FinTech in Africa: An Editorial Introduction

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Abstract

globe over the last decade or so, constituting novel 'FinTech' economies. Although FinTech is registering across critical social scientific research, insufficient dedicated attention has been paid to FinTech in Africa. Bringing together scholars from multiple disciplines and fields, this special issue of eight papers asks what is different about the forms that FinTech is taking in Africa, and considers how foregrounding developments on the continent might reshape social science

Applications of digital technologies to retail money and finance have gathered pace across the

research agendas and political conversations around FinTech globally. In this Introduction, we show how the papers make three main conceptual and analytical moves to attune research to the distinctive features of FinTech in Africa, thereby shifting the focus for research (1) from global

financial inclusion agendas to colonial histories and presents, (2) from economic formalization to multiple modes of economization, and, (3) from techno-economic ecosystems to statecraft and

international security.

Keywords: FinTech; Africa; digital platforms; colonialism; modes of economization; statecraft.

Applications of digital technologies to retail money and finance have gathered pace across

the globe over the last decade or so, constituting novel 'FinTech' economies of payments,

remittances, investment, insurance, credit, and money management of all kinds. Although the

emergence and expansion of FinTech is registering across critical social scientific research, the

premise for this special issue is that insufficient dedicated attention has to date been paid to

FinTech in Africa. Given the existing critical literature primarily concentrates on FinTech in the

United States, China, and Western Europe, our aim is to bring together scholars from multiple

disciplines and fields to explicitly focus on FinTech in Africa. We want to ask what is different

about the forms that FinTech is currently taking on the continent, and consider how

foregrounding distinctive developments and experiences in Africa might feed into and reshape

social science research agendas and political conversations around FinTech globally. Put another

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way, we want to contribute to decolonializing knowledge about FinTech by 'recentring the margins' (Breckenridge and James 2020), making the ostensible periphery of the global FinTech landscape our focal point and offering the kinds of pluriversal analyses which can begin to challenge universalistic accounts based exclusively on developments in the Global West and East (Mohamed et al. 2020, Mignolo 2012).

A collection concentrating on FinTech in Africa is both overdue and timely. One of the most remarkable features of the global growth of FinTech economies over the last fifteen years is the traction gained by mobile money in Africa; that is, receiving, storing and spending money using a mobile phone. Despite fragmented national regulatory systems and uneven distribution due to low penetration of mobile and internet infrastructures in rural areas, Africa is the largest adopter of mobile money systems globally, accounting for roughly half of the world's registered mobile money accounts and 70 percent of the global mobile money transaction value reported in 2021 (GSMA 2022, see also Holtz 2021, FT 2019). Mobile telecommunications corporations are therefore major players in FinTech and financial inclusion in Africa, but do not feature so prominently in the institutional landscape of FinTech economies elsewhere in the world.

While the application of telecommunications and digital technologies has been a 'driver for accelerated provision of financial services' in Africa (Ndung'u 2018) – on some measures, 'financial inclusion' almost doubled across the continent from 23 to 43 percent between 2011 and 2017 (Gandhi 2019) – this has, to date at least, largely centered on innovations in mobile payments. Consider, for instance, Kenya. The country is widely cited as the birthplace of FinTech in Africa and the most highly-evolved national FinTech economy on the continent. It is also home to M-Pesa which, with over 51 million users across seven countries, is currently Africa's largest FinTech platform (Vodafone 2022).¹ Formal financial inclusion tripled to 83 percent of the Kenyan population during a decade or so of rapid change (FinAccess 2019), but it is mobile money rather than traditional bank accounts which is responsible for the majority of the increase: nearly 80 percent of the population are registered mobile money account holders, but only 30 percent of households have access to banking. While evidence about the economic impact of the COVID-19 is still emerging, the pandemic does appear to have further increased the use and up-take of mobile payments in Africa (CCAF 2020). In 2020, Sub-Saharan Africa reported the second largest

growth in transaction volumes for payments globally, and payments firms reported a 22 percent increase in numbers of new users.

