

Check for updates

Original Research Article

'It has changed our lives completely in such a short time!': Infrastructural relations and the 'citizen-turned-private sector' in Lomé, Togo's digital transformation

EPD: Society and Space I-17
© The Author(s) 2025
Article reuse guidelines: sagepub.com/journals-permissions
DOI: 10.1177/02637758251349374
journals.sagepub.com/home/epd



Janine Patricia Santos 🕩

Abstract

This article explores the political economy of digital transformation in Lomé, Togo, and unpacks the relations and contradictions that animate the development of its digital infrastructures. Using the COVID-19 pandemic as the backdrop, I look at how the state, through its *Plan National du Developpement (PND)*, promotes digital infrastructure development for its efficiency in delivering dematerialised state services, and to further attract investors through public–private partnerships. To do so, I argue that the state draws on the poetics of digital infrastructures to create a spectacle of its success and blur the lines between who constitutes the public and the private sectors. By unpacking what I call 'infrastructural relations', or the *social relations of things* that allow for the systems to operate, I illustrate how infrastructural relations are discursively mobilised by the state to justify privatisation and digital infrastructure investment, and to turn citizens in need of welfare to become private neoliberal subjects tasked to propel this digital transformation. I consider the turning of citizens to the 'private sector' as a way for the state to co-opt citizens' vernacular engagements, but also as an opportunity to recognise the central role of citizens in Lomé's state-led digital transformation.

Keywords

Digital transformation, Lomé, infrastructural relations, digital infrastructures, digital for development

Department of Social and Cultural Anthropology, KU Leuven, Leuven, Belgium

Department of Social and Cultural Anthropology, Parkstraat 45-bus 3615, KU Leuven, Leuven, Belgium. Email: janinepatricia.santos@kuleuven.be

Introduction: 'It has changed our lives completely in such a short time!'

Eduin¹ is an employee of Togocom. His boss, a Pakistani expat working for the 5G installation², invited me for dinner after hearing of 'someone doing research on digital infrastructures.' Eduin's boss was wondering if I could provide end-user feedback as someone who 'works on-ground and talks to people.' While our conversations span from the technicalities of installation to the politics of funding, it is mainly side-tracked by real-time assessments of whether to fly out or not before the closing of the borders. It is Tuesday night, and a lockdown will be put in place on Thursday as the COVID-19 pandemic lurks in the shadows.

Eduin's boss suggests we have coffee in one of the Lebanese-owned coffee shops. I make an excuse of having to pack the things I have to leave behind, being fairly optimistic that I could immediately come back in a few weeks. So instead, Eduin's boss tells Eduin to take me home after dropping them off. When we reach the coffee shop, I hastily go after Eduin's boss to thank him for the dinner before he disappears into the place.

"I'm still not sure if we're staying until next week," his boss says after a calculated pause. "I honestly think they should stop investing in us and start investing in their hospitals for this pandemic." ³

Perplexed by the frankness of his boss's statement, I go back to sit with Eduin as he revs up the engine and cruises through Lomé's empty streets.

"Are you still going to work on the installation?" I ask Eduin to break the ice.

"Oui, for a few more weeks... I think." Eduin responds.

"I find it odd that you're installing 5G. I don't think it would help us much in these times..."

"Oui, but this administration has done a lot of odd things. C'est la vie togolaise. We wanted change, but this is what we got."

"Oh, but you work for the state mobile company! You must get free data!" I tease him to lighten the conversation

"Ouais," He laughs, half nervous with the revelation and half proud to admit he has privileged access. "Four years ago, we only had 2G.... Then 3G came, then 4G thanks to the company. It has changed our lives completely in such a short time! I'm still proud of my job even if I don't agree with everything the administration does."

Eduin and I continue to bond over the small charms that make up Lomé's nightlife: the mamans selling koliko (fried yam) on the streets, the bars blasting Nigerian music, and the occasional zemijan (taxi moto) men huddling in groups waiting for their next customers—all to be lost to the curfew in the coming months. As I open our house gates and bid Eduin goodbye, I take one last look at the empty streets in the delicate calmness of Loméan night and think to myself, "All this will change quickly, all before we know it..."

(Fieldnotes, Lomé, Togo, 17 March 2020)

In this article, I look at how Lomé's digital transformation through digital infrastructure development and its underlying discourses is mobilised by public and private actors to, in Eduin's words, 'change the lives of Loméans in such a short time'. Based on 15 months of ethnographic fieldwork in Lomé, Togo, ⁵ I explore how the state-led project of digital transformation unfolds in the everyday lives of its

citizens through their own understanding and experiences of it. I zoom in on the processes and practices that contribute to the so-called digital transformations in the Global South, particularly the materialities that shape these urban transformations, such as the digital infrastructures, tech spaces, various actors and stakeholders, and the citizens who engage with digital technologies and navigate urban landscapes on a daily basis.

I start by detailing digital infrastructure development in Togo to unpack the contradictions that animate its processes. I delve into the discourses employed by state and non-state actors by tuning in on the stories of government officials, private and public workers, investors and Lomé's citizens to illustrate how these discourses are mobilised by the state and various actors to position themselves and others in Lomé's digital transformation. While digital infrastructure development is deemed crucial to fulfilling the country's techno-utopia of digital transformation, the COVID-19 pandemic has revealed the politics inherent in prioritising this particular state project. Using the COVID-19 pandemic as a prism that allows for a refracted view of the internal contradictions in leapfrogging development during a crisis, I look at how these contradictions are being negotiated by state and non-state actors, including Lomé's citizens, who are at the centre of these urban processes.

