

Africa, China, and the Development of Digital Infrastructure Governance: A Case Study of
Ghana and Tanzania

By
Eric Bishel

Submitted to
Central European University
School of Public Policy

In partial fulfilment for the degree of *Master of Arts in International Public Affairs*

Supervisor: *Daniel Large*

Vienna, Austria


2022

I, the undersigned Eric Bishel hereby declare that I am the sole author of this thesis. To the best of my knowledge this thesis contains no material previously published by any other person except where proper acknowledgement has been made. This thesis contains no material which has been accepted as part of the requirements of any other academic degree or non-degree program, in English or in any other language.

This is a true copy of the thesis, including final revisions.

Date: 14/06/2022

Name (printed): Eric Bishel

Signature:  _____

Abstract

The development of digital infrastructure (internet equipment, cell connectivity, surveillance systems, and e-governance practices) in Africa has been accompanied by a mix of enthusiasm for its potential to promote democracy and concern about its misuse as a tool of autocracy. China in particular has been labeled an autocracy promoter for the perceived linkage between Chinese investment and aid and the usage of digital infrastructure by African regimes for authoritarian means. Some have argued that China provides more than just infrastructure; a ‘China model’ of governance, with suppression of opposition and free speech a feature, not a bug. And yet, not every country that receives large amounts of Chinese digital infrastructure investment has seen an autocratic turn. This thesis uses a comparative case study to examine Tanzania and Ghana, two countries where China has contributed or sold large amounts of infrastructure, but who have seen different political reactions to and uses of this infrastructure. It poses the question: how do we explain the differing paths these two emerging democracies take in their political utilization of unregulated digital infrastructure investment? By analyzing elections and regulation in both countries over a period of roughly 15 years, this thesis examines the role that the timing of the introduction of digital infrastructure plays in each country’s political reaction. It argues that in Tanzania, where digital infrastructure was adopted later than Ghana, country leaders perceived the internet as a threat to their hold on power and therefore internally developed a ‘normal’ standard of behavior and governance that was much less open. Ultimately, it concludes that countries combine internal concepts with outside rhetoric, both from China and the Global North, to justify their actions internationally.

Acknowledgments

Thanks to my family, my friends, my advisor, and to those at CEU who helped me.

Table Of Contents

Abstract	iii
Acknowledgments	iv
Table Of Contents	v
Chapter I: Introduction	1
Chapter II: Literature Review	6
Digital Infrastructure and Democracy Literature	6
Africa and a Model of Democracy	8
Chapter III: Method and Case Studies	13
Methodology	13
Case 1: Ghana	14
Case 2: Tanzania	17
Chapter IV: Analysis	21
Similarities, Differences, and a Hypothesis	21
Timing	22
The Origins and Justification of a Norm	24
Chapter V: Conclusion	29
Bibliography	32

Chapter I: Introduction

The “Digital Silk Road” (DSR) stretching from Beijing to Lagos has become one of the central components of China’s global infrastructure plan, known as the Belt and Road Initiative. First articulated in a White Paper in 2015, the DSR formalizes the already extensive involvement of Chinese state-owned banks, companies, and entrepreneurs in digital infrastructure development on the African continent and beyond. Chinese President Xi Jinping stated in his keynote speech at the opening ceremony of the 8th Forum on China-Africa Cooperation (FOCAC) that China’s active involvement in building the digital infrastructure of African nations is a “win-win for mutual benefit and common development, fairness and justice, and progress with the times and openness and inclusiveness.”¹ This assertion of a potential win-win was echoed by African politicians, such as Tanzanian Prime Minister Kassim Majaliwa, who asserted that the cooperation concept and the initiatives proposed by China were compatible with Africa's needs for development.²

While many African leaders hailed the potential for digital infrastructure development, commentators and political leaders in the United States and Europe began to raise the alarm. “China and Russia want to rule the global internet,” warned *The Diplomat*, an American international affairs magazine.³ The U.S and China are in a “battle over Africa” said *Politico*, and “battle lines for the future of the internet” have been drawn, according to *Brookings*.⁴ Concerns about the spread of a Chinese authoritarian internet echoed in the halls

¹ “Full Text: Keynote Speech by Chinese President Xi Jinping at Opening Ceremony of 8th FOCAC Ministerial Conference,” accessed June 2, 2022, http://www.focac.org/eng/gdtp/202112/t20211202_10461080.htm.

² “African Leaders, Experts Hail Xi’s Remarks at Extraordinary China-Africa Summit on Solidarity against COVID-19,” accessed June 2, 2022, http://www.focac.org/eng/zftjkytbfh/202006/t20200618_7053453.htm.

³ Charles Mok, “China and Russia Want to Rule the Global Internet,” *The Diplomat*, February 22, 2022, <https://thediplomat.com/2022/02/china-and-russia-want-to-rule-the-global-internet/>.

⁴ Cobus Van Staden, “How the U.S. Can Eclipse China in the Battle over Africa,” *POLITICO*, April 22, 2021, <https://politi.co/3xgZYIT>; Cameron F. Kerry, “Battle Lines for the Future of the Internet,” *Brookings* (blog), May 11, 2022, <https://www.brookings.edu/blog/techtank/2022/05/11/battle-lines-for-the-future-of-the-internet/>.

of power from Washington to Brussels and beyond. As concerns over Chinese influence in Africa grow among policymakers, China has hit back with its own claims of continued Western imperialism on the Continent. The rhetoric of distrust has become increasingly bellicose. Western distrust is based on several assumptions: that African states are passive recipients of outside influence; that the Chinese internet model is actively being exported; that the “Western” model is intrinsically good for democracy. And, ultimately, that the US and EU need to do something to counter China; that by investment, sanctions, and leadership, the Chinese can be defeated.

These assumptions can, and should, be challenged. Existing literature has deconstructed notions of ‘Africa’ as a homogenous, passive actor with no agency, a dependent continent.⁵ A lively debate exists surrounding the content and promotion of a “China model” of internet governance, and of governance more generally. This thesis engages a central premise of this debate: there is a key difference between “China-Africa” and “Africa-China” development relationships. The relationship between Africa and China is not one-way, and African countries have a great deal of agency. But as the opening discussion demonstrates, China is not the only normative actor. The US is seen as the originator of ‘securitization discourse,’ which is used by authoritarian leaning leaders to justify policy.⁶ Reducing African agency in internet governance to a mere pawn in a new digital Cold War is unconvincing. There are broad surveys of African democratic development, and scholars have studied the correlation between internet and democracy. None of these works has fully explained the different paths that countries in Africa take toward digital infrastructure governance.

⁵ Jean-François Bayart and Stephen Ellis, “Africa in the World: A History of Extraversion,” *African Affairs* 99, no. 395 (2000): 217–67.

⁶ Jonathan Fisher and David M. Anderson, “Authoritarianism and the Securitization of Development in Africa,” *International Affairs* 91, no. 1 (January 2015): 135, <https://doi.org/10.1111/1468-2346.12190>.

This thesis offers a new approach with a novel interpretation. We begin with a comparative case study of Tanzania and Ghana. Two African nations, with similar past political histories, similar amounts of Western and Chinese digital infrastructure investment, and yet vastly different approaches to the regulation of internet access. Ghana open, free, and unregulated; Tanzania closed, controlled, and vulnerable to disruption.

This thesis asks the question: how do we explain the differing paths these two emerging democracies take in their political utilization of unregulated digital infrastructure investment? I argue that the main factor that differentiates the two countries is the timing of when digital access was initiated and implemented, which therefore meant a different perception of the role of the internet in society by the government. In Ghana, free and open internet usage norms were established because digital infrastructure was developed early, before those with authoritarian interests understood the danger this could pose. But Tanzanian leaders, who implemented reliable high speed access years later than Ghana, understood the dangers the internet posed to their continued hold on power in the hands of opposition. Thus, rhetoric and legislation concerning the internet was designed to avoid the dangers to the established power structure that unregulated access might bring. In doing so, Tanzania does not rely on any outside model to shape policy and discourse; rather, local cultural conceptions drove approaches to digital governance. International discourse by either China or the US was merely used strategically by those in power to legitimize this local model when needed on the international stage.

