higher. Citizens are ready to accept a better performing state, one that can assure that their citizenship, security and economic rights are assured, and their life chances are improved. If that means some state surveillance and a digitalization of the mode of contact between the state and the citizen, then citizens in Ghana are ready to accept.

However, while the development narrative and associated mantras like 'Digital Ghana Agenda', 'leapfrogging' and 'financial inclusion' are alluring, the reality is that they naturally are second order. Once these identification systems are instituted, what can immediately be assured is an enhanced surveillance capacity of the state. Van der Straaten (2020) argues for instance that, while the digital nature of citizen identification projects could immediately deepen the commodification of citizens' data and surveillance capitalism, goals like legal identity and sustainable development may still not be realized. The goal of development may be spurred by citizen identification systems, but can never be as assured as the enhanced surveillance capacity the state immediately gains. In practice, identification systems do not deliver development in themselves. Even if they did, identification systems do not in themselves assure inclusiveness. In the end, identification systems matter for state capacity and possibly citizen welfare but not more than the prevailing governance, rule of law and policy structures.

Thus, it is important that actors in Global South countries in debating, designing, and deploying citizen ID systems do not allow the development narrative to marginalize other critical discourses. While in Global North countries, similar projects tend to be more about enhancing trust as related to the use of digital tools and platforms, identification projects in countries like Ghana are designed to heavily shape citizenship as a status and as an experience. It may not matter who is a citizen by constitutional provisions, because these projects add caveats that practically redefine who gets to

actually be a citizen, and what public and private goods they can access as citizens. For instance, a Ghanaian without the Ghanacard is practically not a Ghanaian, and a Ghanaian without the Ghanacard may lose out on all utilities that are tied to the mandatory use of the Ghanacard. Moreover, in countries like Ghana, where the citizenship question is historically unresolved, citizen identification projects could easily congeal and worsen the plight of persons belonging to historically marginalized groups.

Again, the development narrative as an 'easier sell' fosters the promotion and adoption of statist surveillance structures in Global South countries. Consequently, the related insistence on global standards for various identification systems eventually leads to integrated and interoperable surveillance structures that permit the creation of the globally transparent citizen. Thus, while identification systems make the citizen visible to the Global South state, international interoperability suggests that the Global South state could effectively be a midwife delivering its citizens into a global surveillance architecture. Consequently, citizen identification projects in the Global South are not just an effort by the state to see, as argued by James C. Scott. They are simultaneously an effort to promote the global visibility of citizens.

At the base of the 'surveillance for development' frame is the idea that a Global South state that is serious about development must ideally not be the 'dark invisible patch' when global visibilities are being mapped, whether in service of free trade, the integrity of the global financial architecture, immigration or fighting crime. It is in this sense that ID systems in the Global South are being constructed with emphasis on local and international integration and interoperability. The international regimes around KYC, CDD, and biometrics exist to promote global systems that can use virtual/digital continuities to track and profile individuals and eventually navigate physical borders and local peculiarities. However, how accessible the transparent citizen will become will have much to do with the strength of data protection laws and institutions in a country. Ironically, it is typically the same countries that are deemed to need development, and are vigorously embracing surveillance-oriented identification systems that also have non-existent, nascent or weak data protection regimes.

Theoretically, conjoining surveillance and development offers scholars an opportunity to think through the implications for theory and for practice. Traditionally, James C. Scott's (1998) concepts of legibility, simplification, and high modernism have provided a useful shorthand for understanding why the state needs to see, and the dangers of solely relying on science and technology to achieve legibility. In this study, I utilized Scott's concepts as a starting point but intended to show the need to expand Scott's concepts to reflect prevailing realities in the Global South. For instance, Scott mainly chose authoritarian and communist states to exemplify his thesis. A number of studies on surveillance in Africa have followed the same case selection approach and fed the narrative that surveillance systems imposed by African states are designed to extend authoritarianism and repression. Yet, as I show in this study, Global South countries with democratic institutions may also embrace surveillance systems but not for repression. Thus, it is important to appreciate why and how this is and what it means.

A second point resulting from the first is that while Scott argued that the nature of civil society shapes what the state can do, selecting non-democratic cases meant that civil society in the countries he studied would be typically prostrate unlike in countries like Ghana where a growing democracy has meant a vibrant and active civil society and media space. This then deepens the possibility of a co-construction of surveillance regimes. A third perspective is that international development has actors and institutions that come with differences in economic, political and narrative powers. Thus, development or social change programming may not always originate from the state, but from international development actors or at least, within international development structures. In that sense, where surveillance becomes part of development thought and practice, debates about adoption of surveillance-oriented programs and their nature are not only between the Global South state and civil society but also influenced by powerful international actors including corporations.

The fourth angle is that the nature of legibility enabled by digital and biometric systems is very different from those from the physical mapping studied by Scott. While Scott cannot be criticized for not foretelling digital surveillance, it is still important to appreciate that digital and biometric surveillance systems basically mean that physical proximity may not matter much and the state can still track citizens wherever they are. Importantly, the state can have the capacity to combine

digital footprints to profile and construct multiple and varying versions of each citizen across state institutions. Thus, importantly, the identification systems being constructed in countries like Ghana could eventually mean different versions of each citizen in the eyes of the state depending on which agencies are combining which datasets about a person, and which agencies are drawing inferences from those datasets. Also, integrated and interoperable systems mean it is not necessarily only the state that is seeing, but international and transnational systems and actors could too. It is based on these realities that I propose the surveillance for development frame for appreciating what it means when surveillance-oriented systems are framed as necessary for development in Global South countries.