Through unpacking the internal contradictions (Hart, 2018; Ollman, 2015) of what I call 'infrastructural relations', particularly the relations and contradictions between public and private actors in digital infrastructure development, I argue that internal contradictions are negotiated and discursively mobilised by the state to blur the lines between the public and the private sector, and to turn citizens in need of welfare to become private neoliberal subjects tasked to propel Togo's digital transformation. This discursive mobilisation of infrastructural relations becomes the basis for how digital infrastructures 'work' in Togo – wherein the speed and spectacle of digital infrastructures' privatisation is presented as efficient, essential and justifiable by the state, and equally lauded by a global audience.

As digital infrastructures become conduits for Togo's global and regional reintegration, I explore how infrastructural relations within a given locality reveal the wider geopolitical processes contained within these seemingly localised processes. I position Lomé's digital transformation as a partiality of the global processes governing digital infrastructure development, and that any seeming contradiction contained within Lomé's digital transformation is to be understood in relation to the wider global processes that shape them. This, in turn, becomes the foundation for how Lomé's citizens, repairers, hackers, tech space founders and digital youth create new forms of citizenship to fashion their lives and their futures in the 'digitalising' city – a city embedded within a global, and often unequal, digital landscape.

'Infrastructural relations' and the Togolese state

Digital infrastructures⁶ are infrastructures that allow for digital interconnectivity by facilitating the flow of knowledge, data, information and the digital economy (Bowker, 2017; Edwards, 2017; Goffey, 2017; Starosielski, 2015). They are often considered 'critical infrastructures' (Nicole Stariosielski 2015: 55) because they are 'critical to a nation's economic, financial and social stability', and transport 99% of transoceanic digital communication (such as emails, calls, websites, social media and e-commerce platforms). They serve many purposes: from being considered drivers of international businesses through high-speed global transactions and job outsourcing; to being conduits for the circulation of digital transnational media; to the enforcement of national security and deployment of military tactics; and to the incubation of resistance through social media platforms such as the Arab Spring, Occupy Wall Street, #MeToo, Black Lives Matter and the Free Palestine Movement to name a few.

While Togo's digital infrastructures bear similarities to these purported uses, the Togolese state sees the use of digital infrastructures primarily to harness the country's digital economy for social and financial inclusion, and to digitalise the port of Lomé to become the premier logistics hub of West Africa. According to the *Ministère de l'Économie Numérique et de la Transformation Digitale* (MENTD), Togo's digital transformation relies on three main domains to operate: the (1) fixed telephone operators (*opérateur de téléphonie fixe*); (2) mobile phone operators (*opérateurs de téléphonie mobile*); and (3) internet service providers (*fournisseurs d'accès internet*). Within these domains circulate infrastructure materials that facilitate their operations, such as broadband lines, submarine cables, hardware devices, mobile phones, applications, digital services and many others. These materials are in themselves run by actors, stakeholders and end-users who shape the discourses, relations and terms of engagement, and who influence these infrastructures' efficiency and accessibility.

As Brian Larkin (2013) argues in *The Politics and Poetics of Infrastructure*, infrastructures possess a peculiar dual ontology as 'things' that enable the movement of other things, and as 'relations' between things that operate as systems. Here, I focus on the latter: the relations between things that govern the ways in which the systems of things are assembled and constituted, bearing in mind that things can refer to both humans and non-humans, as it is also a matter of political naming as to when humans are defined as objects and subjects for very specific purposes (Lemke, 2015; Mbembe, 2021). What I then refer to as 'infrastructural relations' are the *social relations of things* that allow for the systems to operate: between end-users, service providers, state and non-state actors, and the public and private sectors. Thinking through infrastructural relations through a particular form of abstraction that recognises, re-organises and relates different, often contradictory parts as deliberately selected relational partialities helps elucidate and understand power relations within a given infrastructural system.

While thinking through infrastructural relations bears similarities to 'assemblage thinking' (McFarlane, 2011; Tampio, 2009; Deleuze & Guattari, 2004), the basis of constitution for infrastructures is more apparent and adherent to urban logics, as well as the imaginaries and discourses being mobilised by various actors to serve a coherent purpose and carry a specific function. In the case of Togo, the state serves as the main actor that dictates the logic of the digital infrastructures' constitution, based on the blueprint for digital transformation outlined by MENTD. It primarily considers the telecommunications sector (the three main domains aforementioned) and all the actors involved in this sector as the main conduits for this transformation.

Pandemic solutionism and the Togolese state spectacle

States spearheading digital transformations in the Global South often harness the poetics of digital infrastructures to cement their power, and/or mask their own failures in some instances. In Ferenc David Markó's (2016) research on the deployment of state-of-the-art biometric identity management systems in South Sudan, the South Sudanese state makes use of high-modernist technologies to provide the illusion of success and counter the country's ranking as a 'failed state'. Electronic passports and first-class national identity cards become material-symbolic tools for seemingly successful negotiations between the state and its citizens, while masking the underlying problems of civil wars and humanitarian crises the state fails to address. The Togolese state, with its digital infrastructure development amidst an ongoing health crisis, appears no different.

During the COVID-19 pandemic, instantaneous transactions through digital means were seen by the state as primary solutions in what Maschewski and Nosthoff (2023) refer to as 'pandemic solution-ism' – or the belief in the potential of digital tools to solve complex crises. While Maschewski and Nosthoff's examples mainly look at Big Tech and its attempts to address the virological aspect of the crisis, the same preferential treatment for instantaneous, digital solutions is adopted by the Togolese state to cement their dominance by providing their own technical solutions to complex socioeconomic challenges. In addition to techno-solutionist approaches, Togo's ranking by development agencies as 'one of the poorest countries in the world' (BMZ, 2025; UNDP, 2024)⁷ further reinforces the Togolese state's dominance through its brokering status in acquiring monies for digital

infrastructure development in the form of international aid and foreign investment (see for instance World Bank, 2024).