Before entering the literature review, a brief note on definition. This thesis makes extensive use of the term digital infrastructure, instead of communication infrastructure or internet infrastructure or information and communication technologies used by some

authors.⁷ Digital infrastructure is understood to mean the infrastructure that allows access of the population to the internet, but also that infrastructure that allows the government to monitor the population. This includes cell towers, fiber optic land and undersea cable networks, and surveillance infrastructure. Because this thesis focuses on governmental perceptions and regulation, it is important to precisely study that which the government controls; thus, the use of digital infrastructure.

Likewise, this thesis makes use of the term ‘assistance’ rather than ‘aid.’ The standard definition of aid set out by the Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD has been problematized by scholars, both in the context of the wider development system and China specifically.⁸ This thesis will argue for the use of the term ‘assistance’ when examining digital infrastructure investment. This is understood to mean both state based and private loans, investment, and contract work with the goal of improving the infrastructure of a recipient country. It contends that an expanded definition in the context of digital infrastructure allows us to take a more comprehensive view of the subtle interplay between investment, policy, infrastructure, and governance.

Finally, this thesis engages with the idea of norms. Norms define an “oughtness” or “a standard of appropriate behavior for actors with a given identity.”⁹ Agreed upon and accepted by all actors within a political system or a society, these norms thus govern behavior. There is

⁷ For an overview of this debate, see Iginio Gagliardone, *China, Africa, and the Future of the Internet* (London, UK: Zed, 2019), 3–4.

⁸ Roger C. Riddell, *Does Foreign Aid Really Work?* (Oxford: Oxford University Press, 2008); Shaquille Ifedayo Gilpin, “China, Africa and the International Aid System: A Challenge to (the Norms Underpinning) the Neoliberal World Order?,” *Journal of Asian and African Studies*, December 13, 2021, <https://doi.org/10.1177/00219096211063804>; Pippa Morgan and Yu Zheng, “Old Bottle New Wine? The Evolution of China’s Aid in Africa 1956–2014,” *Third World Quarterly* 40, no. 7 (July 3, 2019): 1283–1303, <https://doi.org/10.1080/01436597.2019.1573140>; Deborah Brautigam, *The Dragon’s Gift: The Real Story of China in Africa* (Oxford New York: Oxford University Press, 2009).

⁹ Martha Finnemore and Kathryn Sikkink, “International Norm Dynamics and Political Change,” *International Organization* 52, no. 4 (1998): 887–917.

a great deal of competition in the normative space between the West and China; China wants to be seen as a norm maker, not a taker, and the West wants to defend the primacy of the established norms.¹⁰ In their foreign policy agendas, both the West and China promote their own norms; however, the types of norms promoted and the extent to which they are adopted is a key debate in the scholarly literature. This thesis engages this debate within the context of digital infrastructure and its governance.

To summarize, this thesis begins with a review of the existing literature on internet governance norms, African agency, and democracy in Chapter II. The methodology that structures the analysis is also therein elaborated. In Chapter III, the two cases of Ghana and Tanzania are introduced, and their political systems, the funding and timeline of their digital infrastructure development, and the recent electoral history and governance of digital infrastructure are laid out. Chapter IV examines the role of timing of digital infrastructure development within the context of norm creation, and the discursive methods used to frame local action. Finally, the conclusion in Chapter V restates the findings of the thesis, and expands on this by identifying the current trends and potential future research areas.

¹⁰ Chris Alden and Daniel Large, “On Becoming a Norms Maker: Chinese Foreign Policy, Norms Evolution and the Challenges of Security in Africa,” *The China Quarterly* 221 (March 2015): 123–42, <https://doi.org/10.1017/S0305741015000028>.

Chapter II: Literature Review

This chapter begins with a discussion of the literature on digital infrastructure, as well as Western securitization and a Chinese model of internet governance. This provides a framework to understand the potential normative discourse promoted to Africa from outside actors. Then, we focus on African actors as independent agents with the goal of providing a model for understanding how African leaders conceptualize the risks of tolerance and oppression. This identifies the need for a synthesis of digital infrastructure, extraversion, and local literature on democracy, to which this thesis will contribute through the use of a comparative investigation of Ghana and Tanzania.

Digital Infrastructure and Democracy Literature

The most authoritative account of the development of digital infrastructure, the related governance, and the role of China is the appropriately titled *China, Africa, and the Future of the Internet*, by Iginio Gagliardone.¹¹ This work surveys Chinese influence on the development of the internet in Africa, along with the ways that African countries seek to use the resources and technology of China to further their own ends. His focus is on “Information and Communication Technologies (ICTs),” which centers his work around the internet, media, and journalism.¹²

The central questions of Gagliardone’s book are on the role of China in the promotion of or assistance in the creation of an authoritarian internet in Africa. He also looks at the role played by local African civil society in influencing the outcome of projects undertaken with Chinese support. These questions are motivation-focused rather than result oriented. This means he does not look for any correlation between activities and outcomes. Instead, he focuses on the techniques and tools that China and Africa are using, to determine how they

¹¹ Gagliardone, *China, Africa, and the Future of the Internet*.

¹² Gagliardone, 3–4.

will shape the Internet going forward. While the question of authoritarianism looms large, the relationship between the strength of democracy and China's role in the development of ICT goes unexplored.

Gagliardone also devotes attention to a "China model" of internet usage. He demonstrates how the internet functions in China, with the central caveat that it is difficult for scholars to agree on the precise outlines of Chinese practice. Ultimately, he remains skeptical that other countries will adopt whole cloth this model, given the cultural, societal, and political differences present in China. Other scholars are less skeptical. Willem Gravett in his 2020 article argues that China is implementing a policy tantamount to digital neo-colonialism in Africa.¹³ For him, the China model is about internet sovereignty, that a government has the absolute authority to control what takes place on the internet within its borders. This, he argues, is being actively promoted and exported to Africa, where countries with authoritarian tendencies are rapidly adopting it. Ultimately, he argues, African policymakers must interrogate their involvement with China to ensure that authoritarian practices do not come along with technology.

Gagliardone touches on an additional point; the role of the securitization discourse in African internet policy. This originates in the broader development context; an excellent overview is offered by Fisher and Anderson, who argue that the primary source of this language on security is not China, but rather the US; and yet, this kind of language is often tied with antidemocratic crackdowns.¹⁴ Samuel Woodhams pushed this analysis further into the understudied field of surveillance technology in African states.¹⁵ He utilized a descriptive approach, discussing specific instances of both Chinese and Western provision of technology

¹³ Willem Gravett, "Digital Neo-Colonialism: The Chinese Model of Internet Sovereignty in Africa," *African Human Rights Law Journal* 20, no. 1 (2020), <https://doi.org/10.17159/1996-2096/2020/v20n1a5>.

¹⁴ Fisher and Anderson, "Authoritarianism and the Securitization of Development in Africa."

¹⁵ Samuel Woodhams, "China, Africa, and the Private Surveillance Industry," *Georgetown Journal of International Affairs* 21, no. 1 (2020): 158–65, <https://doi.org/10.1353/gia.2020.0002>.

to African states. He argued that the primary reason given for these technologies to be implemented is ‘security’ and ‘safety,’ overlapping with the discourse on internet securitization presented by Fisher and Anderson. In the end, he concludes that China plays a significant and prominent role in the distribution of problematic surveillance technology, but he also points out that the West is complicit in the provision of invasive surveillance technologies as well, in the name of security and counterterrorism. This post-9/11 focus on counterterrorism has not remained exclusive to Western discourse, however. Fisher and Anderson, importantly, identify how African leaders in Chad, Ethiopia, Uganda, and Rwanda have adapted the language of security to their own internal problems and situations. Assistance to Africa, materially, and discursively, is not a simple one-way arrangement. It is important, as well, to understand the role that African countries play in using and adapting the proffered assistance.

