

16 Conclusion: Understanding the Inclusive Potential of Open Development

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Introduction

The driving aim of this volume is to understand and improve inclusion in open development practice. This concluding chapter is an attempt to draw out the key discussions, definitions, and lessons, in order to build an understanding of how inclusion matters for open practices. The first section explores the normative assumptions undergirding open practices, and the different ways that the authors of this volume frame inclusion in relation to open practices. The second section explores what matters for inclusion and open practices, providing nuance to the assumptions of open development. Finally, we offer some key takeaways and potential work going forward.

Assumptions and Ways of Seeing Inclusion

To draw out lessons on inclusion and open practices, it is important to understand the implicit normative assumptions behind open development practices. These assumptions are: first, knowledge is central to open development. The acquisition of knowledge is empowering, and its equitable distribution is, in turn, a public good. Second, the practices associated with openness—producing/creating, distributing/sharing, and using/reusing knowledge resources—contribute to the global knowledge commons by supporting the creation, sharing, management, and meaningful use of knowledge resources. Third, by offering cost-effective means for people and institutions to do so, open practices in education, science, governance, data, and innovation can facilitate inclusion. Fourth, over time, the distribution of knowledge, the broadening of information, and the flattening of hierarchies preventing access and use may just be able to help tackle the issue of inequality. These four assumptions show how inclusion undergirds open development; in fact, open development *is* a process of inclusion. These

foundational ideas [and ideals] of open development offer a new imaginary for development practice, grounded in knowledge production, distribution, and use—and in the knowledge commons.

Yet these ideals also challenge us to understand and evaluate how, for whom, and under what conditions open practices *actualize* inclusion and when they do not. As we have seen throughout this volume, inclusion is complex, and the purposes behind open activities are, in the end, what condition the inclusion. From innovation to education, the authors in this volume explored and contested inclusion in the context of the practices associated with their particular areas, revealing important framing issues in complex and layered territory.

How are the core values and norms of inclusion engendered in open practices? The “action orientation” of open development—its production, distribution, and use—speaks to empowerment (or at least the empowering potential). It happens through the user’s *participation* in the practices, when she exercises her *agency* to do so. In this sense, **inclusion builds around and is actualized by participation and agency.**

As people become engaged in activities, and because they have agency in that engagement, **inclusion develops and deepens over time as a process in, and an outcome of, open activities.** For example, with open educational resources (OER) and practices (OEP), inclusion develops through progressively deeper levels of engagement, from basic access (being able to access an open book) to participation (where users begin to engage and leverage content) to empowerment (where users are able to create and remix educational content) (chapter 12). As users increase their participation in OER activities, they are more included—and more empowered by that deeper engagement. This undergirds the “social” part of inclusion (World Bank 2013).¹

Inclusion is also defined by its relation to *exclusion* and how this affects gaps in participation: gaps in who is counted, who gets named, who shows up on the map, and who even is allowed to do the counting, mapping, and naming are all critical variables of inclusion in the distribution of information online (chapter 5). Exclusion is how we know the inclusive potential of an activity. It is not just the number of people participating, but also *who is represented*. For example, many online platforms are considered “inclusive” by default because of the numbers of people who get involved, even though this approach suffers from considerable imbalances in gender, socioeconomic status, age, or geolocation in terms of those who choose or are able to participate (chapter 14). Therefore, engaging marginalized populations such as Indigenous, rural, or poor people—even if they are not represented in large numbers—strengthens the inclusive outcome because of the structural and epistemological barriers that have conditioned participation in the past. Diversity matters for inclusion.

Inclusion is understood by its relation to inequality because of the implicit assumption that it can generate greater *equality* (and/or equity) in general, and equality of access, use, and reuse of information in particular. Digitally mediated participation and representation promise equality by “circumventing traditional mediators of information” and by allowing people “a more significant role in shaping the content” (chapter 5); this is part of the empowering potential. “Open information is equally accessible and usable by all, and therefore portends more equality with respect to the meaningful use of this information” (Lessig 2003; chapter 5). This speaks to the promise of tools that “equalize the opportunity that people have to access and participate in the construction of knowledge and culture, regardless of their geographic placing” (chapter 5). According to chapter 7, the “critical element of peer production is that the open practices that it entails can spawn cycles of knowledge growth, reuse, and sharing, which lead to increasing returns and knowledge spillovers” (chapter 7; Garzarelli et al. 2008).