As the material conditions of Lomé and many other cities in the Global South are distinct and far from the idealised and often theorised Global North, looking at how infrastructural relations are negotiated within this particular context allows us to de-centre hegemonic notions of digital transformation and its efficiency. In Lomé, where modernity and neoliberal reforms stand in dire contrast to the social, political and economic inequalities they claim to assuage, we see digital economies and infrastructures beyond their usual iterations and critiques of platform economies, information flows, data management, cognitive labour and surveillance capitalism (Graham, 2019; Harvey et al., 2017; Zuboff, 2019). We begin to look at the very core of digital infrastructures and their materiality: the undersea cables, 5G installations, data centres, and mobile phones, and how states and citizens (re)position themselves and engage with these systems of operation in the digitalising city (Figure 1).

Lomé's digital infrastructures: leapfrogging development?

Lomé is a city created by its port – the only deep-water port in West Africa. The port was initially built as a colonial wharf in 1904, and the city was then built around it by local and foreign traders and entrepreneurs (Santos, 2023; Marguerat, 1994). It has been a colonial city and a commercial centre at the onset and differs from a colonised traditional village with a pre-existing chief, with the exception of its autochthone settlers in Bè who initially gave the city its name: Alotimé, which means a place 'among



Figure 1. Map of Google's Equiano Cable (Telegeography, 2024).

the alo trees' in Ewé⁸. Lomé remained a settler port city for foreign and local traders under German 'protection' until 1914, and became the capital city during the French administration following its division between the French and the British in 1920.

Given Lomé's deep-water port and its strategic position in the region, the Togolese government aims to leverage this and transform Lomé to become the 'premier financial-logistics hub' of West Africa. This was made explicit in the country's *Plan National de Développement 2018–2022* or the 'PND', considered by state actors and private investors as 'the blueprint for Togo's future' in structurally transforming the Togolese economy. It primarily focuses on job creation and revenue generation, with possible spillover effects to vulnerable populations.

The PND has three pillars of strategy: (1) to establish a logistics hub of excellence and a first-class business centre in the sub-region; (2) to develop agricultural, manufacturing and extractive industries; and (3) to enhance social development and strengthen inclusion mechanisms (PND, 2018). These three axes, particularly the first and third, make use of the digital economy to reposition the port of Lomé as central to the region, develop the banking sector, and provide the fastest route to social and financial inclusion via the use of mobile phones. Digital infrastructures in Togo have now become a crucial site for development and are heavily reliant on foreign direct investment (FDI) (Figure 2).

It is also through the development of digital infrastructures that the government envisions efficiently providing public services, especially to vulnerable populations, via the 'dematerialisation' of state services. Some examples include the digitisation of birth certificates, ease of transaction in import–export customs operations, online tax payments, and mobile direct cash transfer schemes. This is part of the government's Togo Digital 2025 strategy which includes digital projects such as nationwide biometrics and the 'dematerialisation' of 75% of government public services by 2025. A reworked version of the government platform for public services was launched in June 2022 and currently offers digitalised state service procedures such as passport applications and tax payments.



Figure 2. PND's three pillars as photographed from an investment brief (photo by author, Lomé, June 2019).

'Saute de grenouille'

Despite these state-led digitalisation projects, some of Lomé's tech-savvy citizens seem cautious of the state's newfound obsession with digital infrastructure development. One makerspace founder called this type of development 'saut de grenouille' or leapfrogging. He shared that while tech spaces are recognised as initiators of digital transformation in Togo, with their 'expertise' often enlisted by government consultants, the government and their European partners fall short in sincerely making the development democratic and accessible. Makerspace and tech space founders, as well as their members, have been constantly disillusioned by the all-talk stance of the state and their funding partners in making the developments more practical and inclusive. Citizen-initiated tech spaces in Lomé are left to fend for themselves and receive little to no funding support, while the state has also started building their own tech spaces and incubators that put existing ones at risk.

During the 2019 Togo-EU Economic Forum, ⁹ the CEO of a pan-African bank remarked that instead of building schools, prioritising digital infrastructure development can be treated as a 'shortcut' to transmitting education. According to him, providing online learning platforms is much faster and cheaper than building physical schools. His suggestion was nonetheless met with much scepticism, as basic infrastructures and access to health care, potable water and electricity remain pressing issues in Togo and many parts of the African region (Ngwenyama et al., 2006; Alzouma, 2005) (Figure 3).

While it can be said that leapfrogging development 'is easier than a steady march' (Bowker, 2017: 401) and might appear more sensible as 'superstructural elements' are positioned to move far ahead in order to eventually pull with it the economic base in one fell swoop, there is often the misconception that once connectivity is in place, other benefits such as telemedicine, distance education, bridging the urban–rural divide and financial inclusion will immediately follow (Main, 2001). In the case of Togo, the overt optimism of the state in leapfrogging development was made more apparent during the



Figure 3. Togo-EU Economic Forum (photo by author, Lomé, June 2019).

COVID-19 pandemic when dematerialised state services and its ability to render instantaneous solutions were prioritised over providing basic health infrastructures.

In their reflection on the COVID-19 pandemic's effects on urban life, Marvin, McFarlane and other urban scholars (2023) point to the pandemic's tendency to accelerate certain urban processes and agendas while decelerating others due to the pandemic being an immediate 'threat to society' and the need to reassess priorities in response. As I illustrate further through the mobile cash transfer scheme Novissi, the Togolese state's dematerialised digital transactions appear to leap over the geographical and physical boundaries imposed by the COVID-19 lockdowns, accelerating the process of digital transformation to assuage the socioeconomic challenges that come with it. This acceleration of digital transformation continues after the pandemic and becomes part and parcel of what Marvin et al. (2023) call the 'post-pandemic' city – a city whose imaginaries, sociotechnical networks and infrastructural relations are radically transformed by the pandemic for the longer term. As a post-pandemic city, Lomé is characterised by accelerated neoliberalisation of digital infrastructures that are set to create jobs and new revenue streams in line with the state's economic blueprint – the PND.