Africa and a Model of Democracy

This understanding, that African countries and leaders play a central role in the utilization and adaptation of outside assistance, is part of a broader set of thoughts about African agency stemming from the theoretical work of Jean-François Bayart, who championed the idea of ‘extraversion’.¹⁶ Instead of a dependance theory, which states that African economic and political outcomes are caused by the influence of colonizing powers, Bayart argues that African (predominantly Sub-Saharan) countries and their leaders acted with agency in their own self-interest in ways that contributed to dependance. African leaders imported outside ideas and structures with the goal of integrating them into the local context to consolidate and maintain their regimes. This marriage of local knowledge with outside influence was a conscious attempt to use the unequal relationship that these polities had for

¹⁶ Jean-François Bayart and Jean-François Bayart, *The State in Africa: The Politics of the Belly*, 2. ed., repr. (twice) (Cambridge: Polity, 2010).

the benefit of the leadership. While Bayart was writing prior to widespread adoption of digital infrastructure in Africa, the relationship between outside assistance and local agency can be seen within that context as well. Ultimately, this agency means that to examine the actions of an African country, we must look beyond the interventions of an outside power and instead look at the ways that the leadership pursues its own goals within local conceptions of the state and society.

An excellent survey of African democracy, with a focus not on outside efforts but rather on the local conditions, is found in Nic Cheeseman's 2015 book.¹⁷ Cheeseman surveys African democracy in the postcolonial era, arguing against notions that Africa is not suited for democracy. Instead, he finds that against all odds democracy has succeeded in many cases. However, he warns against using 'African values' as a guide for political behavior, as these are too often used to excuse authoritarian action. Ultimately, a one-size-fits-all approach to democratization is impossible for Cheeseman, identifying patterns in the democratization of various states. He does not offer a comprehensive and explanatory theory, but does suggest that there is real power in targeted comparative democracy studies.

Cheeseman relies on a model of democratization that has come to be a standard in the literature and will be deployed in this thesis. This model, set out by Dahl and refined by Lindberg, describes two dimensions of democratization/autocratization in the framework of elections: the cost of oppression and the cost of toleration.¹⁸ This is best explained visually (see below).

¹⁷ Nic Cheeseman, *Democracy in Africa: Successes, Failures, and the Struggle for Political Reform*, New Approaches to African History 9 (New York: Cambridge University Press, 2015).

¹⁸ Staffan I. Lindberg, *Democratization by Elections: A New Mode of Transition* (Johns Hopkins University Press, 2009), 320.

The Two Dimensions of the Democratization Metagame

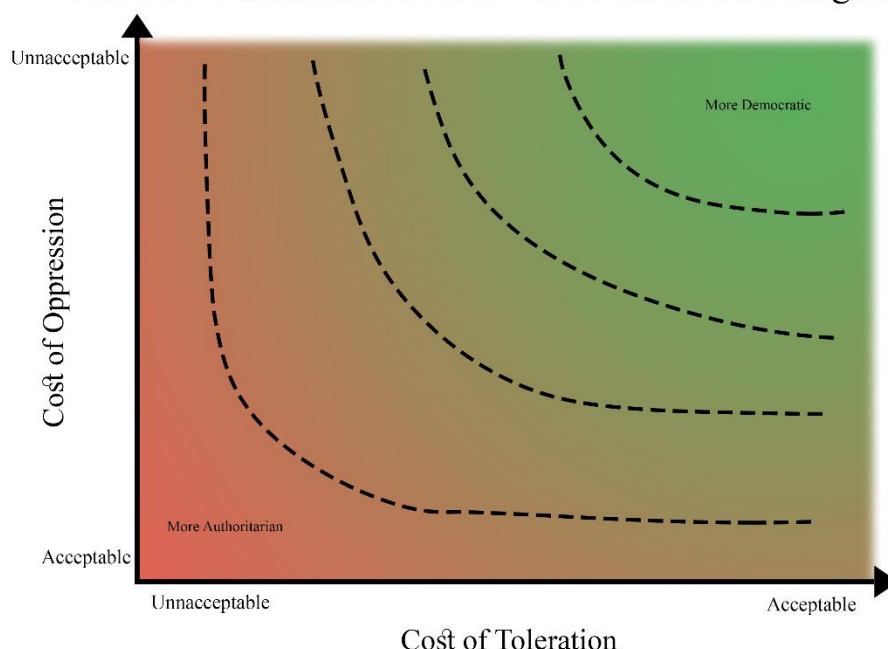


Figure 1

On the vertical axis is the Cost of Oppression; on the horizontal axis is the Cost of Toleration. If oppression is unacceptable to a regime, and toleration is acceptable, then it is/becomes a liberal democracy. Likewise, if oppression is not costly, acceptable, and toleration is very costly, unacceptable, then the regime is/becomes authoritarian. Regimes are not completely in control of these costs; outside factors influence them. Furthermore, this is entirely based on the *perception* of the regime; leaders must make decisions based on perceived cost, not real cost, because their information on the real-world cost is limited (i.e., can't know until the measure is attempted). This framework is particularly useful in moments of elections, where the potential for change exists if movement along either axis can be impacted.

All of these ideas and models will be examined in the context of a case study of Ghana and Tanzania. One important work on Ghana is Emmanuel Gyimah-Boadi's authoritative overview of the history of Ghana's political development since independence.

He covers the main eras and ends with the democratic transition. However, the account is somewhat dated, and does not include any scholarship on digital infrastructure.¹⁹ This study can be supplemented by Gagliardone's book, which has a few examples of the development of infrastructure as well as the extant culture surrounding digital infrastructure.²⁰ This, too, is limited, however, since he does not attempt to link this with models of democracy, or explain the origins of the usage norm.

Tanzania has a more robust set of literature surrounding its political history and digital infrastructure governance. Dan Paget provides an oft-cited account of the development of Tanzanian democracy before the recent backsliding. He advances the argument that the ruling party was initially comfortable with a disorganized opposition. As the opposition has gained power the leadership has imposed more stringent regulation to prevent a loss of power. Paget does not address the governance of digital infrastructure in this crackdown at any length, but instead references an article by Parks and Thompson. They examined the way that Tanzania has implemented digital infrastructure regulation, arguing that regulation was introduced over time as a type of 'regulatory creep.' This analysis is extremely useful; however, it does not explain why the introduction of this norm was not met with more pushback, nor does it explain why this was possible in Tanzania but not Ghana.

Current literature has yet to integrate together the areas covered by this review; namely, the relationship between the 'China model,' securitization discourse, and digital infrastructure governance in an explicitly African context. The case studies from Ghana and Tanzania have laid an excellent groundwork, which this thesis will build upon to offer an

¹⁹ Emmanuel Gyimah-Boadi, "Politics in Ghana Since 1957: The Quest for Freedom, National Unity, and Prosperity," *Ghana Studies* 10, no. 1 (2007): 107–43, <https://doi.org/10.1353/ghs.2007.0004>.

²⁰ Gagliardone, *China, Africa, and the Future of the Internet*.

understanding of the reason that extroversion and digital infrastructure development resulted in different outcomes in both countries.

Chapter III: Method and Case Studies

This section provides background on both countries and the method of analysis of this thesis. A comparative case study methodology is used; the first part of this chapter elaborates on the sources and reasons for choosing such a method. Then, we focus on an overview of the situation in Ghana and Tanzania: a brief political history, a look at their implementation of digital infrastructure, and finally an overview of democratic trends and digital infrastructure governance. Ultimately, commonalities and differences are parsed to expose a key element in our analysis: the importance of the timing of digital infrastructure implementation.

Methodology

Utilizing a comparative case study methodology, this thesis makes use of a diverse set of sources for both Tanzania and Ghana. The advantage of this method is that it engages the central research question while taking into account the context and wider situation for both countries. Moreover, a case study methodology provides flexibility and applicability to current, real-world events where control cannot be maintained.²¹ An explicit focus is on qualitative method as well, although several numerical sources are used as appropriate. The focus is on integrating a wider set of textual evidence into a narrative of events. An experimental methodology would be inappropriate in this thesis, as it is impossible to isolate any one variable and study its impact. A descriptive approach, like a survey or archival study, is not appropriate since the goal is to provide an explanatory framework.

Analysis is based on data and observation, combined within theoretical frameworks hypothesized by other scholars, to produce an explanation for the ultimate outcome. As these two case studies are diachronic, time series data sources were particularly valuable.

Information was sourced from EU Election Monitoring Reports, Afrobarometer survey data

²¹ Robert K. Yin, *Case Study Research: Design and Methods*, 4th ed, Applied Social Research Methods, v. 5 (Los Angeles, Calif: Sage Publications, 2009).

(2008, 2011, 2014, 2016, 2019), open-source reports and articles on Chinese infrastructure investment, and limited-scope peer reviewed studies of each country. These cover a broad spectrum of primary and secondary sources, allowing the thesis to examine the broader patterns in both countries in order to identify commonalities and differences. This synthesis reveals macro trends that are otherwise overlooked in single-case studies.