Also illustrative of the need for dedicated critical attention to be given to FinTech in Africa is a wave of global venture capital investment in the equity of the continent's digital technology start-up and early-stage firms. Predating and accelerating during the pandemic years, this is a wave of investment which targets FinTech in particular. FinTech in Africa is viewed as a fruitful opportunity by global investors, due to fast-growing populations, expanding urban middle classes, and the state of the existing 'undeveloped financial services industry' (Holtz 2021, FT Partners 2019). There have been year-on-year increases since 2014 in the aggregate volume and average investment size of venture capital transactions in Africa - especially in firms in Nigeria, South Africa, Egypt, Kenya, Senegal and Ghana - although the average size of transactions remains relatively small in global terms (Holtz and Golubski 2021, AVCA 2019). In 2021 alone, USD 5.2 billion of venture capital investments were made in Africa, a total greater than the four previous years combined (Partech 2021, p. 10-11). And, FinTech was very much to the fore, attracting USD 3.2 billion worth of investment in 2021 (62 percent of the total), and accounting for 45-95 percent of all deals across the six leading countries noted above (p. 22-23).

Although extensive investment in FinTech firms is underway across the globe (CBInsights 2021), one of the key differences in Africa is that the start-ups funded by these deals are typically not founded by locals. While African FinTech entrepreneurship frequently aspires to change the old ways of doing things, it is often embedded in gendered, racialized and colonial hierarchies and works with the 'received and appropriated practice' of Silicon Valley which stresses speed, scale and disruption (Friederici, Wahome and Graham 2020, p. 155). White male immigrants from the Global North exhibit considerable ease in setting up digital companies in Africa. Such 'white fronting' is reproduced by investor preferences for founders with certain educational and institutional backgrounds, and also by the procurement practices of African governments which continue to favor business partners from former colonial centers. Recent media reports confirm the 'humiliation, discrimination, stereotyping and sometimes racism' experienced by African entrepreneurs in their interactions with global investors (Madowo 2020, Njoki and Gugu 2020). Expressed in quantitative terms by a survey of CEOs of African startups who raised investment in

2021, Africa-educated CEOs raise less funding as compared to their foreign-educated counterparts—both in terms of number of deals (44 percent) and in amount raised (28 percent) (Cuvellier 2022).

Our Special Issue on FinTech in Africa builds on earlier scholarship published in the *Journal of Cultural Economy (JCE)* which has been a key forum for FinTech research. FinTech economies of digital financial inclusion in India (Ertürk, Ghosh and Shah 2022) and alternative and experimental FinTech projects (Faustino 2022) feature, for instance, in a recent Special Issue on the role of stories and tales in the remaking of contemporary finance (Lopez, Faria and Faustino 2022). *JCE* has also published research into FinTech to address mobile money and payments (Tooker and Maurer 2016, O'Dwyer 2019, Baig 2020, McDonald and Li Dan 2021), cryptocurrencies and blockchain technologies (Rella 2020), new forms of lending (Kear 2018), gamification discourses (van der Heide and Želinský 2021), and the limits of technological transformations in banking (Kværnø-Jones 2022). Although Africa is occasionally present across this wide-ranging body of work, it does not typically provide the substantive focus for FinTech research.

Evolving from an initial online workshop for invited participants organized by the editors in January 2021, the special issue features papers by authors from Anthropology, Development Studies, Economics, Geography, History, Political Science, and Sociology. The papers also present a range of empirical studies - from East, West, and Southern Africa, and of key African FinTech hubs, such as Cape Town. They combine specific geographical coverage with analytical attention to the multi-scalar configurations of FinTech, from the 'macro' to the 'micro', including examination of global BigTech companies and incumbent telecommunications firms, global development industry actors, consultants and state institutions, FinTech startups and their investors, and diverse formal and informal economic networks of FinTech users. Moreover, although mobile money, payments and remittances rightly provide an important focus for the special issue and for research into FinTech in Africa more broadly, the papers will address an array of FinTech economies, including credit and lending, micro-insurance, applications of blockchain technologies, and the incorporation of digital technologies into informal monetary and financial relations.

The papers in this special issue do not seek to offer a common and single theoretical agenda for research into FinTech in Africa. From different disciplinary, geographical and empirical starting points, and developing a diverse range of broad-based cultural economy approaches, the papers each offer their own analysis in the context of somewhat different academic and political debates. However, when they are read together and in productive relationships with one another, the papers in this special issue do make three sets of conceptual and analytical moves to critically attune research to the distinctive features of FinTech in Africa, shifting the focus for research (1) from global financial inclusion agendas to colonial histories and presents, (2) from economic formalization to multiple modes of economization, and, (3) from techno-economic ecosystems to statecraft and international security. In the remaining sections of this Introduction, we elaborate on the main conceptual and analytical moves made across the special issue to foreground FinTech in Africa, briefly discussing how each paper contributes to the making of these moves and reflecting on wider implications for global research into FinTech.