Yet we are seeing more and more how legitimate evidence and facts are competing with vast amounts of information garbage, including mis- and disinformation. Not all information is equal, and discerning fact from misinformation and propaganda is increasingly posing a challenge online. This is why the normative grounding of open development matters, because ideally **inclusion signals an individual's *capability, with the skills, access, and genuine discernment, to exercise agency toward optimal knowledge equity.*** Undergirded by equitable knowledge, democratized knowledge production and dissemination in the commons offer both the challenge and the new imaginary of open development (chapter 2).

Furthermore, **inclusion is also an *outcome or consequence of actions by others who have capabilities as intermediaries.*** For example, open data democratize access to informational resources and offer a kind of inherent inclusivity, but the meaningful use of that data depends on the individual and communal capacity to leverage it as a resource, as well as the drive for, and interest in, using it for public, communal benefit (rather than to accrue additional benefits to the already privileged) (chapters 10 and 11). This approach to open data use as a public good in turn requires meaningful access to a digital ecosystem, with the skills and abilities to analyze and use that data, and the sociopolitical agency to apply the data to situations where there is a gap or need, and, furthermore, to use this concern to benefit the greatest number of people. Because these can be large barriers for genuine participation, intermediaries who leverage open data for public benefit offer a means to optimize the benefits of data. So, in some instances, open processes contribute to inclusion even if the leveraging of an open resource is done by an intermediary on behalf of an otherwise excluded population.

Even with the layers and complexities of inclusion that signal tensions in open development, inclusion is inseparable from openness. But a key emphasis from this volume is that **purpose conditions the inclusion that is realized.**

Lessons for Openness and Inclusion

Building on the different ways of understanding inclusion in open development, the following section draws out the lessons emerging from the chapters.

Digital Drives Open Practices

Even though a key piece of our revised definition of open development is that it does not necessarily have to be digital—for instance, the way educational data is “open” when it is publicly displayed/written on the walls of the school—most arguments made in this book imply that open resources have a digital component.² It follows that if a majority of open resources are digital, then poor telecom and electrical infrastructure are going to be barriers to the use and reuse of open resources. Indeed, a lack of electricity was cited as a barrier to OER adoption (chapter 12).

This suggests that the benefits that can be derived from open activities when they are digital are not evenly distributed; many people are excluded from benefits because of barriers having to do with costs to access and skills needed to leverage digital tools. Yet as we will discuss further, it is more complicated than simply an *access or no access* dichotomy. While there are many challenges with basic access to the technology infrastructure (to mobile phones and the online ecosystem), it is also about different levels of use when there is online access and having the capacity to use data and enjoy the benefits of that use (access, participation, voice, contribution, not just use-as-is, but remixing).

Benefits of Open Resources Are Conditioned by Diversity of Access

The types of devices (e.g., mobile phone versus a tablet) and locations through which someone has access (home versus school) condition the benefits of open resources. For example, in Latin America, being able to access the Internet from different places and on different devices affects the number and type of tasks performed online by the individual (chapter 9). This affects the open activities being realized, but also the capacity to benefit from these activities. This is because limited access signifies other kinds of inequalities having to do with location, age, and the educational and socioeconomic status of the user. Even though “smartphones are touted as the solution to Internet access issues, a large part of the population does not take advantage of this access” to

participate and engage in open activities (chapter 9). Participation and use (which are further conditioned by the sex, age, and education level of the user) are affected by whether people can access the Internet from home, work, or an educational or public space, and use a computer, mobile phone, or tablet, and this in turn influences the kinds and number of open activities from which a user may benefit.

Knowledge Creation and Adaptation Support Agency

The power (or empowerment) of openness emerges from using (remixing) and engaging in production and sharing; this is the key to agency and the transformative potential of open practices. Inclusion actualized as participation in knowledge creation supports empowerment. In the OER space, maximal levels of participation allow contributors to engage in “sustained collaboration, or the development of communities of practice where creating, sharing, and peer reviewing of OER is a focal practice” (chapter 12). Moreover, the research suggests that exposure to OER and openness ideas more generally can change pedagogical practices—and facilitate a change in mindset. For instance, in a community water testing project in Lebanon, “not only did these citizen scientists feel more informed about water issues in their respective areas, they felt empowered to begin making demands on the government to pay attention to water-quality issues” (chapter 13).