Privatisation and the 'Plan National de Détournement'

The key players involved in developing the digital infrastructures of Togo are: (1) The World Bank through the West African Regional Communications Infrastructure Program (WARCIP); (2) Google through the Equiano cable; (3) private French internet service providers Group Vivendi Africa and Teolis; (4) Moov (Atlantique Telecom Togo) – the only private mobile network operator granted licence to operate in the country; and (5) Agou Holding, ¹⁰ the recent acquisitor of state-owned telecommunications company Togocom (formerly Togo Telecom/Togocel).

The WARCIP, funded by the World Bank and in cooperation with MENTD, aims to reinforce connectivity and lower the costs of access through the construction of new ICT infrastructures. World Bank currently finances 97.59% of MENTD while the remaining 2.41% is financed by the Togolese government (Development Aid, 2024). While the state seems to influence this development significantly, the PND's explicit strategy to neoliberalise development through public–private partnership has made a shell out of state-owned companies, making them mere conduits to bringing in private investment. For example, private internet service providers Teolis and Vivendi through CanalBox have mainly been responsible for deploying fibre optics through electricity cables in cooperation with the *Compagnie d'Energie Electrique du Togo* (CEET). This then resulted in 80% coverage of Grand Lomé in both electricity and internet. To add, narratives of national development such as the PND seemingly mask the continuities of colonialism in developing digital infrastructures, as it remains reliant on former colonial ties with French private companies and intergovernmental agencies such as the World Bank.

In November 2019, the Togolese government declared Agou Holding the majority stakeholder of state-owned telecoms company Togocom at 51% through their investment of approximately 160 B FCFA (245 M EUR) in infrastructure development. These investments are said to cover the introduction of new technologies, such as the restructuring of the mobile money distribution network, solutions for e-administration and e-justice, private sector platforms and communication tools for entrepreneurship, and the installation of 5G. In 2021, Togo is said to be the first country in West Africa to have 5G connection. The majority of mobile phone users in Lomé perceived this as a hoax at that time and had no means of verifying the presence of the newly installed infrastructure, as 5G compatible phones remained inaccessible and unaffordable for the majority of its citizens.

At present, Google is the main investor in the country's digital infrastructure. The arrival of the Equiano cable in Lomé was announced in March 2022 and was declared operational in August 2023. The Equiano landing in Togo is a public–private joint venture with *Société d'Infrastructures Numériques* (SIN) and CSquared, a Uganda-based telecommunications infrastructure company that

bested established West African tech hubs during the bidding. This joint venture called CSquared Woezon (woezon means 'welcome' in Ewé) currently manages the landing station and the fibre optics cable running throughout West Africa. The Equiano landing cable, the first landing point in the African continent, is said to create 37,000 jobs in Togo and double the increase of internet speed by 2025.

Despite these investments, the concentration of these developments remains within the confines of Lomé, as private interests rely on having a market for recuperating their infrastructure investments. Cities are often seen as sites for infrastructure developments due to the preference of joint ventures and investors to play safe and rely on supply-side investments in places that already have existing infrastructures and potential clients. As such, digital infrastructure developments do not necessarily increase global interconnectivity but simply reinforce connectivity in places that were already previously connected (Starosielski, 2015).

Like most investment-seeking cities, Lomé stands as a 'site for neoliberal experimentation' (Nubukpo, 2019; Ward and Swyngedouw. 2018) marked by real-time privatisation and deregulation of digital infrastructures. While the state relies on the neoliberal tactics of private—public partnership, funding coursed and consolidated through the authoritarian state is said to have resulted in revenue going directly to the pockets of those benefiting from the state's patronage system. As Charles Piot. (2010: 35) describes the longstanding tactics of privatisation in Togo since the structural adjustment programmes, 'Now potential earnings were immediately privatised, with sources of state revenue becoming avenues for private income for multiple state actors'.

Billboards of the PND lined up Lomé's streets and were used as endless talking points for the 2020 Presidential Elections. The political word-play mastered by the Togolese through decades of curtailed freedom of expression (Toulabor, 1994, 1981) has resurfaced in response. *Plan National de Développement* earned the nickname *Plan National du Détournement* from those who believe that 'the blueprint for Togo's future' is actually a blueprint for state corruption outlining their new sources of revenue. Digital infrastructure in Togo remains a quasi-monopoly beset by a lack of competition, with high costs rendering it accessible only to those who can afford it. Even the necessity of 5G installation is questioned not just by Eduin's boss, but also by the wider Togolese population.

When the deterministic claims of neoclassical economics become the basis for fashioning futures (Appadurai, 2013), with, for instance, 5G connectivity being projected to bring 9.28 B EUR revenue to the continent (Jeune Afrique, 2019) or the Equiano cable creating 37,000 jobs, digital infrastructure investment makes sense and there is little question on the leapfrogging strategy. Billions of projected revenue gloss over the urban inequalities it tries to level out. How the discourses and seemingly contradictory interests of digital infrastructure development play out in Lomé and the lives of its inhabitants, the supposed beneficiaries of these developments, will be the main point of discussion in the remaining sections.

Incubating politics in digital spaces: the citizen-turned-private sector

According to a young start-up founder, one of the main criticisms of Togo's digital ecosystem is the lack of 'equitable justice' in providing access to infrastructures and connectivity throughout the country. While, for instance, the state claims 80% fibre optics coverage of the city, only 19% of the population is able to use mobile broadband (Togo First, 2019). With the failure of structural adjustments and the continued 'détournement' of state budgets, Togo is currently considered in investment portfolios as the 12th poorest country in the world (Irwin-Hunt, 2020) and has been heavily reliant on the private sector for the implementation of its development projects.

As the minister of MENTD Cina Lawson pointed out to potential investors during the Togo-EU Economic Forum.

