

## What better informs ICT4D: desktop or field study?

Reviewing: Arul Chib, Caitlin M. Bentley, Matthew L. Smith (Editors)  
*Critical Perspectives on Open Development. Empirical Interrogation of Theory Construction.*  
ISBN: 978-1-55250-596-0 The MIT Press, Cambridge Massachusetts, London England. 321 pp. February 2021.

Book review by Anna Bon, February 2021

Open Development – the sharing of free, public networked resources, educational materials, research, data repositories and other digital resources without access restrictions or cost – holds a promise for positive, democratic, social transformation. It opens avenues for ICT4D, shifting the focus from infrastructure and transfer-of-technology toward more equitable models of development. It is in this emancipatory sense of Openness, that the new book, *Critical Perspectives on Open Development -- Empirical Interrogation of Theory Construction*, edited by Arul Chib, Caitlin Bentley and Matthew Smith with contributions from thirty scholars, mainly from the global South, examine how open development can serve the needs of poor populations in developing regions. The book targets an academic audience, but also practitioners and policymakers in international development.

Open development is an umbrella term covering different instances of openness, including open innovation, open government, open data, and open science. This range of policies and actions relate to the economic, political and social spheres (Davies & Perini, 2016). How can the impact of open development be captured? Open development is said to benefit poor and marginalized communities while largely contributing to business innovation and economic growth. It is said to support aid transparency, efficiency and effectiveness while bringing powerful decision-making tools to the policy-makers (Linders, 2013; Gascó-Hernández, 2018). But who actual benefits from the impacts of open development? who provides? who controls, who decides? How does global policy on open development relate to and affect the reality of developing regions? And how does the current book respond to these pressing questions?

As its subtitle *Empirical Interrogation of Theory Construction* suggests, this book is centered around theoretical frameworks on open development. The first research phase consists of desktop studies and literature reviews carried out by a senior core team. During a second phase researchers from countries in Asia and sub-Saharan Africa (not involved in the first phase) are invited to empirically interrogate the theoretical frameworks built in the first phase. The whole research aims to bridge gaps between research communities by reducing definitional disparities that hamper cross-disciplinary studies on open development.

The two-phase approach is reflected in the structure of the book. Part I theorizes the concepts: *stewardship*, *trust*, and *situated learning* in three theoretical chapters. Each of the concepts is tested and reflected upon in an empirical chapter. The same structure is repeated in Part II, in which *inequalities*, the *capabilities approach*, and *inter-institutional collaboration* are theorized in three chapters, after which each is assessed and discussed in a case study.

The theory chapters on stewardship regimes (chapter 2, Reilly & Alperin) trust in ICT systems (chapter 3, Rao et al.) and situated learning (chapter 4, Chaudhuri et al.) provide clearly objective, detached and context-free conceptualizations. This may sometimes take the

form of rather unspecific generalizations, such as: “*in complex institutional relationships, as between a government and its stakeholders, data is generated by many different information systems that are attached to a wide variety of different social processes*” (chapter 2, Reilly & Alperin) or, for example by referring to “*communities of practice*” (chapter 4 Chaudhuri et al.) without discussion about the nature of “community” (online, rural, research?) is referred to is and what their “practice” entails.

The theoretical chapters of Part II show a more critical attitude. In chapter 8 (by Dearden et al.) transformation of institutional structures and participatory approaches are proposed to challenge dominant knowledge and production hierarchies. In chapter 9, Zheng & Stahl propose an adapted (and also more critical) version of Amartya Sen’s (1999b) capability framework for evaluation of open development initiatives. In chapter 10, an original viewpoint is forwarded by Singh et al. on *Open Washing* or the unavoidable co-optation of open development by the “big tech” private transnational technology providers, especially in the absence of legal and regulatory frameworks.

However, the most interesting chapters are the empirical ones, e.g. on Open Data Initiative in Kenya, on the Chennai Smart City Initiative in India, and on the co-creation of a weather information system by local farmers in West Bengal, India. From specific case studies, for example Moumita’s story in chapter 7, we learn how local data is produced, exchanged and consumed locally by farmers in a way they themselves have determined and decided. How this type of co-creation serves local needs, while being open and relevant through the agency and openness of this community. It shows the situatedness of grassroots initiatives in a setting of local open innovation.

The detachment between desktop study and practice in the field is illustrated e. g. in a study on the Chennai Smart City Initiative in India, by Sadoway & Shekhar (“Changing Infrastructure in Urban India”). This study reflects on how open initiatives are emblematic of public-private partnership models and how this favors corporate, technology-oriented solutions over democratically governed service provision. It reads: “*we raise questions about Rao et al.’s (chapter 3) [theoretical] trust model because it positions publics as disembodied feedback channels (that is, as external agents in sponsored systems and/or information generators) rather than as (pro)active citizens or comanagers of information*”. (Chapter 4, p. 117)

Overall, the case studies could have contributed more to situated knowledge and a deeper understanding of various aspects of open development through a process of analysis, pattern extraction, deliberation and theory co-creation. This could have been done based on field-based material. The concise descriptions of local stakeholders, their operational goals, local practices and business processes, mechanisms at work, and how data or services do or do not affect local agency and livelihoods, could have brought many new insights on this topic.

Although theory *for theory’s sake*, is not the purpose of this book, its theory-led research – approach, which is presented in the introduction as a groundbreaking and possibly new “golden standard” for ICT4D research – has shown its limitations. Since the book targets as readership also practitioners and policymakers in international development, a solution-oriented design science approach (e.g. Manzini, 2015) or action research (e.g. Reason & Bradbury, 2001) might have been more appropriate methods to generate situated knowledge and inform and guide policy. Especially in such a complex knowledge domain as open innovation for developing countries, the path between theory and practice could have been

iterative and two-directional (e.g Bon, 2020). The field cases in this book offer sufficient material for further investigation, joint deliberation and purposeful action. They make the book readable and relevant. It shows that the field studies hold the clue to understanding open development in complex real-world environments of the world.

## References

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