From Global Financial Inclusion to Colonialism

The first conceptual and analytical shift made by papers in this special issue concerns the global macro-political economic context of FinTech in Africa. The Special Issue seeks to place FinTech in Africa in the substantive context of colonial legacies and presents. This contrasts with critical accounts of FinTech in Africa that tend to situate analyses in the context of global development and poverty programs, offering a counter-weight to policy, consultancy, academic-practitioner and media agendas which emphasize how FinTech is serving to advance 'financial inclusion' and 'banking the unbanked'. 'Financial inclusion' is regarded by the Group of 20 and other global actors as an essential movement towards an 'Innovative, Interconnected and Inclusive World Economy' (G20 Principles for Innovative Financial Inclusion, 2010;² Maya Declaration, 2011³). According to the World Bank (2018), for example, roughly 40 percent of the global adult population (~1.7 billion people) are outside of formal financial market structures, and Africa is home to roughly three-quarters of these so-called 'unbanked' populations who typically reply on cash and unregistered economic transactions (Frost 2020, p. 5). Beginning from the premise that the unbanked can now typically access a mobile phone, and working in

conjunction with the IMF, the World Bank's (2018) Bali FinTech Agenda⁴ provides a 12 point policy framework for member states. The opening point of this framework encourages member states to 'I. Embrace the Promise of Fintech,' and it follows that that they should 'II. Enable New Technologies to Enhance Financial Service Provision.' While this includes digital technologies for 'efficient data collection, processing, and transmission,' it also rests on 'facilitating foundational infrastructures', such as telecommunications, broadband and settlement systems. Indeed, with economic recovery from the pandemic predicted to be slower in Sub-Saharan Africa than in advanced economies (IMF 2020), it is FinTech that is expected to be key to expanding access to global markets, fueling job creation, and improving public service delivery (Selassie 2021).

Situating FinTech in Africa in the context of financial inclusion initiatives and global development agendas, existing social scientific research highlights how the remarkable growth of mobile payments has itself provoked change in the very meaning and practice of 'financial inclusion' (Bernards 2019a, Lai and Samers 2020, Mader 2016). In Maurer's (2015) terms, the shift from microfinance as the central axis of global financial inclusion programs to digital financial inclusion by FinTech has thus also been a movement from 'poverty capital' to 'poverty payment'. At the same time, extant research stresses the uneven, partial and limited expansion of FinTech economies in Africa (Bernards 2019b). Rather than simply serving to bank the unbanked, the ostensibly inclusionary expansion of FinTech features the kinds of raced and gendered practices of exclusion that have long marked the history of financial relations on the continent (Natile 2020). There is also 'reluctance', 'dissent' and 'denial' amongst FinTech users, which interrupts apparently smooth and unproblematic expansion in Africa (Guermond 2020b). Moreover, rather than simply aiding local economic participation and development, existing research shows how global agendas promoting FinTech create new opportunities for the global financial and technology industries to expropriate and extract value from populations in Africa (Aitken 2017, Gabor and Brooks 2017, Donovan and Park 2022). This includes the charging of 'tolls' for 'riding the rails' of payments infrastructures, for example, and experimenting with new sources of value gleaned from transactional data (Maurer 2015). The networks of global financial and technology companies, venture capital and philanthropic investors and development organisations which Gabor and Brooks (2017) call the 'fintech-philanthropy-development complex' are certainly at work in Africa, forging networks of partnerships with local political elites and entrepreneurs to grasp new opportunities (Lai and Samers 2020).