EU Election Monitoring Reports for Ghana and Tanzania make up an important component of the analysis. They provide a snapshot of the level of democracy, and correspondingly the level of control over digital infrastructure, at the most important moment for democracies: elections. Elections are moments where the democratic path of a country is celebrated or criticized. It is also a moment with the highest potential for interference. Countries may have laws that can be utilized in undemocratic ways; but it is only in their usage that they can be analyzed.

Case 1: Ghana

Summary of recent political history

Ghana became a politically unified and independent state in 1957 after centuries of colonial rule. After independence, it almost immediately fell into authoritarianism. A succession of military coups and rulers continued until the 1992 ‘democratic’ transition under the Jerry Rawlings administration. Although this transition was seen as flawed, throughout the 1990s there were democratic improvements leading up to the 1996 election, perhaps the first competitive election in the country. In 2000, the first peaceful transition of power took place between the ruling party and the opposition. Successive improvements in the quality of democracy continue.²² Yet, the system is vulnerable; in 2008, 2012, and 2016 there were serious concerns about the outcome of the elections. However, tensions were resolved and stability assured. Ghana is a two-party system, with the National Democratic Congress

²² Gyimah-Boadi, “Politics in Ghana Since 1957.”

(NDC) and the New Patriotic Party (NPP) each in power for roughly equal amounts of time since 1996.

Summary of Digital Infrastructure policies and investments

Ghana arrived comparatively early to the digital space. In 1995, the country was first connected via undersea cable to the world internet backbone, and internet adoption began to pick up in Accra as early as 2000.²³ Cell service was established even earlier, in 1992. These dates are important to keep in mind; this thesis will later show how this timing was important for governance. In terms of funding and resources, these early efforts were primarily based on technology and funding from the US and Europe. Connectivity was mostly limited to Accra, and the rest of the country saw comparatively little penetration of this technology. In 2006, the Ghanaian government began planning a massive expansion of connectivity throughout the country. Support was secured for the first time from China, with the provision of \$180 million in loans from the Chinese Exim bank.²⁴ Construction began in 2008, with Huawei as the primary implementing partner. However, European experts were also involved, and in 2012 Vodaphone took ownership of the infrastructure.²⁵ The result was a rapid improvement in the level of connectivity in Ghana. Afrobarometer survey data from 2008 shows 89% of respondents in the country never used the internet; in 2011 81%, in 2014 74%, in 2016 66%, and in 2019 it was only 54%. The improvement in internet availability meant that those with access reported using the internet daily; usage went from 1% daily to 25% between 2011 and 2019.

²³ G. Pascal Zachary, "Black Star: Ghana, Information Technology and Development in Africa," *First Monday* 9, no. 3 (March 2004), http://firstmonday.org/issues/issue9_3/zachary/index.html.

²⁴ "Ghana to Receive Support from China," *Modern Ghana*, March 23, 2006, <https://www.modernghana.com/news/97062/ghana-to-receive-support-from-china.html>.

²⁵ Tim Gigg, "Building a National Fiber Backbone in Africa," accessed May 13, 2022, <https://www.ppc-online.com/blog/building-a-national-fiber-backbone-in-africa>.

Timeline of elections and interference

Next, we can use the EU election monitoring reports for the 2008, 2016, and 2020 elections. This data allows us to observe how digital infrastructure interacted with the elections and how that same infrastructure was regulated. In 2008, the election observers did not focus on the role of the internet.²⁶ This matches up with the data on its usage; it was not until this year that construction commenced to expand access, and, therefore, the internet would not have played a prominent role in the election. Despite this lack of EU data, this same year saw the passage of the Electronic Communications Act in Ghana. This law makes it illegal to use the internet to send or distribute misinformation or false claims, without stating precisely how that will be judged or any limits on its use. This act was subsequently identified by EU election observers as dangerous, as it can be a tool for silencing dissent.²⁷ At the time, however, it was uncontroversial and was not employed for political purposes. By 2016, the EU reports included the internet alongside traditional media, but discussions point to the internet as supplementary to the existing media landscape. Access by traditional media to online platforms was limited; however, there were no limitations placed on private individuals, and no prosecutions made based on material posted online.²⁸ This trend continued into 2020, when the EU devoted an entire section of its report to internet usage and monitoring.²⁹

²⁶ European Union Election Observation Mission to Ghana, “Final Report on the Presidential and Parliamentary Elections, 2008” (European Union Election Observation, 2009), <https://ec.europa.eu/info/strategy/relations-non-eu-countries/types-relations-and-partnerships/election-observation/mission-recommendations-repository/missions/239>.

²⁷ European Union Election Observation Mission to Ghana, “EU EOM Ghana Presidential and Parliamentary Elections 7 December 2020 Final Report,” 2021, <https://ec.europa.eu/info/strategy/relations-non-eu-countries/types-relations-and-partnerships/election-observation/mission-recommendations-repository/missions/408>.

²⁸ European Union Election Observation Mission to Ghana, “EU EOM Ghana Presidential and Parliamentary Elections 2016 Final Report,” 2017, <https://ec.europa.eu/info/strategy/relations-non-eu-countries/types-relations-and-partnerships/election-observation/mission-recommendations-repository/missions/30>.

²⁹ European Union Election Observation Mission to Ghana, “EU EOM Ghana Presidential and Parliamentary Elections 7 December 2020 Final Report.”

Internet literacy has increased rapidly due to multiple NGO programs, and the recent Covid pandemic meant that internet access was an important tool for electoral campaigns. The internet saw free and open use during the election; misinformation spread, as did fact checking organizations, and political rivals used advertising and social media to promote their campaigns. The potential for issues that social media presents aside (common to all democracies), there were no limits on access, self-censorship, or onerous surveillance. This again, in spite of a law on the books that would provide an interested executive with the tools to intervene. The evidence suggests that free and open internet access represented a norm for usage in Ghana.

Case 2: Tanzania

Summary of recent political history

The state of Tanganyika gained independence from British colonial rule in 1961 and merged with state of Zanzibar in 1964 to become Tanzania. Early politics were dominated by Julius Nyerere, the first president, who engaged in a massive campaign of centralization and homogenization during his 21-year rule and developed close ties with the nascent Chinese development cooperation effort. Towards the end of his presidency, he consolidated his ruling party into the Chama Cha Mapinduzi (CCM), which continues to hold power in Tanzania. A single-party state since independence, Tanzania entered a period of liberalization in the mid-90s that was similar to Ghana. This allowed for the creation of multiple political parties and the first multi-party elections in 1995. The margin of victory for the CCM in those early elections was enormous; however, after 2005 these margins began to decrease rapidly as the main opposition party, Chama cha Demokrasia na Maendeleo or Chadema, became more organized and popular. As Chadema's popularity grew, the CCM began to resort to

increasingly repressive measures to maintain power; as such, the elections in 2015 and 2020 were seen as highly flawed by the international community.³⁰

Summary of Digital Infrastructure policies and investments

Implementation of digital infrastructure in Tanzania was much slower than in Ghana. Before 2009, internet access was only available via satellite, which severely limited bandwidth and made connection unaffordable for anyone but business customers.³¹ Internet cafes were the only feasible way for private citizens to use the internet, depressing usage numbers. Data shows that 94% of Tanzanians never used the internet in 2008, and only .4% of those surveyed used it daily. The inflection point for digital infrastructure in Tanzania was 2009; government interest was matched by a rapid investment in infrastructure. The first undersea fiber optic cable connected Tanzania to the world internet backbone, and planning began for a massive expansion of land-based connectivity.³² The undersea cable was funded by African and European investment; but the land-based fiber optic network was primarily funded by China. \$264 million in loans from the China Exim Bank were secured, and China Telecom and Huawei began construction and technology transfer.³³ Here, we see the same pattern of investment in Tanzania and Ghana. This means that we can rule out a hypothesis that governance was impacted by the originator of the infrastructure project. The National ICT broadband fiberoptic backbone (NICTBB), as it is called, was completed in 2016, years after Ghana.³⁴ Afrobarometer surveys demonstrate that usage of the internet remained low. In 2011, 89% of respondents reported never using the internet; in 2014 this fell to 86%, in 2016

³⁰ Dan Paget, "Tanzania: Shrinking Space and Opposition Protest," *Journal of Democracy* 28, no. 3 (2017): 153–67, <https://doi.org/10.1353/jod.2017.0053>.