Indeed, open practices support a change in the control of information and who can produce it; the remixing potential in open practices can actually overturn traditional knowledge hierarchies and epistemologies. Open resources not only reduce costs, they can offer potential tools for decolonizing curricula by allowing people to question and reflect (chapter 13), create and share information locally, and incorporate many non-traditional authors and voices (chapter 12). Deeper engagement, where users are active participants in knowledge creation, can produce a change in power relations. “Information and power thus became intimately intertwined as people capitalized on the value associated with epistemic control: information represented *this* and not *that*” (chapter 5). The creator of information is the creator of worlds.

Creation and Adaptation Lag Where They Could Have the Most Potential

Many openness activities are not quite there yet. The chapters of this volume show that the majority of people in developing countries are still on the earlier end of the use spectrum—meaning *use-as-is* rather than *use-as-remix* (chapters 4, 5, 12, 13, and 14). Most open activities outlined in the survey of Latin America are not done, and only 12 percent of the sampled population engages in open government activities like accessing e-services (chapter 9).

Moreover, chapter 5 provides the following examples. Activity emerging from the entire Middle East and Africa on open platforms like GitHub (“home to less than 1 percent of GitHub users and commits”) compares to the level of activity in Switzerland. People living in these regions also contribute to platforms at lower rates, with Africans constituting less than 2 percent of edits on Wikipedia: “only 16 percent of content about Nigeria and 9 percent of content about Kenya are created by locals.” Though some of this can be explained by poor Internet penetration, this explains only about “one-third of the variability in the number of GitHub users per country.” So a driving question remains: “What sort of global information society are we building if large groups of people rarely participate in it as producers?”

Barriers to Open Resources Are Structured and Socially Embedded

The agency needed to engage in open practices is conditioned by the social structures that underlie gender discrimination, socioeconomic hierarchies, historical epistemological divisions, and even the infrastructural challenges associated with geolocation (chapters 4, 5, 6, and 13). This is because the discrimination and social biases that already exist in society easily move, and can be amplified, online. As the examples of gender biases within open-source software and Wikipedia suggest in the volume, certain types of participation are valued more highly than others, and this is often gendered. Women contributing on platforms such as Wikipedia reported a range of issues with the dominant masculine culture that had a cooling effect on their contributions and highlighted a need for safer or less stereotypically driven spaces (chapter 4).³

Furthermore, status and education also condition participation. The evidence from Latin America suggests that having an education above secondary school, higher socioeconomic status, and being able to access the Internet in a variety of ways allows people to engage in, and benefit from, open activities (chapter 9). In other words, because the socially embedded hierarchies and asymmetries associated with gender, history, geolocation, and socioeconomics that control knowledge production and dissemination affect agency, they in turn affect the inclusive potential of open resources and practices.

But there are ways to structure open spaces to decrease some forms of discrimination and to improve certain kinds of equitable inclusion. For instance, the Open and Collaborative Science in Development Network (OCSNet) found that changing language around a project helped to improve female participation, overcoming some gendered barriers (chapter 13). Also, allowing men and women to have separate hours at computer labs in Afghanistan improved women’s participation in an OER initiative (chapter 4). Furthermore, even though global asymmetries tend to reify historical barriers, open education research showed that OER use appears to be higher, or at least just

as high, in the countries with lower gross domestic product (GDP) than in those with higher GDP. This suggests that the availability of OER is supportive in the locations that may need them the most (chapter 12), although the authors are cautious about this conclusion.

Informational Asymmetries Are Structured by Global North Dominance ...

Increasingly, if knowledge cannot be located online, it effectively does not exist (chapter 6). Thus mapping, naming, and being counted are all critical in the twenty-first century because of the growing prevalence of the online environment and its increasing importance for brokering knowledge. This is where open practices and open resources have a role to play in the knowledge commons. Yet, as the authors argued, being recognized as a subject or as an actor with agency online is conditioned not only by the barriers outlined here—but significantly also by *proximity to Global North concerns*.