Reference to histories of financial exclusion and the networks of the fintechphilanthropy-development complex begins to point us towards the relevance of a longerstanding macro-political economic context for analyzing what is different about FinTech in Africa, namely, European colonialism. Critical accounts of FinTech in Africa clearly need to continue to contextualize analyses amidst drives for global financial inclusion, and this remains the macropolitical economic context for analyses offered by several of the papers in this special issue (e.g. Guermond 2022, Kedir and Kouame 2022, Mader, Duvendack and Macdonald 2022). But papers in this special issue also make a conceptual and analytical move to situate FinTech in Africa somewhat differently. Building on recent interventions (Bernards 2019a, Guermond and Samba Sylla 2018, Natile 2020, Pigeuad and Samba Sylla 2021), and connecting with wider-ranging debates about 'digital colonialism' (Gravett 2020, Kwet 2019), 'data colonialism' (Couldry and Mejias 2019 Thatcher, O'Sullivan and Mahmoudi 2016) and 'algorithmic coloniality' (Mohamed et al. 2020), papers in this special issue shift analytical attention to the repressive and discriminatory force of colonial legacies and presents in shaping FinTech in Africa. There are distinctive and variegated colonial dynamics of FinTech in Africa that can be studied in their own right or in conjunction with global financial inclusion agendas, thereby informing critical conversations around FinTech globally.

The lingering coloniality of FinTech is a theme explored in several papers of this special issue. Rodima-Taylor (2022), for example, examines ubiquitous informal savings groups in Kenya and South Africa as embedded in the colonial legacies of land and labor appropriation present within historical European settler communities. Despite the end of formal colonial rule, traditional forms of self-help continue to be an important locus for the organization of large-scale interventions by states, development actors and the private sector. Meanwhile, addressing the decolonizing potential of blockchain technologies, the paper by Campbell-Verduyn and Giumelli (2022) argues that blockchain-based experiments are facilitating rather than displacing the legacies of colonial exclusions, largely due to their incorporation within global finance/security

infrastructures in Africa. They also outline some of the ways in which the exclusionary practices of digital technology might be confronted to realize decolonial possibilities. Pollio and Cirolia (2022), moreover, position their analysis of FinTech experimentation by the urban state in Cape Town as a counterpoint to simple assumptions about the force and consequences of colonial legacies in shaping the prospects for African development.

The persistence and renewal of colonialism is the explicit focus for Paul Langley and Andrew Leyshon's (2022) contribution to the special issue. Focused on emergent forms of credit and lending in Africa's Fintech economies, they explore how digital financial inclusion is a deeply colonialized process in which networked relations between FinTech platforms and user populations serve to perpetuate racialized exploitation. While mobile payments have been key to FinTech expansion in Africa, platforms are also now providing unsecured short-term credit products via mobile wallets. Credit relations are created that are already known to lack transparency and to be giving rise to increasing levels of debt and default (Chalwe-Mulenga, Duflos, and Coetzee 2022, Izaguirre et al. 2018, Kaffenberger et al. 2018). Through a detailed account of the business model and practices of a Cape Town-based FinTech firm active in a number of African countries, Langley and Leyshon argue the growth of the platform political economy of FinTech in Africa entails a specific configuration of corporate and infrastructural neocolonial relations which enroll populations previously excluded from formal financial relations under colonial regimes. While FinTech platforms extol a version of the modernizing and civilizing mission of the enlightened empowerment of users, they simultaneously expropriate racialized rents. The article thereby argues that while FinTech in Africa rests on specific and uneven conditions of racialized marginalization rooted in colonial legacies, it is also recasting colonial relations in the present.

From Economic Formalization to Modes of Economization

The second conceptual and analytical move fashioned by papers in this special issue centers on the economization processes of FinTech in Africa. Rather than regard FinTech to be generating economies which include Africans in formal monetary and financial relations for the first time, the Special Issue shifts the focus for research to address multiple modes of

economization. For policymakers, consultants, academic-practitioners, and mainstream and specialist media, FinTech advances the movement of financial inclusion in Africa precisely because it deploys digital technologies to include formerly excluded populations in formal market relations. FinTech, in short, is widely regarded to enable the economic formalization of monetary and financial relations on the continent. For critical research and engagement with Fintech in Africa, this matters in both analytical and political terms. As Timothy Mitchell (2007) highlights more broadly, the topographical imaginary of a boundary between formal and informal economies is an established feature of global development agendas that work via 'a form of exclusion-inclusion'; that is, they position apparently deficient informal economic practices 'outside' of formal markets such that they can be brought 'inside'.