One of the key points of the PND is for our national development policy to be mainly financed by the private sector. That's why you're all here today. Today, what we want to do is to tell you that we do indeed need to digitalize our economy, and we want to do it with you.... We are talking about digitalization, it is a fashionable term, but the first thing is that it is not the state that implements it.... We are saying that there have been many advances in the digital sector, and I am very happy about that in Togo, but these advances are being implemented by the private sector, by the actors in that sector...

This emphasis on the role of the private sector has been used to paradoxically justify the withdrawal of the state, mostly in terms of financial responsibility, while remaining the main conduit for the PND's implementation. At the same time, the state is also able to discursively manipulate the shifting of responsibility by changing the definition of the 'private sector' depending on its perceived audience. During the presidential elections in February 2020, a government-sponsored tech incubator became grounds for campaigning for President Faure Gnassingbé, as the tech incubator was established within the PND blueprint. Almost all entrepreneurial workshops and activities held within the space pay homage to the PND and to 'His Excellency, the President of the Republic', giving new use to tech incubators not just as spaces for incubating entrepreneurial ideas but also as spaces for incubating political influence. In one of their monthly talks to promote youth entrepreneurship, the guest speaker, who also happens to be the presidential adviser for the execution of the PND, stated to the audience of young entrepreneurs:

The private sector is important in implementing the PND. And when we say private sector, we mean *you*. You are the private sector.

To the eyes of the state that aims to mobilise as much resources as it can, the blurring of the private and the public is a playable advantage, as the state discursively shifts its citizens from being subjects in need of public welfare to exploitable 'private' neoliberal subjects that can contribute to the execution of the PND and the economic growth of the country (Figure 4).

The same can be said of digital infrastructure development, wherein the promise of wider coverage and accessibility meant that for people to have access to digital infrastructures, they must first be able to pay for their connectivity as consumer-citizens. This neoliberal approach to digital infrastructure development does not necessarily directly translate to the state providing access and inclusion to its citizens. It relies on citizens' wilful engagement to include themselves financially and socially in the digital economy. Even if the justification for harnessing the potential of the digital economy was based on the upsurge of mobile penetration, mobile penetration has relied on people finding ingenious ways to gain access to digital services through repairing and trading second-hand mobile phones, or hacking electricity and other people's Wi-Fi, instead of these services being provided by the state.

In questioning the social relevance and access to 5G, the start-up founder who mentioned the lack of equitable justice added: 'People don't even have mobile phones'. While the state, together with international agencies such as the World Bank and multinational private investors such as Google and Agou Holding, claims to provide the conditions for financial and social inclusion, it is Lomé's inhabitants who create new forms of citizenship through their own engagements with digital infrastructures. They do so in order to find latent solutions to the lack of equitable justice, yet their successes are nonetheless co-opted as the state's own doing.

Santos II



Figure 4. Togo's young tech entrepreneurs (photo by author, Lomé, February 2020).

These novel forms of citizenship and participation through ingenious engagements with urban infrastructures are by no means exclusive to Lomé. In Mike Degani's (2022) ethnography of electric power supply in Dar es Salaam, Tanzania, access to the power grid is a matter of constant modal negotiation between citizen and state, as both engage in some form of socially acceptable theft or 'parasitism' by feeding off contrived arrangements to deliver electricity and distributional justice, especially for urbanites who otherwise would not have access to it. Nikhil Anand (2017) similarly illustrates in his work on Mumbai's hydraulic infrastructures how urban settlers take matters of water provision into their own hands instead of waiting on the 'city to act', claiming their own form of hydraulic citizenship while revealing the inefficiencies of the state and its water department in provisioning marginalised citizens and in exerting technocratic control over water as a resource. Across the Global South, the failure of the state to produce the socio-economic results of the projects it has promised and subsequently privatised are taken over by the ingenuity of its citizens – an ingenuity that, while being celebrated for its ability to produce results for the state, speaks volumes of the state's inefficiency. It is in these instances that 'ingenuity' becomes a form of socio-economic critique (Santos, 2023), revealing the smoke and mirrors upon which the state has built its spectacle of success: the structural and global inequalities that the state perpetrates in its efforts to maintain the status quo.

It is also important to note here, however, that this social condition of the citizen-turned-private sector animates how digital futures and everyday utopias are constructed and materialised or turned into reality by Lomé's citizens. Togo's discursive mobilisation of its citizens as the private sector, or of private investment serving public interests, makes use of the spectacle of modernity as part of the poetics of digital infrastructures (Larkin, 2013) in justifying neoliberal processes and the continuous coercion it employs upon its citizens. Nonetheless, it is also through the affective affinities generated by the promise of infrastructure in its poetics (Degani 2022; Appel et al., 2018; Larkin, 2013) – such as hope in the instantaneous changes that can be brought about by digital transformation – that

people are able to negotiate and reconcile the contradictions of the coercion and monopoly imposed by the state, and their own dreams and aspirations with regards to it. As Eduin said of his involvement in the 5G installation, 'I'm still proud of my job even if I don't agree with everything the administration does'.

The case of 'Novissi' and the COVID-19 lockdowns

Once I arrived in Belgium after being called back by the university in March 2020, I immediately contacted my interlocutors to update them on my situation and gather news on theirs. Most of the people I work with are small-time mobile phone repairers, university students and young tech space founders who were quick to respond with calls for help as the lockdowns have mainly suspended their sources of livelihood. After a few days of getting in touch with them and keeping up to date, the instructional videos for the COVID-19 cash transfer 'Novissi' began circulating among our WhatsApp groups. Yet when I asked them whether they had registered and received their Novissi, they simply said: 'We can't. We don't have a voter's ID'. Disillusioned by Togo's tumultuous political history, most of my interlocutors no longer find any use for the voter's ID. For them, not having a valid voter's ID reflects their distrust of the state, and they merely see the document as another means for state surveillance (Figure 5).

