

Book Review

Technopolitics and ICTD in Africa

Iginio Gagliardone, *The Politics of Technology in Africa: Communication, Development, and Nation-Building in Ethiopia*, 190 pages, Cambridge, UK: Cambridge University Press, 2016, \$99.99 (hardcover), ISBN: 9781107177857

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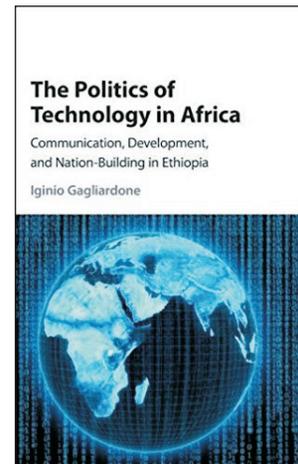
The Politics of Technology in Africa: Communication, Development, and Nation-Building in Ethiopia engages with the complex and ever-evolving ICT landscape in contemporary Ethiopia by exploring the relationship among diverse political, technical, and social actors. Iginio Gagliardone offers an in-depth and insightful analysis of the politics of ICT adoption and adaptation, drawing on more than a decade of research in Ethiopia to explore how the same technologies take on different meanings in different national contexts. This *technopolitical* perspective avoids technodeterministic approaches to ICTs while also engaging with the constraints of national contexts.

This book and the approach it advocates would be useful and informative for scholars and practitioners from a variety of disciplines, including political science, history of technology, development studies, media and communication, and African studies, to name a few. Through weaving macro- and meso-level analysis and his emphasis on two large-scale projects, Schoolnet and Woredanet, Gagliardone reveals the complexities and contradictions inherent in national ICT for development projects.

Focusing primarily on two national technology initiatives, Gagliardone presents a compelling picture of how politics (discourse and policy) interacts with technology, nationalism, and development to create a *technopolitical regime* that is uniquely Ethiopian, but also provides a framework for analyzing ICT policy, practice, discourse, and implementation in other national contexts. A technopolitical regime is “both the medium and the outcome of a negotiation between a specific technology, a cultural and political context, and the actors that animate it and compete for power” (Gagliardone, 2017, p. 13). Gagliardone uses the concept of *technopolitics* to explore the interactions among national governments, other political and economic actors (e.g., nongovernmental organizations, corporations, journalists), and technological artefacts (e.g., satellites, Internet, plasma TVs, e-mail) that influence technology adoption and adaptation. The author argues that to understand the adoption and adaptation of ICT on the national level, it is imperative that we engage with political discourse and political policy, which do not always align, and technology and that we do not view technology as apolitical, but rather as imbued with politics and power.

Building on the work of Gabriel Hecht, who first introduced the term *technopolitical regime* to explain the relationship between nuclear power development and national identity in France, Gagliardone shows how conflict and politics in Ethiopia shaped the development of Schoolnet, a national ICT project designed to distribute the same lesson plans to schools across the state, and Woredanet, a national project intended to create a direct line of communication between the center (the capital, Addis Ababa) and the peripheries (mostly rural Ethiopia).

Throughout the book, Gagliardone provides a compelling rationale for this technopolitical approach to



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studying national-level ICT initiatives. This approach is also relevant to practitioners working in the ICTD field as it suggests the need to consider the role of national policies and practices on ICTD implementations. He shows that political discourse and policy have real implications for how ICTD projects are developed and executed in local communities. He examines political discourses, political conflicts, adoption of actual large-scale technology and the rationale behind these adoption and adaptation decisions using data collected from numerous site visits in Ethiopia, interviews with key figures, archival, and textual research. Gagliardone provides a useful overview of the concepts of technopolitics and technopolitical regimes (chapter 2), before delving into his case (Ethiopia) over the course of five empirically rich and clearly argued chapters. He concludes with a thoughtful discussion of how technopolitics can be used to examine other cases, particularly cases of ICT for development projects in Africa, an issue to which I will return to later.

For scholars interested in contemporary Ethiopia, this book provides a fascinating political history that shows how technology can be used as part of a much larger national agenda. Gagliardone goes to great length to contextualize Schoolnet and Woredanet as Ethiopian ICT projects that reflect the government's approach to center-periphery relationships as well as the government's commitment to ethnic federalism and a development agenda that supports a strong centralized government. Without much prior knowledge of Ethiopian politics, I was able to clearly grasp how technology and political conflict between national and international actors shaped the development of Ethiopia's ICT policies generally and Schoolnet and Woredanet specifically. This analysis also served one of the book's main goals: to show how technologies take on different meanings in different political and economic contexts.

To illustrate this point, Gagliardone uses neighboring African countries as foils for Ethiopia and encourages other scholars to take up the charge of studying national ICT agendas in other African nations from a technopolitical perspective. For me, someone who has studied ICT initiatives in neighboring Kenya, the value of approaching national-level ICT policy and practice from a technopolitical lens is clear: It avoids technodeterministic views of technology while also acknowledging the constraints of political systems. As the author points out, the Kenyan government's approach to ICT differs widely from Ethiopia's, especially in relation to liberalization of the sector and engagement with international nongovernmental organizations and ICT businesses. Although both countries have contracted with Chinese telecommunications companies (discussed below), Kenya has allowed competition in the market and made a clear commitment to developing the ICT sector to serve a wide range of interests, its own included. Kenya's investment in Konza Technology City is just one example of the national commitment to ICT development that the government touts in political discourse, policy, and practice (<http://www.konzacity.go.ke>). Of course, the 20-year project is in its infancy and is not without its critics. But the fact that the Kenyan government even wants to build a "technology city," part of the larger Kenya Vision 2030 plan, highlights the stark differences in national approaches to ICT for development, an area that is ripe for continued comparative research.

Finally, the discussion of Ethiopia's relationship with China, something that Gagliardone engages with in the latter part of the book (mostly chapter 7), is an important contribution of this research. The role of China as a major financial investor in Africa has received substantial attention in the last decade from scholars interested in international relations and development. Gagliardone uses the Ethiopian government's relationship with the Chinese telecommunication company, ZTE, which was backed by the Chinese Development Bank, to explore this complex relationship (p. 139). China's "no strings attached" investment and development strategy has meant countries with repressive regimes, Ethiopia included, can use Chinese funds for national development, including in the areas of Internet and mobile infrastructure. Ethiopia's relationship with ZTE, and China more broadly, allowed Ethiopia to dramatically increase its technological infrastructure while maintaining a monopoly on telecommunications access and stifling innovation and consumer access.

A major contradiction that Gagliardone's analysis reveals is that Ethiopia has enormous investments in ICT infrastructure, but ranks at the bottom of world rankings for access to ICTs (Internet and mobile) and Internet freedom. He argues that this contradiction is a result of the tightly controlled nature of the sector and the government's politically motivated reasons for investing: to maintain the government's position and allow it to communicate with constituents throughout the state, but not to foster citizens' use for other purposes, including communicating with each other locally and internationally. Gagliardone illustrates this point through his

discussion of Ethiopian bloggers at home and in the diaspora. He describes the government's harsh and repressive response to citizens using the Internet to criticize the government, which included arresting and jailing the Zone 9 bloggers in 2014, as a way of highlighting the government's stance on ICT use that does not support its agenda.

For anyone interested in the complexities and contradictions of ICT for development in Africa, this book offers a fresh approach to the topic. I recommend this book to researchers engaged in national or comparative research as it offers a strong empirical model for how to conduct this kind of research without losing sight of the larger implications. Although Gagliardone only engages with government-sponsored national projects, his approach could be applied to regional-level ICT projects and offers a useful framework for conducting comparative research at multiple levels. ■

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