In contrast with the prevailing discourse on FinTech in Africa, existing critical accounts of the emergence and expansion of FinTech across the globe tend to unpack the application of digital technologies in retail money and finance. FinTech is shown to rest on the introduction of wireless telecommunication and digital cloud computing infrastructures that, in combination with longer-standing payment and banking architectures (Dörry et al. 2018, O'Dwyer 2019), make possible 'at-a-distance' relational connections and flows (Bernards and Campbell-Verduyn 2019, O'Dwyer 2019, Rodima-Taylor and Grimes 2019). Data aggregation and algorithmic analysis is also shown to make possible the banking of populations who were previously unknown and deemed too risky (Aitken 2017), and to enable value (i.e. rent) to be extracted from FinTech users and their data (Gabor and Brooks 2017, Maurer 2015). Furthermore, and importantly, social science tends to connect these novel digital infrastructural and data dynamics of FinTech with wider-ranging research into economization processes that extend and deepen unequal and exploitative formal relations of money and finance. Rather than simply applying digital technologies to achieve inclusion in formal economic relations, FinTech is thereby understood to further processes of 'marketization' and 'financialization' which create new opportunities for global technological and financial capital to expropriate value (Aitken 2017, Bernards 2019, Guermond 2020a, Mader 2018).

Papers in this special issue also develop the concepts of 'marketization' and 'financialization' to analyze the digitalized economic relations instantiated by FinTech in Africa.

Vincent Guermond (2022) examines the impact of digital financial services in West Africa on financial inclusion by analyzing the marketization processes around migrant remittances in Ghana and Senegal (see also Horst et al. 2014, Lindley 2010, Rodima-Taylor and Grimes 2019; Kunz et al. 2021). Guermond's paper details how state, civil society and private sector organizations in Ghana seek to leverage digital remittances as a way to expand financial inclusion, drawing attention to the role of market-making devices such as credit scoring algorithms and text messages which influence remittance customers to alter their financial practices and take out more digital loans. Guermond contends that these calculative and automated behavioral nudges are largely in conflict with existing informal financial practices, and may well hamper strategies of social reproduction attached to remittances. To this end, he stresses the power imbalances that the digitalization and marketization of remittance transfers fosters between the users and providers of services, and the impacts of FinTech on informal economic repertoires and coping strategies. Through a focus on how the advancement of digital financial inclusion risks increasing the capacity of commercial finance to curtail migrants' livelihood practices and choices, the article contributes to the study of critical financial geographies of marketization and development.

Meanwhile, in Rob Aitken's (2022) contribution to the special issue, the concept of 'financialization' is deployed to offer a critical analysis of the intersection of two recent trends within the micro-insurance industry: attempts to extend insurance to cover climate change related uncertainties; and, the immersion of micro-insurance with the technologies and business practices of FinTech (Rinehart. K., et al., 2018, Hernandez, E., et al., 2018, Bagus, U. et al., 2020, Keucheyan 2018). His specific focus is on experiments in parametric remote-sensing insurance and, for Aitken, the critical purchase of the financialization concept is largely three-fold. First, it links the specific and novel economizing processes of micro-insurance to the much broader, wider-ranging and powerful export of the language and practice of finance among those often left on its edges. Second, the concept draws attention to the epistemological transformations underway, as climate uncertainties are subjected to financializing logics and rendered as calculable risks. Third, working with this concept enables Aitken's analysis to show how the

financialization of risk doesn't simply enhance the economic security of newly included and vulnerable populations, but often serves to amplify the uncertainties that they face.

The papers by Guermond (2022) and Aitken (2022) thus problematize and analyze how FinTech in Africa is constituted through distinctive marketization and financialization processes. Papers in the special issue also make two further analytical and conceptual moves to tease out the multiple modes of economization through which FinTech in Africa unfolds. First, several papers work with an alternative processual concept, namely, 'platformization' (Langley and Leyshon 2022, Rodima-Taylor 2022). The concept of platformization prompts accounts of digital economies that combine socio-technical analysis of configurations of digital infrastructures and data with a particular focus on the rise of platform intermediation and platform business models (Langley and Leyshon 2017). It follows that the digitalization of retail money and finance by FinTech does not simply contribute to ongoing processes of marketization and financialization, but unleashes a novel set of political-economic processes propelled by extensive capital investment which pivot on the intermediary business and competitive organizational strategies of platforms (Langley and Leyshon 2021). Platform intermediation is distinct. It is premised on multi-sided and multi-dimensional value extraction, and on rapid scaling to achieve monopolistic and oligopolistic positions which change the competitive basis of retail finance. And, in Langley and Leyshon's (2022) paper here, the platformization of FinTech in Africa is shown to feature a discrete configuration of corporate and infrastructural neo-colonialism that enrolls populations into formal monetary and financial relations to renew colonial expropriations.