Novissi, or 'solidarity' in Ewé, is an unconditional cash transfer scheme employed by the Togolese government for workers in the informal sector whose livelihoods have been disrupted by the COVID-19 lockdowns¹¹. Registered workers 18 and above are said to receive 30% of their minimum wage every fortnight through the course of the lockdowns, as long as they can provide proof of their identity via a valid voter's ID. Women, said to be the priority of Novissi, receive 6125 FCFA or 8.97 EUR per fortnight (a total of 12,250 FCFA/month or 17.94 EUR/month), while men receive 5250 FCFA or 7.69 EUR (a total of 10,500 FCFA/month or 15.38 EUR/month). The aim of Novissi is to help Togolese citizens with their daily subsistence, on top of the waived electricity and water charges during the 3-month lockdowns from April to June 2020 (Novissi, 2020; FT, 2020).



Figure 5. Novissi social media advertisement in circulation (Novissi, 2020).

To the credit of Novissi, the seeming efficiency of utilising existing digital infrastructures to facilitate mobile cash transfers has been lauded by the international community. Among those in praise of Novissi's efficacy are 2019 Nobel prize winners for economics Esther Duflo and Abhijit Banerjee, who cited Togo's scheme as an example of how their proposed universal ultra-basic income (UUBI) can be a quick solution to the financial distress caused by the pandemic in impoverished countries. In an article for *The Guardian*, they wrote:

The government [of Togo] has also launched a cash transfer scheme linking an electronic wallet to peoples' cellphones; it already has 1.3 million people registered and has sent money to 500,000 in the region of Greater Lomé (the capital) alone. The good news is that many countries, particularly those in Africa, already have the infrastructure to rapidly transfer money across a population using cellphones. Many people already use these systems in private exchanges, so government schemes based on this infrastructure can be up and running in a matter of days. If phone data indicates that some regions are experiencing greater economic distress, the transfer could be more generous in those places. (Duflo & Banerjee, 2020)

The pandemic has positioned digital infrastructures as the 'solution', primarily due to its ability to serve public interests amidst a global health crisis. While the pandemic has also forced the Togolese state to re-assess its priorities by immediately ordering additional respirators and hospital equipment, it has legitimised the presence of digital infrastructures because of its efficiency in delivering dematerialised state services in the form of mobile money cash transfers. Nonetheless, the question remains whether the cash transfer scheme has indeed been disbursed to its supposed beneficiaries, or is merely another form of discursive state spectacle that claims to have distributed approximately 32.8 M EUR to over 920,000 vulnerable citizens (25% of the Togolese population) during the pandemic (World Bank, 2023).

A few months further into the lockdowns, I began asking again if there were any improvements in the financial situation of my interlocutors, and if they had finally received their share of the Novissi. I received the same negative responses, and rather more disconcerting ones like identity theft and hacking within the system. Yao, an English teacher who had lost his job due to the closing down of schools, tried to register for the Novissi only to find that somebody had already registered under his name and claimed his share of the direct cash transfer. Yao was not the only one who fell victim to identity theft, as many others have voiced their concerns over WhatsApp and Youtube indicting Novissi as a scam.

While others have said they know of beneficiaries who have received their part of the cash transfer, many have also come up with conspiracy theories of the Novissi being recuperated from their own pockets. In a WhatsApp group of one of the makerspaces, the members started sharing stories of how they lost 5000 FCFA (7.62 EUR) worth of mobile data overnight, which should have lasted them 30 days at most. They seem to believe that this is how the state, together with mobile companies, has been recuperating their losses from Novissi – that they have again been mobilised as the 'private sector' that funds public welfare instead of being its beneficiaries.

Conclusion

Digital infrastructure development has followed several trajectories in the African continent, mostly stemming from a neoliberal narrative that focuses on economic growth and job creation. As Togo follows suit with its own trajectory, what emerges are seeming contradictions within digital infrastructure development, such as the adoption of neoliberal processes by an authoritarian state, and the turning of its citizens to the private sector serving public interests. These contradictions of the public and the private, the neoliberal and the authoritarian, are discursively mobilised by the state to redefine their citizens either as welfare beneficiaries or as private neoliberal subjects tasked to propel Lomé's digital transformation.

As can be seen with infrastructural relations between the various public and private actors in Togo's digital transformation, digital infrastructures and their development stand as urban processes that are continuously being made and remade depending on how their contradictions are negotiated, mobilised or instrumentalised by those who engage with it. Certain circumstances such as the COVID-19 pandemic have a way of accelerating and decelerating these urban processes, reinforcing the power of the state and its preferred actors, and re-organising the constitution of infrastructures and its relations to make infrastructures 'work', even as mere spectacle. Nonetheless, the poetics of digital infrastructures go beyond its discursive framing as one that catapults Togo into regional and global integration, to one that invites critique on the perceived material conditions within which its processes unfold.

Digital infrastructures allow the inhabitants of Lomé to reflexively question its existence amidst the lack of other basic facilities and services, and to come up with ways to wilfully include themselves and provide solutions to its inaccessibility. Lomé's inhabitants create their own forms of citizenship and participation through their everyday practices of hacking, repairing and repurposing of mobile phones and discarded digital materials in an attempt to deliver themselves the 'equitable justice' that is lacking from the state-led digital transformation. Citizens look to their own contributions to Lomé's digital transformation and are often reflexive of the instances when their efforts are being co-opted. They provide critique of the state's efforts through, for instance, wordplay on the state blueprint, resistance to acquiring a voter's ID, or even conspiracy theories over cash transfer schemes.

Nonetheless, Lomé's citizens also possess affective affinities to the promise of digital infrastructure in its poetics and find hope in instantaneous change. While not always easy, they attempt to negotiate the contradictions and coercions imposed by the state as citizens-turned-private sector and their own dreams and aspirations in relation to it. They do so by anchoring it on the promise that digital infrastructures are set to completely 'change their lives in such a short time', almost as instantaneously as digital transactions, even if the state is not always as agreeable as Eduin thinks.