³¹ "Tanzania Telecoms Sector Report," *TanzaniaInvest* (blog), September 25, 2016, <https://www.tanzaniainvest.com/telecoms/tanzania-telecoms-sector-report>.

³² Nur Bremmen, "How High-Speed Internet Access Is Changing Tanzania," *Ventureburn* (blog), August 10, 2012, <https://ventureburn.com/2012/08/how-high-speed-internet-access-is-changing-tanzania/>.

³³ Motolani Agbebi, Gong Xue, and Zheng Yu, "China-Powered ICT Infrastructure: Lessons from Tanzania and Cambodia," SAIIA Policy Briefing (South African Institute of International Affairs, November 2021), <https://saiia.org.za/research/china-powered-ict-infrastructure-lessons-from-tanzania-and-cambodia/>.

³⁴ AidData, "Project 23142: China Exim Bank Loans \$70 Million USD for Phase I of the Tanzania National Fiber Optic Backbone," accessed May 16, 2022, <https://china.aiddata.org/projects/23142/>.

77%, and in 2019 72%. A meager 10% of respondents used the internet every day in 2019.

High costs and low awareness were identified as key factors in this relatively meager uptake in usage.³⁵

Timeline of elections and interference

How have Tanzanian elections been impacted by the introduction of digital infrastructure? The first election studied, in 2010, revealed very limited use of the internet in ways that mirrored Ghana. The EU election monitoring report does not mention internet usage; this is unsurprising given the level of access shown in the Afrobarometer data. One additional data point is a study was conducted in 2010 on Tanzanian internet use around the time of the election. The study provided internet café access to participants, showing them how the internet worked and how to use it. The results of the study showed that people became more politically informed with internet access and use, but also gives us insight into the level of governmental control.³⁶ By and large, there were no restrictions placed on internet usage at the time; but Tanzanians also by and large did not use the internet. In other words, there was no widespread norm in place. This same year saw the first legislative foundations for internet control in the Electronic and Postal Communications Act (EPOCA). At the time, the act only mandated SIM registration by individuals, but would go on to be considerably expanded later. While the 2010 election was not a paragon of openness nor a role model for democracy, it was generally conducted without overt governmental influence and could be seen as part of a path towards improved democratic rule.³⁷

³⁵ Motolani Agbebi, Gong Xue, and Zheng Yu, “China-Powered ICT Infrastructure.”

³⁶ Catie Snow Bailard, “A Field Experiment on the Internet’s Effect in an African Election: Savvier Citizens, Disaffected Voters, or Both?,” *Journal of Communication* 62, no. 2 (April 2012): 330–44, <https://doi.org/10.1111/j.1460-2466.2012.01632.x>.

³⁷ European Union Election Observation Mission to Tanzania, “European Union Election Observation Mission Final Report Tanzania – General Elections October 2010,” 2011, https://www.eods.eu/library/FR%20TANZANIA%202010_en.pdf.

Many of these gains were reversed in 2015 when, despite the continued low levels of access, internet regulation came to play a much larger role in the election. The Cybercrimes Act of 2015 was introduced prior to the election, with a similar goal as the Ghanaian Electronic Communications Act of targeting fraud, misinformation, and illegal internet activity. However, unlike Ghana, it was used to explicitly target opposition politicians, NGOs, and monitoring groups in the immediate wake of the election.³⁸ As these groups protested the election results, particularly the nullification of the election in Zanzibar, the government responded with a crackdown on their statements, using their online postings to justify their arrest. As the opposition mobilized, moving to a strategy of protest, internet access was further restricted.³⁹ In 2018, the EPOCA was significantly amended, with new provisions requiring a license and fee for bloggers, targeting a reduction in anonymity, cracking down on “false information,” and requiring full surveillance of internet café users. This crackdown saw the disappearance of many bloggers and online reporters, effectively criminalizing the nascent online opposition community.⁴⁰ Finally, in the 2020 elections, measures escalated once again to utilize a classic authoritarian tactic; the shutdown of internet access during the period of elections.⁴¹ Free and open use of the internet, a decade after 2010, has been effectively destroyed through the harsh implementation of regulatory measures.

³⁸ European Union Election Observation Mission to Tanzania, “EU Election Observation Mission Final Report – Tanzania General Elections 2015,” 2016, https://www.eods.eu/library/eu-eom-tz-2015-fr_en.pdf.

³⁹ Paget, “Tanzania: Shrinking Space and Opposition Protest.”

⁴⁰ Lisa Parks and Rachel Thompson, “The Slow Shutdown: Information and Internet Regulation in Tanzania From 2010 to 2018 and Impacts on Online Content Creators,” *International Journal of Communication* 14, no. 0 (2020), <https://ijoc.org/index.php/ijoc/article/view/11498>.

⁴¹ “Internet Disrupted in Tanzania on Eve of General Elections,” *NetBlocks* (blog), October 27, 2020, <https://netblocks.org/reports/internet-disrupted-in-tanzania-on-eve-of-presidential-elections-oy9abny3>.

Chapter IV: Analysis

How do we explain these different regulatory approaches to the internet? This chapter begins with a brief analysis of the similarities and differences. The main argument is that timing is a key factor in explaining the different outcomes. We will then go on to show how timing led to the internal development of a norm that is, on the surface, similar to both Western and Chinese rhetoric, but is, in fact, locally crafted. We conclude by demonstrating how outside rhetoric is used to justify action for an international audience without being an adapted model.

Similarities, Differences, and a Hypothesis

Although it would be incorrect to assert an equivalency between these two countries, it fair to argue that they have a great deal in common historically. Both gained independence in the post Second World War wave of decolonization, and both saw authoritarian rule and political instability after independence. Both have diverse populations; both witnessed the emergence of democratic liberalization in the 1990s, albeit with less organized competition early on in the case of Tanzania. Both are countries that prize stability, and seek to avoid civil unrest or conflict. From a digital infrastructure perspective, there are also several similarities: both have, in 2020, fairly similar levels of infrastructure and multiple sources of infrastructure funding. Indeed, their models of funding and connection are identical, with European and American investors providing the initial fiber optic linkage and Chinese loans and technology facilitating the development of the land-based internet connection. The key difference, and the one I argue played the biggest role, is the timing of the initial connection and its impact on the growth of internet usage. Because Ghana connected to the internet much earlier, norms for free and open internet usage were established before parties with authoritarian aims could block them. In Tanzania, by the time the internet gained acceptance,

the potential for its use as a tool of opposition was well known. Therefore, regulation was put in place early that prevented the normative acceptance of the internet as free and open.

Timing

In order to understand the role of timing, we must return to the model of democracy set out by Lindberg at the beginning of this thesis (See Fig. 1).⁴² Recall the two axis: Cost of Oppression and Cost of Toleration. In the case of digital infrastructure, early adopters (particularly in transitional democracies) faced a lack of information; they did not know the political impact of the internet. However, adoption of the internet had clear economic benefits. Early adopters like Ghana naturally skewed towards openness; it was better for business. Therefore, the cost of toleration was set to acceptable; it posed no threat, and any interference to internet access could be seen as carrying an acceptable cost of oppression as well. This perception would guide policy, and therefore norms within the country. A Ghanaian journalist remarked “We don’t really get a whole lot from the government but this one – Internet freedom – you did not give it to us...”⁴³ And this early perception of internet freedom led to a normative acceptance of the internet, changing the cost of oppression. As the free and open internet is increasingly ingrained in daily life, costs of oppression rise dramatically. People will notice sudden disruption. Given the fixed policy of toleration based on early perceptions and a shift in the cost of oppression, a regime is faced with the choice of pursuing a costly and normatively unallowable crackdown, or allowing continued access. This contributes to a reticence to use the potential instruments of oppression in place in Ghana. That same Ghanaian journalist affirms this: “...you [the government] did not give it to us and we are not going to allow you to take it from us.”

⁴² Lindberg, *Democratization by Elections*.

⁴³ Quoted in Gagliardone, *China, Africa, and the Future of the Internet*, 143.