Second, regardless of whether concepts of marketization, financialization or, indeed, platformization are deployed to analyze the distinctive forms taken by FinTech in Africa, papers in this special issue highlight how is these modes of economization work both on and across formal/informal monetary and financial relations, traversing what Maurer (2012) terms the 'disunity' of mainstream/alternative relations (see, especially, Kedir and Kouame 2022, Rodima-Taylor 2022). African economies are characterized by pervasive informality, a manifestation of histories of multiple currencies and transactional pathways linked old trade routes, diverse administrative regimes, and the exclusions and social control agendas of colonial and post-colonial states. Given monetary and financial relations in Africa have been minimally mediated

by banks and states, they are often configured through indigenous cultural terminologies and cosmologies, and via a diverse array of social networks and institutions (Guyer 1995, 2004, Berry 1995). Papers in this special issue stress how FinTech in Africa often does not simply displace and replace the cultures and institutions of informal money and finance with newly minted formal relations (see also Rodima-Taylor and Grimes 2019). Informal relations and practices persist, and are likely to be combined with and transformed by the formal economizing processes of FinTech, resulting in heterogeneous and hybridized informal/formal relations of money and finance.

The paper by Daivi Rodima-Taylor (2022), for example, examines the intersection of FinTech with the social economies of mutual help groups in South Africa and Kenya, situating this dynamic in longer-term colonial legacies and present-day policies of extractive platformization. To counter the assumption that platform intermediation proceeds in the same way all over the world, Rodima-Taylor (2022) connects theories of platform capitalism with Jane Guyer's (2016, p. 112) broader and more open definition of 'platform economies' in Africa as entailing a 'combination of architecture, standard applications, and spaces for novel performances'. This conception underpins the paper's analysis of the rapidly growing FinTech initiatives in South Africa and Kenya that aim to harness digital platforms and software for the management of informal savings groups. Besides providing mobile wallets for group savings, platforms may connect the groups to commercial banking products and financial market investing. Illuminating the informal/formal hybridity of FinTech platformization in Africa, however, Rodima-Taylor shows how the new material platform infrastructures of group apps, digital credit and mobile money intersect with the peopled infrastructures of economic informality. This distinctive constellation is often seen by FinTech actors as driven by various local versions of 'Ubuntu', the idea of human interdependence rooted in humanist African philosophy. Contributing to wider debates about FinTech-mediated financial inclusion, the article thus contends that FinTech as a platform political economy does not simply and only formalize monetary and financial relations, but rather combines old and new, digital and non-digital, inanimate and peopled infrastructures.

Adding to the analysis of the informal/formal hybridity of the monetary and financial relations of FinTech in Africa, the paper by Abbi Kedir and Euphrasie Kouame (2022) explores the role of financial technology in mediating the occupational choices of low-income women in

Africa. It interrogates the link between FinTech and entrepreneurship, drawing on large data sets from central and western Africa. The paper calls for a critical view of financial inclusion on the continent in the light of gendered livelihood and resource access patterns. Most financial inclusion research in Africa has focused on the factors affecting access to formal bank-based finance, and the expanding mobile money use in Africa has often been viewed as contributing to formal financial inclusion. Instead, Kedir and Kouame argue that dynamics of inclusion are more complex, as the formal economizing processes of FinTech interact and intersect with a sophisticated web of informal and formal institutions and modes of transaction. Using consumer data from Burkina Faso and Cameroon and disaggregating the analysis by gender, the paper explores the impact of mobile money use on women's entrepreneurship, and advances policy recommendations to guide the evolution of digital finance on the continent that are attentive to its informal/formal hybridity.