Acknowledgements

This research would not have been possible without the participation of Lomé's young tech entrepreneurs, university students, start-up founders and members of tech incubators and makerspaces. My sincere thanks to the University of Lomé for hosting my research, and for the CityLabs project in KU Leuven, of which this particular research in Lomé is part.

Declaration of conflicting interests

The author declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article

Ethical approval

Conducting ethnographic research in Lomé, Togo received ethics approval from the KU Leuven Social and Societal Ethics Committee (SMEC) under approval number G2018101358 on 19 March 2019, and its amendments to conducting research during the COVID-19 pandemic on 7 December 2020.

Informed consent

All participants provided written and/or oral informed consent prior to participating. All participants are anonymised and/or are given pseudonyms unless otherwise stated, and as requested by the participants themselves.

Funding

Research in Lomé, Togo was funded by Bijzonder Onderzoeksfonds Reference No. C14/18/023 under the Research Project CityLabs – Inventing the Future, KU Leuven, Belgium.

Bijzonder Onderzoeksfonds KU Leuven (grant number C14/18/023).

ORCID iD

Janine Patricia Santos (D) https://orcid.org/0009-0006-2314-7568

Notes

1. Participants have been anonymized and/or given pseudonyms, with the exception of public figures and unless otherwise requested by the participant.

- 2. Three companies were working on the 5G installation in Togo at that time: Nokia, Ericsson and Huawei.
- 3. Pre-pandemic, Togo had only four ICU beds for their population of approximately 8 million. By April 2020, the Togolese government had ordered additional medical equipment, including 250 respirators, and had turned the Hôtel Ibis into a quarantine centre.
- 4. In May 2019, a constitutional change approved by the parliament allowed then-president Faure Gnassingbé to run for another two consecutive terms until 2030. This resulted in a landslide win during the February 2020 elections. As Faure Gnassingbé once said, 'My father told me to never leave power' (Koutonin, 2020), making the Gnassingbé dynasty the second longest-running dictatorship after North Korea.
- 5. Fieldwork was conducted from April 2019 to June 2021, with an interruption from mid-March 2020 to early 2021 due to the COVID-19 pandemic.
- Digital infrastructures are also alternatively referred to as knowledge infrastructures, contemporary communication infrastructures, data infrastructures, network infrastructures, and information infrastructures, among others.
- 7. According to UNDP's Human Development Report in 2024, Togo ranks 163 out of 193 countries based on their Human Development Index (UNDP 2024).
- 8. Ewé is one of the main languages spoken in the Southern parts of Togo and Ghana. Its colloquial version Mina, which is more commonly spoken in Lomé and the Maritime Region (Southern Togo), is a derivative of Ewé with a mix of French, German, English and Portuguese words that have been accumulated throughout years of colonisation and encounters with traders in the port city.
- 9. The 2019 Togo-EU Economic Forum was a two-day high-level investment meeting initiated by the Togolese government to present the PND to potential European investors. The economic forum was attended by diplomats, policymakers, investors from public and private sectors, local and international entrepreneurs, and by President Faure Gnassignbe and then-Prime Minister Komi Klassou. Panellists and keynote speakers included some of the country's top investment consultants, such as Dominique Strauss-Khan, Lionel Zinsou and IFC-WB West Africa Manager Ronke Ogunsulire.
- 10. Agou Holding is a pan-African consortium composed of Axian Group and Emerging Capital Partners (ECP), two of the biggest private investors in the telecommunications, banking and energy sectors in the African region. Their current investments include Ecobank, Orabank, MTN Côte d'Ivoire, Telma and Airtel.
- 11. The official lockdowns in Togo began on 20 March 2020 and were lifted on 9 June 2020. Imposed restrictions include international and local travel bans, curfews from 19 h to 6 h, closing of schools, universities and markets, and bans on mass gatherings and communal prayers.

References

Alzouma G (2005) Myths of digital technology in Africa: Leapfrogging development? *Global Media and Communication* 1(3): 339–356.

Anand N (2017) Hydraulic City: Water and the Infrastructures of Citizenship in Mumbai. Durham: Duke University Press.

Appadurai A (2013) The future as cultural fact. London: Verso.

Appel H, Anand N and Gupta A (2018) Introduction: Temporality, politics and the promise of infrastructure. In: Anand N, Gupta A and Appel H (eds) *The Promise of Infrastructure*. Durham: Duke University Press, 2–38. BMZ (2025) Togo. Available at: https://www.bmz.de/en/countries/togo (accessed 6 January 2025).