Tanzania was different. By the time internet access first became available, events in northern Africa like the Arab Spring showed the power of the internet as a tool of opposition. The leaders of Tanzania from the outset understood the cost of toleration to be unacceptable. Even if oppression became more costly, they would still maintain more authoritarian control. The Tanzanian leadership knew this; President Magufuli, the winner of the 2015 election and one of the leaders of Tanzania's authoritarian turn, remarked "I was wishing that angels descend from heaven one day and close all these platforms, so that when they are reopened after one year, we have already built our new Tanzania."⁴⁴

This observation runs counter to a common assertion in the media and in some of the scholarly literature that China is responsible for this authoritarian turn.⁴⁵ The claim is that China encourages the regimes it supplies with technology to become more authoritarian, or that countries that receive large amounts of assistance are likely to take an authoritarian turn as oppression through digital tools becomes easier. It is more complicated than this. Indeed, the mirroring in the patterns of investment and infrastructure building in Ghana and Tanzania show that China's influence is not explanatory. Ghana adopted the internet, with the assistance of China, during a period of democratic transition and instability. This took place earlier than Tanzania, and manifests as a normative predilection for openness. The early days of the internet in Ghana were not subject to intense regulation, and as such the internet community was established and entrenched by the time regulation became more popular throughout the world. Tanzania also adopted the internet during a period of democratic transition and instability, but this was later than Ghana, and as such the government was much quicker to institute rules regarding internet access.

⁴⁴ Iddi Ssessanga, "Tanzania: Internet Slowdown Comes at a High Cost," *DW.COM*, November 5, 2020, <https://www.dw.com/en/tanzania-internet-slowdown-comes-at-a-high-cost/a-55512732>.

⁴⁵ Gravett, "Digital Neo-Colonialism."

Interestingly, scholars have observed that internet restrictions in Tanzania did not come all at once. Lisa Parks and Rachel Thompson argue that the imposition of regulation was slow and gradual, terming it analogous to regulatory creep.⁴⁶ This can be supported by two other observations. First, regulation is partially a reaction to the growing organization of the opposition, as noted by Paget.⁴⁷ But secondly, and more importantly, it is part of a broader securitization and normative conceptualization effort that profoundly impacts local understandings. By approaching the internet as a ‘threat’ to security rather than an opportunity for economic development, the government has successfully influenced the norms for internet use and regulation. Afrobarometer data reflects this: in 2017, 64% of Tanzanians said that they agreed the government should be able to monitor private communications to avoid violence. In Ghana, only 34% agreed with this statement. Charlotte Cross notes the same general impact in her 2021 article, observing that even opposition members were not unabashed proponents of a free internet. They shared concerns about the security risks, as well as the potential for insults and the incitement of violence.⁴⁸

The Origins and Justification of a Norm

As we have demonstrated, the actions of African governments are highly dependent on their own internal situation, particularly the timing of internet access. Countries do not take up a model of authoritarian digital infrastructure governance to mirror or comply with China in exchange for assistance. Nor do these same countries adopt a competing model because of Western investment. However, the question still remains: do these countries adopt an outside norm at all? Regardless of the material assistance, both the West and China offer a

⁴⁶ Parks and Thompson, “The Slow Shutdown: Information and Internet Regulation in Tanzania From 2010 to 2018 and Impacts on Online Content Creators.”

⁴⁷ Paget, “Tanzania: Shrinking Space and Opposition Protest.”

⁴⁸ Charlotte Cross, “Dissent as Cybercrime: Social Media, Security and Development in Tanzania,” *Journal of Eastern African Studies* 15, no. 3 (July 3, 2021): 442–63, <https://doi.org/10.1080/17531055.2021.1952797>.

model that can be freely adopted. Why did Tanzania choose the path it did, assuming the interest in the maintenance of a more authoritarian regime type?

There are three potential reasons why Tanzania chose this path. The first, often given by concerned democracy advocates, is that Tanzania observed a model of internet governance, the so called “sovereign internet,” and chose to adopt that model instead of a model promoted by the US and Europe of free and open access.⁴⁹ In other words, Tanzania had a normative vacuum, and chose the Chinese norm – China as even more than a norm maker, a norm promoter.⁵⁰ The second is one given often by critics of the first explanation: that Tanzania adopted a securitized internet, with the threat of global terror and civil conflict justifying the need to crack down on online discourse. They point to the common language in the US and Europe, and even their surveillance strategies, used in the ‘War on Terror.’⁵¹

These two arguments have strengths. No single cause can be said to be the sole reason. But this thesis proposes a third potential explanation for why Tanzania chose this path: a contingent reaction to unfolding global political events. The decisions made in Tanzania (or in Ghana for that matter) are not a result of imposition, but rather of choices made by the leaders of the state, presumably acting in their own best interests. Policy makers act on the available information in ways that conform to the model set out by Lindberg. Extraversion, in other words, is a key factor in the decision making of local authorities. Data tracing change over time of multiple variables supports this hypothesis. By 2010, when Tanzania was ramping up internet access and seeing the first significant growth in mass connectivity, the ‘dangers’ of the internet to regimes with authoritarian tendencies were clear. The Arab Spring demonstrated the powerful organizational potential of internet access. Social

⁴⁹ Gravett, “Digital Neo-Colonialism.”

⁵⁰ Alden and Large, “On Becoming a Norms Maker.”

⁵¹ Woodhams, “China, Africa, and the Private Surveillance Industry.”

networks were taking off, allowing widespread communication in a much simpler way than older message boards or forums. The CCM was happy to have a competitive electoral system with a disorganized opposition. The internet proved to be a powerful tool for unifying opposition. Much attention was given to the remarks of the Deputy Minister for Transport and Communications Edwin Ngonyani at the 2017 China-Tanzania New Media Roundtable, focusing on his statement about the emulation of China in Tanzania. Many pointed to this as clear evidence that China was exporting a model, and this opinion was even given as congressional testimony in the US.⁵² But commenters missed a crucial portion of his statement: “Citing the role of social media in the Arab Spring, when governments were overthrown, Mr. Ngonyani said social media content has power to shape ideas and the mindset of people and if it remains uncontrolled it can lead to instability.”⁵³ The Tanzania government and the CCM were well aware of the potential of the internet; they did not need to look as far as China to understand this.

China alone does not provide a reason for Tanzania to adopt restrictive governance of the internet. Nor does China alone provide the tools for doing so; Tanzania’s internet was not built on solely Chinese technology. Does China provide anything? The China model of the internet, as a whole, is also out of reach for African states as well. Scholars point out the differences in political culture that make such an approach impossible, and imposition of an outside norm against a preexisting and widely understood local one is extremely difficult.⁵⁴ Even limited measures, like adoption of pieces of legislation, can only be done with a strong understanding of local context and an understanding that there would not be strong normative pushback. In technical measures, African governments have shown they are well aware of

⁵² Elizabeth C. Economy, “Yes, Virginia, China Is Exporting Its Model,” accessed May 19, 2022, <https://www.newswise.com/politics/yes-virginia-china-is-exporting-its-model>.

⁵³ Asterius Banzi, “Tanzania Seeks Chinese Help in Social Media,” *The East African*, August 1, 2017, <https://www.theeastafrican.co.ke/tea/news/east-africa/tanzania-seeks-chinese-help-in-social-media--1370738>.

⁵⁴ Gagliardone, *China, Africa, and the Future of the Internet*, 95.

their limits in such an approach. Edwin Ngonyani, at the roundtable, also stated that “our Chinese friends have managed to replace [western platforms] with their homegrown sites that are safe, constructive, and popular. We aren’t there yet...”⁵⁵ While it may be a distant aspiration, the reality is that African countries will not rid themselves of sites like Facebook or Twitter any time soon; and China has no real interest in providing an alternative either. Chinese sites are set up for Chinese users, and are difficult for outsiders to navigate in China, let alone elsewhere. But China can be the source of something valuable: a strong force pushing for international acceptance of their model. In doing so, China opens the way for countries like Tanzania to use similar language to legitimize intentions and justifications internationally. Tanzanian perceptions of the need for limits on open internet usage are not imported from China; they are homegrown, cultivated by the government from widely held national ideas. But they match up with the same Chinese rhetoric: that there must be a crackdown on ‘immorality,’ that development is a paternalistic practice spread from the top down, and that deference towards elders must be maintained.⁵⁶

We can demonstrate that this rhetoric is utilized, but not promoted, by looking at Tanzania, which goes beyond Chinese-like concerns about moral decadence. This rhetoric also contains strong concerns about security and stability.⁵⁷ Tanzanians are concerned about national unity and cohesion, a result of the governmental efforts in the second half of the twentieth century to unify the polity into a nation and the subsequent framing of the internet. Regulation is discussed within this context of supporting the security of the country.⁵⁸ This

⁵⁵ Asterius Banzi, “Tanzania Seeks Chinese Help in Social Media.”