From Ecosystems to Statecraft and Security

To consider the distinctive forms taken by FinTech in Africa, the papers in this Special Issue make a third set of conceptual and analytical moves that revolve around how FinTech is understood in geographical and socio-spatial terms. Instead of focusing on the social relations and spatial connections of techno-economic ecosystems, the Special Issue foregrounds how socio-spatial variegations, concentrations, and territorialities are significant as FinTech in Africa is enrolled into statecraft at urban and national scales, and into international security regimes. In the customary socio-spatial framings provided by business, consultancy and policy literatures, FinTech across the globe is held to be practiced in techno-economic 'ecosystems' (see Leyshon 2020, Wójcik 2021). Innovative applications of digital technologies to retail monetary and financial services are thus typically understood to emerge from complex interactions within systems of spatially connected and interdependent economic institutions. Consistent with the notion of ecosystems, cities where FinTech institutions and innovations are primarily located and centralized are termed 'hubs' (CCAF 2018). The core rationale for innovation by FinTech ecosystems is presumed to be consumer empowerment, from the inclusion of first-time financial services consumers to the disruption of the business of banking to improve services for existing

consumers (Flynt 2016, Rubini 2017). Start-up firms are often held to play the lead role in FinTech innovation, but often collaborate with banks and other incumbent institutions across ecosystems to bring innovations to market (Cap Gemini and EFMA 2021). Powerful claims follow from this conventional socio-spatial framing, such that FinTech ecosystems are held by policymakers to be key to the disruption of banking and retail finance in the Global North, and to the banking of the unbanked in the Global South.

When characterizing the socio-spatial landscape of FinTech in Africa, papers in this special issue tend not to take up the techno-economic ecosystems metaphor and related assumptions from complex systems thinking. Indeed, to speak of an African FinTech ecosystem would be misleading in crucial respects, and would impute cohesion and interdependence to a landscape that is actually fragmented, uneven, and territorialized. Innovation in FinTech in Africa faces a number of obstacles as a result. The environment of digital entrepreneurship is considerably different from that in the Global North, and internet connectivity and power supply are often significantly limited. Combined with the poor reach of traditional banking and fragmented digital payment systems, this typically results in rather sporadic technology innovations geared mainly towards addressing local problems and constraints. Few African enterprises are yet able to mobilize significant outreach or user-driven value creation (Friederici et al. 2020). African Fintech firms often depend on piecemeal expansion and market niches that favor local cultural and market knowledge, or seek to mediate certain local assets that are of value to corporate customers in the Global North, such as labor or specific cultural artifacts. Rather than building on network effects, this can lead to relationship-driven and linear scaling, making it difficult for African startups to sustain competitive challenges from foreign BigTech platforms (p. 213-14). Africa's digital payment landscape remains fragmented, moreover, and features low levels of interoperability between multiple digital payment providers, often within the same territory (Mureithi 2022).

Rather than adopt the customary socio-spatial framing of FinTech, papers in this special issue instead take their cue from critical social science research which provides two main alternatives. First, economic geography, in particular, typically conceptualizes FinTech economies through a networks-and-nodes approach (Wójcik 2021). This is a well-established approach for

understanding the relational institutional geographies of money and finance as composed of heterogeneous 'networks' (Martin and Pollard 2017) or 'ecologies' (Leyshon 2020). Contrary to conventional ecosystems-and-hubs framings, the institutional network geographies in FinTech are shown to feature the play of power. 'BigTech' corporations, for example, are now the dominant players in certain networks (*i.e.* Google, Apple, Facebook and Amazon in North America and Europe; Baidu, Alibaba and Tencent in China and Asia) (Lai and Samers 2020). In other networks, it is incumbent banks and institutions that are to the fore in the uptake of digital technologies (Haberley *et al.* 2019, Hendrikse *et al.* 2018). Long-standing urban hierarchies are also important to shaping the geography of FinTech hubs, as key financial centres are often also key nodal points in the institutional networks of FinTech (Hendrikse *et al.* 2019, Sohns and Wójcik 2020).

Second, critical scholars tend to foreground the sovereign-territorial space of FinTech. National FinTech economies are held to be territorially variegated, largely as a consequence of diverse legal and regulatory arrangements and geo-political competition (Tusikov 2019, Ioannou and Wójcik 2022). Indeed, FinTech is shown to be the focus for an array of sovereign state and governmental strategies which shape the territorial trajectories of national FinTech economies in important ways. In India, for example, FinTech-enabled digital financial inclusion has gone hand in hand with a post-colonial development strategy that features state-led data infrastructures for surveillance and taxation (Ertürk, Ghosh and Shah 2021, Jain and Gabor 2020). Not dissimilarly, in China, FinTech can be understood as one manifestation of a deep synergy between financial market liberalization policies and the authoritarian state, wherein rapid growth is permitted and supported by the state precisely because it simultaneously consolidates the Chinese Communist Party's legitimacy and ruling capacity (Gruin 2019, Gruin and Knaack 2020).