Fortunately, some recent publications are centering the concepts of surveillance and development. Hossein and Nyst (2013) have been explicit about how international development and humanitarian aid programming could deepen surveillance in beneficiary countries. Martins (2021) is drawing attention to how a pandemic crisis like COVID-19 also serves as further basis by international development actors to promote surveillance-oriented systems. Schoemaker and Kirk (2019) have designed a mapping tool that can be used to map the relationship between political actors, corporate actors and identification systems. Van der Straaten (2020) is arguing that digital ID systems could lead to “unsustainable development.” My suggested Surveillance for Development (S4D) frame attempts to contribute to this agenda by emphasizing that a particular approach to development is being promoted in which the Global South must ‘see’ in a particular way in order to lead development. As a result, Global South countries are not only dealing with a binary of surveillance or privacy; or surveillance or insecurity. There is a lot more at stake including the determination and experience of citizenship, and a reconstitution of the state and the state-citizen contact.

My S4D frame is intended to inform our thinking on what tying surveillance to development means, and to signal (potential) implications and continuities that should complicate the analysis of citizen identification systems in the Global South. The frame must first be read with a question mark (S4D?) in order to first, not be understood as an emphatic and non-qualified support for surveillance systems, and second, be rather interpreted as centering the Janus-faced and contentious nature of surveillance. Also, S4D offers a semantic shift that highlights the real

surveillance orientation of systems that are non-controversially branded as identification systems. Third, S4D is peculiar to Global South countries as they historically are the countries that must contend with development as an objective, and be acted upon by international development as a construct and industry. It is rare to see surveillance projects in a Global North country branded as ‘for development’. Promoting surveillance tools in development thought and practice means that Global South states that tend to rely on development aid may be more amenable to accepting such tools. Additionally, the creation and centering of ID-related metrics in development reports and assessments further promote identification systems as a development indicator for Global South states. Fourth, the transnational integration and interoperability of citizen identification systems means the enrolled citizens may not just be transparent to the state but also be globally or transnationally visible. Fifth and importantly, the development objective is so existential in Global South countries that despite fears of statist and corporatist abuse of enhanced surveillance powers, citizen identification systems are likely to enjoy both state, non-state, local and international support. Who gets surveilled could actually determine who gets to be deemed a citizen, and how ideal the citizenship experience can be.

Really, it should not be normal, for example, that the registration of SIM cards would assume the high importance of shaping the experience of citizenship, but that is the reality once SIM registration, or an ID card or a digital address for that matter, is framed as necessary for development. Due to the increasing national and international interoperability and integration of identification systems, it is increasingly self-undermining for citizens to avoid enrolment or to enroll with inaccurate data as some form of resistance, or in service of privacy. Curiously, while biometric and digital citizen identification systems are being promoted as necessary for development, it is actually rare to find a Global North country — typically presented as models of development — that actually needed citizens’ biometrics and digital tracks in order to develop. These tools may help with development through the societal legibility they engender and the resulting enhancement of state capacity but there are contextual, institutional and historical realities that they cannot help a Global South state “leapfrog.”

Ultimately, once surveillance-oriented systems are promoted as necessary for development, development and surveillance scholars should be interested in how this narrative is being gradually

centered in, and backed by international and domestic development institutions, and how financing, statistics and technical support are being used to push the narrative. Also, development scholars must wonder whether beyond the new technologies, there are really different dynamics at play in terms of who has the first mover advantage in terms of technology and capital between the Global North and Global South and in turn, who is winning the increasing number of contracts within the space and who eventually pays for these contracts. For indeed, if identification systems are only going to increase in the Global South, then a massive economy is being built around it and it is important that capital and skill surpluses stay in the Global South this time around. Development scholars must also appreciate that digital and biometric systems mean, as Breckenridge notes, the emergence of the 'biometric state' in the Global South. On the other hand, these surveillance systems make possible the creation of different versions of one citizen. Thus, we must be curious whether the biometric state seeing and leading citizens who can each be multiple and fluid is what the Global South needs for economic advancement.

For surveillance studies scholars, studying the connections between development and surveillance in the Global South should lead to what Hong (2017) calls creative critiques of surveillance beyond privacy and humanism. There is some value to having a state that sees, and non-state actors in Ghana agree with the state and its international development partners that the state is underperforming because society is not legible enough. Yet, what can be assured with the ongoing citizen identification projects is an increase in the state's surveillance capacity, and a more legible society. Whether the developmental boost as envisioned by various actors will be realized is a second order question, shaped by various contextual issues and cannot be answered with certainty. as surveillance systems are not a silver bullet for development. It is important that states and their development partners do not promote surveillance systems in a de-contextualized manner without regard for the relevant maturity, and competence of civil society and the media, as well as economic and political institutions in the Global South, lest citizens are left with more statist control and less statist care.

Overall, as shown in the Ghanaian case, the care and control debate in surveillance studies must not assume any false dichotomies, the idea of a care-control spectrum as offered by Lyon is useful as some level of surveillance is necessary for promoting the wellbeing of citizens and society.

When I situate the development argument closer to the care spectrum, I conclude that what is being articulated in the Global South is about remedying traditional state underperformance, recognition of citizenship, improvement in the experience of citizenship, and shielding local business interest. Thus, the very notion of care must be understood as being beyond the manifest function of a surveillance system in itself as a lot more is at stake.

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