⁵⁶ Cross, “Dissent as Cybercrime”; Amy Hawkins, “Beijing’s Big Brother Tech Needs African Faces,” *Foreign Policy* (blog), accessed May 19, 2022, <https://foreignpolicy.com/2018/07/24/beijings-big-brother-tech-needs-african-faces/>.

⁵⁷ iAfrikan News, “Tanzania Imposes Strict Social Media Regulations to Stop ‘Moral Decadence,’” *TheNextWeb* (blog), April 10, 2018, <https://thenextweb.com/news/tanzania-imposes-strict-social-media-regulations-stop-moral-decadence>.

⁵⁸ Cross, “Dissent as Cybercrime.”

point is, interestingly, often minimized by commenters focused on the influence of China.⁵⁹

The US, rather than China, has been a key promoter of conceptions of ‘national security.’

And Tanzania has used this rhetoric as well on the international stage to justify its actions. It is useful, then, to ask whether or not we conceive of the US as a promoter of a securitization model? Or, is it that others have adopted the rhetoric as a way to express the legitimacy of their own internal concerns on an international stage?

Tanzania demonstrates an interesting mixture of internal and external concerns and rhetoric. It is impossible to attribute Tanzania’s actions to China; just as it would be incorrect to attribute those same actions to the US. The agency of the leadership of African countries is often ignored in the face of worrying proclamations of hegemony and neo-colonialism. Refocusing attention on locally informed extraversion is essential to understanding the origins of the situation, the governance justifications, and any potential policy responses. Policy based on an understanding of the local dynamic will go far in moving away from the reactionary responses caused by the bellicose rhetoric of a digital neo-Cold War.

⁵⁹ Gravett, “Digital Neo-Colonialism.”

Chapter V: Conclusion

In looking at the implementation of digital infrastructure, this thesis argued that the timing of implementation shaped the norms surrounding digital governance. Tanzania, with its later implementation than Ghana, saw a much more restrictive normative approach. This was championed by leaders because of their beliefs in the dangers inherent in internet access. In adopting norms surrounding digital infrastructure usage, these countries responded to an internal dynamic rather than ideas or pressures imposed by outside actors, most notably China. When local leaders sought justification for policies, they employed language from either China or the US. This language provided a certain legitimacy for domestic governance on an international stage.

This thesis began by highlighting concerns from commenters about the rising influence of China in African Democracy. Implicit was a belief that Chinese influence could be countered through adequate infusions of time, money, and energy. Data employed in this thesis, however, suggests that this is a flawed response. As we have demonstrated, there are many pathways to authoritarian regulation of digital infrastructure that are beyond the control of outside powers. Regardless of whether the West or China fund infrastructure, the fact remains that governments will implement laws that they see fit to deal with the perceived internal threats. African nations control their digital governance.

This thesis also theorizes that the power of all governments, not just the two studied here, to regulate digital infrastructure rests upon the normative environment within the country. This can be changed, from the top down but also from the bottom up through local actors. Instead of geopolitical alarms about the spectre of China, those who wish democracy to succeed in Africa should instead focus on demonstrating the advantages of a free, open, and democratic internet where it counts: with ordinary people, within their normative context, on the continent.

This thesis sets out a basis for future research. A theory is herein elaborated; but other case studies can build on this and offer insights into the way in which other leaders perceive the costs of oppression and toleration in the implementation of the internet. This framework can also be fruitfully applied to non-transitional democracies, and serves as a good foundation for discussing digital infrastructure governance. Finally, further study can be made of the cases going forward, to further examine local normative understandings and their evolution over time.

Indeed, with this knowledge of the importance of internal contingency instead of outside influence, we can ask what the future will bring. A near-term test of the importance of internal contingency is in Ghana. In early 2022, there were a series of arrests of journalists for violations of the Electronic Communications Act. This is the same law previously identified in this thesis as mostly unused.⁶⁰ The reactions of civil society and monitoring organizations were immediate and harsh. Government justifications were rejected as false, and activists in the country were left alarmed about future use of the law.⁶¹ So far, use has been extremely limited and met with harsh pushback; time will tell if usage will escalate, and whether the population will continue to protest.

The Tanzanian case is also evolving. It is unclear what the government will do next. In 2020, savvy internet users employed VPNs to avoid the blocks during the election.⁶² And for those that could not, the internet block shut down commerce and took a heavy economic toll.⁶³ Will the government continue this policy? Will they attempt to implement their own

⁶⁰ Dasmani Laary, "Press Freedom in Ghana Is Taking a Step Backwards, as Journalists Are Being Prosecuted under the Criminal Code," *D+C* (blog), April 12, 2022, <https://www.dandc.eu/en/article/press-freedom-ghana-taking-step-backwards-journalists-are-being-prosecuted-under-criminal>.

⁶¹ Samuel Appiah Darko, "Ghana's Law on Publication of False News Is Vague and Easily Abused – It Should Go," *The Conversation* (blog), February 23, 2022, <http://theconversation.com/ghanas-law-on-publication-of-false-news-is-vague-and-easily-abused-it-should-go-177470>.

⁶² Samuel Woodhams, "Africa's Innovative Response to Internet Repression," *DW.COM*, November 12, 2019, <https://www.dw.com/en/africas-innovative-response-to-internet-repression/a-51199067>.

⁶³ Iddi Ssessanga, "Tanzania: Internet Slowdown Comes at a High Cost."

localized platforms under their control? And, if some democratization in Tanzania is achieved, what will the internet policy look like then? Whatever the outcomes in Ghana or Tanzania, what is clear is that understanding future events will require close attention to African realities, and less attention to the bellicose rhetoric of a China-Western scramble for Africa's internet.

Bibliography

- “African Leaders, Experts Hail Xi’s Remarks at Extraordinary China-Africa Summit on Solidarity against COVID-19.” Accessed June 2, 2022.
http://www.focac.org/eng/zftjkytbfh/202006/t20200618_7053453.htm.
- AidData. “Project 23142: China Exim Bank Loans \$70 Million USD for Phase I of the Tanzania National Fiber Optic Backbone.” Accessed May 16, 2022.
<https://china.aiddata.org/projects/23142/>.
- Alden, Chris, and Daniel Large. “On Becoming a Norms Maker: Chinese Foreign Policy, Norms Evolution and the Challenges of Security in Africa.” *The China Quarterly* 221 (March 2015): 123–42. <https://doi.org/10.1017/S0305741015000028>.
- Asterius Banzi. “Tanzania Seeks Chinese Help in Social Media.” *The East African*, August 1, 2017. <https://www.theeastafrican.co.ke/tea/news/east-africa/tanzania-seeks-chinese-help-in-social-media--1370738>.
- Bailard, Catie Snow. “A Field Experiment on the Internet’s Effect in an African Election: Savvier Citizens, Disaffected Voters, or Both?” *Journal of Communication* 62, no. 2 (April 2012): 330–44. <https://doi.org/10.1111/j.1460-2466.2012.01632.x>.
- Bayart, Jean-François, and Jean-François Bayart. *The State in Africa: The Politics of the Belly*. 2. ed., repr. (Twice). Cambridge: Polity, 2010.
- Bayart, Jean-François, and Stephen Ellis. “Africa in the World: A History of Extraversion.” *African Affairs* 99, no. 395 (2000): 217–67.
- Brautigam, Deborah. *The Dragon’s Gift: The Real Story of China in Africa*. Oxford New York: Oxford University Press, 2009.
- Charles Mok. “China and Russia Want to Rule the Global Internet.” *The Diplomat*, February 22, 2022. <https://thediplomat.com/2022/02/china-and-russia-want-to-rule-the-global-internet/>.
- Cheeseman, Nic. *Democracy in Africa: Successes, Failures, and the Struggle for Political Reform*. New Approaches to African History 9. New York: Cambridge University Press, 2015.
- Cross, Charlotte. “Dissent as Cybercrime: Social Media, Security and Development in Tanzania.” *Journal of Eastern African Studies* 15, no. 3 (July 3, 2021): 442–63. <https://doi.org/10.1080/17531055.2021.1952797>.
- Darko, Samuel Appiah. “Ghana’s Law on Publication of False News Is Vague and Easily Abused – It Should Go.” *The Conversation* (blog), February 23, 2022.
<http://theconversation.com/ghanas-law-on-publication-of-false-news-is-vague-and-easily-abused-it-should-go-177470>.
- Dasmani Laary. “Press Freedom in Ghana Is Taking a Step Backwards, as Journalists Are Being Prosecuted under the Criminal Code.” *D+C* (blog), April 12, 2022.