To address FinTech in Africa, papers in the Special Issue make conceptual and analytical moves that develop the networks-and-nodes and sovereign-territorial framings of FinTech geographies. FinTech in Africa is shown to be enrolled into statecraft in different and significant ways at urban and national scales, and into international security regimes. For example, focusing on Cape Town, Andrea Pollio and Lisa Cirolia's (2022) paper shows how FinTech in Africa features

in processes of urbanization, especially the development of urban infrastructures and practices of 'city-statecraft.' The article identifies two important ways in which Cape Town has come to be positioned as the FinTech capital of the continent. It explores the processes of developing a robust broadband infrastructure in the city, situating this in the histories of cloud computing and business process offshoring. It also examines the political and social processes through which Cape Town has come to be a launch-pad for FinTech start-ups aimed at the African continent. The paper links the development of this technology hub to the global expansion and local lobbying of Amazon, and the drive of the local government to attract FinTech investment to the city in order to create lower skilled jobs. While FinTech in Cape Town is enrolled in geographically and historically situated processes of financial extraction, it is also offering new employment opportunities for low skilled workers, as well as linking peripheral projects across Africa to capital to test their innovations.

Picking up on the sovereign-territorial geographies of FinTech in Africa and national statecraft, the paper in the special issue by Phil Mader, Maren Duvendack, and Keir MacDonald (2022) examines recent attempts by governments in Sub-Saharan Africa to raise tax revenues from digital financial services, exploring the ways in which local actors participate in decisionmaking over taxation policies. Opponents of such taxation (which most often affects mobile money) argue that it represents an unfair burden, particularly on the poorest users. The article discusses the fairness and efficiency considerations around assessing the impacts of digital services taxation in Africa, and the role of different actors in the political economy of the digital services tax policy. Examining mobile money tax controversies around statecraft in Kenya, Uganda and Malawi specifically, the authors contend that the challenge is not primarily a technical but a political one. Technically complex arguments and sophisticated advocacy campaigns advanced on the part of money transfer companies call attention to the ways in which businesses can exert the forms of power unavailable to ordinary citizens. The ambiguities around mobile money taxation also highlight the divergent interests of citizens, businesses and governments that incorporate different understandings of fairness and inclusion in FinTech in Africa.

Finally, the closing paper in the Special Issue by Francesco Giumelli and Malcolm Campbell-Verduyn (2022) advances a critical discussion of the ways in which extractive processes of FinTech intermediation in Africa constituted through blockchain technologies are also instantiated in emerging international financial security infrastructures. The paper contributes but also moves beyond the binary debate about blockchain applications, a debate that regards these technologies as either reinforcing forms of colonial extraction that perpetuate North-South inequities, or as fostering decolonial ambitions in the Global South. To this end, the paper situates African blockchain techno-experimentation within wider international infrastructural relations that are shaped by geo-political forces. Examining the growing shift of blockchain experimentation from Global North to the Global South with respect to FinTech applications in Africa, the article argues that critical cultural economy analysis must consider the evolving international security regime under which the adoption of the technology is emerging and attempts to alleviate existing power asymmetries are being enacted.

Overall, then, the eight papers in the Special Issue begin to foreground the different forms that FinTech is taking in Africa. FinTech in Africa is analyzed from the vantage point of different disciplinary contexts, research sites, and broad-based cultural economy frameworks. To draw out and unpack the distinctive features of FinTech in Africa, the Special Issue suggests the conceptual and analytical focus for research should shift in three main directions: (1) from global financial inclusion agendas to colonial histories and presents; (2) from economic formalization to multiple modes of economization; and, (3) from techno-economic ecosystems to statecraft and international security. Recentering global social science research agendas and political debates on Africa, the Special Issue will hopefully provoke further work and future political engagement with FinTech which doesn't begin, by default, from developments and experiences in the Global West and East.

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