- Bowker G (2017) How knowledge infrastructures learn. In: Harvey P, Jensen C and Morita A (eds) *Infrastructure* and Social Complexity: A Companion. New York: Routledge, 391–403.
- Degani M (2022) The City Electric: Infrastructure and Ingenuity in Postsocialist Tanzania, 1st ed. Durham: Duke University Press.
- Deleuze G and Guattari F (2004) A thousand plateaus. New York: Continuum.
- Development Aid (2024) Ministère de l'Economie Numérique et de la Transformation Digitale Togo Funding Agencies. Available at: https://www.developmentaid.org/donors/view/146918/ministry-of-posts-digital-economy-and-technological-innovation-togo-ministere-des-postes-de-leconomi (accessed 28 June 2024).
- Duflo E and Banerjee A (2020) Coronavirus is a crisis for the developing world, but here's why it needn't be a catastrophe. In: The Guardian. Available at: https://www.theguardian.com/commentisfree/2020/may/06/vulnerable-countries-poverty-deadly-coronavirus-crisis (accessed 1 June 2020).
- Edwards P (2017) Downscaling: From global to local in the climate knowledge infrastructure. In: Harvey P, Jensen C and Morita A (eds) *Infrastructure and Social Complexity: A Companion*. New York: Routledge, 339–351.
- FT (2020) Mobile cash is the best way to help Africa fight COVID-19. In: Financial Times. Available at: https://www.ft.com/content/adc604f6-7999-11ea-bd25-7fd923850377 (accessed 24 May 2020).
- Goffey A (2017) Machinic operations: Data structuring, healthcare and governmentality. In: Harvey P, Jensen C and Morita A (eds) *Infrastructure and Social Complexity: A Companion*. New York: Routledge, 365–378.
- Graham M (2019) Digital Economies at Global Margins. Cambridge: MIT Press.
- Hart G (2018) Relational comparison revisited: Marxist postcolonial geographies in practice. *Progress in Human Geography* 42(3): 371–394.
- Harvey P, Jensen C and Morita A (eds.) (2017) *Infrastructures and Social Complexity: A Companion*. New York: Routledge.
- Irwin-Hunt A (2020) Togo's reforms spur FDI renaissance. In: FDI Intelligence. Available at: https://www.fdiintelligence.com/content/data-trends/togos-reforms-spur-fdi-renaissance-77281 (accessed 28 June 2024).
- Jeune Afrique (2019) Télécoms : objectif 5G. In : Jeune Afrique. Available at: https://www.jeuneafrique.com/mag/692438/economie/telecoms-objectif-5 g/ (accessed 1 June 2020).
- Koutonin M (2020) Togo has long been mired in political crisis and elections won't change that. In: The Guardian. Available at: https://www.theguardian.com/global-development/2020/feb/21/togo-has-long-been-mired-in-political-crisis-and-elections-wont-change-that (accessed 29 May 2020).
- Larkin B (2013) The politics and poetics of infrastructure. Annual Review of Anthropology 42: 327–343.
- Lemke T (2015) New materialisms: Foucault and the 'government of things'. *Theory, Culture & Society* 32(4): 3–25.
- Main L (2001) The global information infrastructure: Empowerment or imperialism? *Third World Quarterly* 22(1): 83–91.
- Marguerat Y (1994) La naissance d'une capitale africaine : Lomé. Revue Française D'histoire D'outre-mer 81(302): 71–95.
- Markó FD (2016) We are not a failed state, we make the best passports: South Sudan and biometric modernity. *African Studies Review* 59(2): 113–132.
- Marvin S, McFarlane C, Guma P, et al. (2023) Post-pandemic cities: An urban lexicon of accelerations/decelerations. *Transactions of the Institute of British Geographers* 48: 452–473.
- Maschewski F and Nosthof A (2023) Pandemic solutionism: The power of big tech during the COVID-19 *Crisis*. *Digital Culture & Society* 8(1): 43–66.
- Mbembe A (2021) Out of the Dark Night: Essays on Decolonization. New York: Columbia University Press.
- McFarlane C (2011) Assemblage and critical urbanism. City 15(2): 204–224.
- Ngwenyama O, Andoh-Baidoo F, Bollou F, et al. (2006) Is there A relationship between ICT, health, education and development? An empirical analysis of five West African countries from 1997–2003. *The Electronic Journal of Information Systems in Developing Countries* 23: 1–11.
- Novissi (2020) Programme Novissi. Available at: https://novissi.gouv.tg (accessed 30 May 2020).

Nubukpo K (2019) L'urgence africaine. Paris: Odile Jacob.

Ollman B (2015) Marxism and the philosophy of internal relations; or, how to replace the mysterious 'paradox' with 'contradictions' that can be studied and resolved. *Capital & Class* 39(1): 7–23.

Piot C (2010) *Nostalgia for the Future: West Africa after the Cold War*. Chicago: University of Chicago Press. PND (2018) *Plan National de Developpement 2018-2022*. Lomé: République Togolaise.

Santos JP (2023) We deserve new things': (anti-)bricolage in Lomé's makerspaces. Africa 93(4): 496–521.

Starosielki N (2015) The Undersea Network. Durham: Duke University Press.

Tampio N (2009) Assemblages and the multitude: Deleuze, hardt, negri and the postmodern left. *European Journal of Political Theory* 8(3): 383–400.

TeleGeography (2024) Submarine Cable Map. Image. Available at: https://www.submarinecablemap.com/(accessed 28 June 2024).

Togo First (2019) Togo: Only 20% of the population uses mobile internet. In: Togo First. Available at: https://www.togofirst.com/en/itc/1904-2989-togo-only-20-of-the-population-uses-mobile-internet (accessed 21 February 2020).

Toulabor C (1981) Jeu de mots, jeu de vilains. Politique Africaine 3: 55-71.

Toulabor C (1994) Political satire past and present in Togo. Critique of Anthropology 14(1): 59–75.

UNDP (2024) Human Development Report 2023-2024. Available at https://hdr.undp.org/content/human-development-report-2023-24 (accessed 6 February 2025).

Ward C and Swyngedouw E (2018) Neoliberalisation from the ground up: Insurgent capital, regional struggle, and the assetisation of land. *Antipode* 50(4): 1077–1097.

World Bank (2023) Novissi Togo - Harnessing Artificial Intelligence to Deliver Shock-Responsive Social Protection. Washington, DC: World Bank.

World Bank (2024) Togo: \$100 Million in Funding to Accelerate Digital Transformation. Available at https://www.worldbank.org/en/news/press-release/2024/12/19/togo-100-million-in-funding-to-accelerate-digital-transformation (accessed 6 February 2025).

Zuboff S (2019) The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. New York: Public Affairs.

Author Biography

Janine Patricia Santos, PhD, is a social anthropologist focusing on global inequalities and embodied practices in digital transformations. After completing her PhD at KU Leuven Belgium, she balances her time between applied research and policymaking as a Research Affiliate at the Department of Social and Cultural Anthropology, KU Leuven and as a Policy Advisor for the European Digital Rights.