<https://www.dandc.eu/en/article/press-freedom-ghana-taking-step-backwards-journalists-are-being-prosecuted-under-criminal>.

Elizabeth C. Economy. “Yes, Virginia, China Is Exporting Its Model.” Accessed May 19, 2022. <https://www.newswise.com/politics/yes-virginia-china-is-exporting-its-model>.

European Union Election Observation Mission to Ghana. “EU EOM Ghana Presidential and Parliamentary Elections 7 December 2020 Final Report,” 2021. <https://ec.europa.eu/info/strategy/relations-non-eu-countries/types-relations-and-partnerships/election-observation/mission-recommendations-repository/missions/408>.

———. “EU EOM Ghana Presidential and Parliamentary Elections 2016 Final Report,” 2017. <https://ec.europa.eu/info/strategy/relations-non-eu-countries/types-relations-and-partnerships/election-observation/mission-recommendations-repository/missions/30>.

———. “Final Report on the Presidential and Parliamentary Elections, 2008.” European Union Election Observation, 2009. <https://ec.europa.eu/info/strategy/relations-non-eu-countries/types-relations-and-partnerships/election-observation/mission-recommendations-repository/missions/239>.

European Union Election Observation Mission to Tanzania. “EU Election Observation Mission Final Report – Tanzania General Elections 2015,” 2016. https://www.eods.eu/library/eu-eom-tz-2015-fr_en.pdf.

———. “European Union Election Observation Mission Final Report Tanzania – General Elections October 2010,” 2011. https://www.eods.eu/library/FR%20TANZANIA%202010_en.pdf.

Finnemore, Martha, and Kathryn Sikkink. “International Norm Dynamics and Political Change.” *International Organization* 52, no. 4 (1998): 887–917.

Fisher, Jonathan, and David M. Anderson. “Authoritarianism and the Securitization of Development in Africa.” *International Affairs* 91, no. 1 (January 2015): 131–51. <https://doi.org/10.1111/1468-2346.12190>.

“Full Text: Keynote Speech by Chinese President Xi Jinping at Opening Ceremony of 8th FOCAC Ministerial Conference.” Accessed June 2, 2022. http://www.focac.org/eng/gdtp/202112/t20211202_10461080.htm.

G. Pascal Zachary. “Black Star: Ghana, Information Technology and Development in Africa.” *First Monday* 9, no. 3 (March 2004). http://firstmonday.org/issues/issue9_3/zachary/index.html.

Gagliardone, Iginio. *China, Africa, and the Future of the Internet*. London, UK: Zed, 2019.

Modern Ghana. “Ghana to Receive Support from China,” March 23, 2006. <https://www.modernghana.com/news/97062/ghana-to-receive-support-from-china.html>.

Gigg, Tim. “Building a National Fiber Backbone in Africa.” Accessed May 13, 2022. <https://www.ppc-online.com/blog/building-a-national-fiber-backbone-in-africa>.

- Gilpin, Shaquille Ifedayo. "China, Africa and the International Aid System: A Challenge to (the Norms Underpinning) the Neoliberal World Order?" *Journal of Asian and African Studies*, December 13, 2021. <https://doi.org/10.1177/00219096211063804>.
- Gravett, Willem. "Digital Neo-Colonialism: The Chinese Model of Internet Sovereignty in Africa." *African Human Rights Law Journal* 20, no. 1 (2020). <https://doi.org/10.17159/1996-2096/2020/v20n1a5>.
- Gyimah-Boadi, Emmanuel. "Politics in Ghana Since 1957: The Quest for Freedom, National Unity, and Prosperity." *Ghana Studies* 10, no. 1 (2007): 107–43. <https://doi.org/10.1353/ghs.2007.0004>.
- Hawkins, Amy. "Beijing's Big Brother Tech Needs African Faces." *Foreign Policy* (blog). Accessed May 19, 2022. <https://foreignpolicy.com/2018/07/24/beijings-big-brother-tech-needs-african-faces/>.
- iAfrikan News. "Tanzania Imposes Strict Social Media Regulations to Stop 'Moral Decadence.'" *TheNextWeb* (blog), April 10, 2018. <https://thenextweb.com/news/tanzania-imposes-strict-social-media-regulations-stop-moral-decadence>.
- Iddi Ssessanga. "Tanzania: Internet Slowdown Comes at a High Cost." *DW.COM*, November 5, 2020. <https://www.dw.com/en/tanzania-internet-slowdown-comes-at-a-high-cost/a-55512732>.
- NetBlocks. "Internet Disrupted in Tanzania on Eve of General Elections," October 27, 2020. <https://netblocks.org/reports/internet-disrupted-in-tanzania-on-eve-of-presidential-elections-oy9abny3>.
- Kerry, Cameron F. "Battle Lines for the Future of the Internet." *Brookings* (blog), May 11, 2022. <https://www.brookings.edu/blog/techtank/2022/05/11/battle-lines-for-the-future-of-the-internet/>.
- Lindberg, Staffan I. *Democratization by Elections: A New Mode of Transition*. Johns Hopkins University Press, 2009.
- Morgan, Pippa, and Yu Zheng. "Old Bottle New Wine? The Evolution of China's Aid in Africa 1956–2014." *Third World Quarterly* 40, no. 7 (July 3, 2019): 1283–1303. <https://doi.org/10.1080/01436597.2019.1573140>.
- Motolani Agbebi, Gong Xue, and Zheng Yu. "China-Powered ICT Infrastructure: Lessons from Tanzania and Cambodia." SAIIA Policy Briefing. South African Institute of International Affairs, November 2021. <https://saiia.org.za/research/china-powered-ict-infrastructure-lessons-from-tanzania-and-cambodia/>.
- Nur Bremmen. "How High-Speed Internet Access Is Changing Tanzania." *Ventureburn* (blog), August 10, 2012. <https://ventureburn.com/2012/08/how-high-speed-internet-access-is-changing-tanzania/>.
- Paget, Dan. "Tanzania: Shrinking Space and Opposition Protest." *Journal of Democracy* 28, no. 3 (2017): 153–67. <https://doi.org/10.1353/jod.2017.0053>.

Parks, Lisa, and Rachel Thompson. "The Slow Shutdown: Information and Internet Regulation in Tanzania From 2010 to 2018 and Impacts on Online Content Creators." *International Journal of Communication* 14, no. 0 (2020).
<https://ijoc.org/index.php/ijoc/article/view/11498>.

Riddell, Roger C. *Does Foreign Aid Really Work?* Oxford: Oxford University Press, 2008.

Samuel Woodhams. "Africa's Innovative Response to Internet Repression." *DW.COM*, November 12, 2019. <https://www.dw.com/en/africas-innovative-response-to-internet-repression/a-51199067>.

Staden, Cobus Van. "How the U.S. Can Eclipse China in the Battle over Africa." *POLITICO*, April 22, 2021. <https://politi.co/3xgZYIT>.

TanzaniaInvest. "Tanzania Telecoms Sector Report," September 25, 2016.
<https://www.tanzaniainvest.com/telecoms/tanzania-telecoms-sector-report>.

Woodhams, Samuel. "China, Africa, and the Private Surveillance Industry." *Georgetown Journal of International Affairs* 21, no. 1 (2020): 158–65.
<https://doi.org/10.1353/gia.2020.0002>.

Yin, Robert K. *Case Study Research: Design and Methods*. 4th ed. Applied Social Research Methods, v. 5. Los Angeles, Calif: Sage Publications, 2009.