Inclusion in the informational ecosystem means having agency in being recognized and counted in information creation—whether through advocating for recognition (as an informational subject) or by creating the information/facilitating information development (as the user/creator)—and requires overturning informational asymmetries (for instance, ensuring participation is deconditioned by Global North interests alone). This speaks to the cognitive justice undergirding efforts to make science open, collaborative, and accessible to everyone as both participant and user (chapter 13). In fact, upending informational imbalances “‘demands recognition of *knowledges*, not only as methods but as ways of life’ (Visvanathan 2009), to ensure that all people have the right to access and create locally relevant knowledge with epistemologies, tools, and modes of collaboration of their choice” (chapter 13). It also means questioning the standard *determinants of legitimacy of content* (chapter 6) that have thus far structured knowledge development, creation, and reputational metrics. The lack of attention to the embedded hierarchies in information geographies undermines the promises of open, accessible information and knowledge.

Local platforms might be one way of countering these dynamics, particularly when they offer content in local/national languages. The example of Darakht-e Danesh in Afghanistan offers a glimpse into the possibilities of this idea, with localized content developed for teachers in the top three languages used in schools in Afghanistan. This helps to counter the problems that arise for OER that are only in dominant global languages (chapter 12). Local platforms can draw on global resources while encouraging local content creation.

...And Condition Discoverability

How open resources are found, or are “discoverable,” in online searches (chapter 6)—conditioned by popularity, by language, by being known in the Global North, or by capabilities to leverage information—all reflect the underlying structure of global communicative dynamics. The 10 Cs⁴ developed by ROER4D as an elaboration of the earlier 5 Rs⁵ has loCate as an important precondition to other consumption practices; the knowledge commons ecosystem plays a critical role in the ease of locating the desired or appropriate content (chapters 6 and 12). Historical power dynamics and hierarchies support uneven *geographies of information* (chapter 5), which are not only fostered through platform idiosyncrasies, but are actually embedded in search algorithms. For example, an awkward consequence of Global North open access research systems is the tendency to exclude lesser-known researchers and their studies. Open access research policy mandates from the North (which are contributing to public goods) help to flood the Internet with content developed by and for scholars from privileged locales, and the algorithms for discoverability further privilege this abundant content (chapter 6).

Rather than supporting the removal of North-South barriers, open access research sometimes may unwittingly entrench them. Global South knowledge—already marginalized by historical power (and knowledge) relations between Northern and Southern scholars—then continues to have its legitimacy determined by Global North norms and practices, as well as epistemological hurdles (chapters 6 and 13). This is not to argue that open access is a bad thing, but rather to understand how better to support scholars on the margins “to curate their scholarship in ways that make it openly visible and discoverable” (chapter 6).

Global Platforms Shape Discourse and Act as *De Facto* Information Intermediaries

A key issue is that commercial platforms based and moderated in the Global North act as *de facto* intermediaries in informational intermediation and undergird exclusion because of their main focus on Global North markets and issues (chapters 4, 5, and 6). Knowledge itself is not neutral, and, in the global online marketplace, certain types of knowledge are devalued by their position in the North-South exchange of ideas. As delivery mechanisms for open goods and services, many online platforms can intensify this type of knowledge devaluation, particularly if they are global in scope and driven by Northern concerns.

In combination with the challenges of solving uneven Internet access (and establishing the diversity of access required for real engagement), platforms often lack content from marginalized locations (or else it is crowded out by the issues of discoverability, as just discussed). With the current reality of online platform business models, it can

feel like issues from the margins do not matter, as marginal populations do not live in areas that drive commerce in the Global North and do not have the luxury of income to drive advertising revenue.

There are alternative platforms operating outside of Global North advertising models, particularly supporting some of the open practices around education and science discussed in this volume. These tend to be supported by governments (national governments, or more often, foreign governments) or by nongovernmental organizations (NGOs). The knowledge generated in these venues constitutes the public goods described in chapter 7 as “knowledge resources.” And open provision can spread beyond borders (chapter 7) and allow materials to be reproduced and repurposed regionally. For example, open educational content developed in a regionally popular language, that is otherwise not common can dominate a region (and speaks to the importance of local engagement too).

The challenge of the public goods approach is that support, particularly funding, for those goods can be tenuous. NGOs, for instance, depend on funding from governments, either the national government or foreign aid. In these instances, while the inclusive potential exists, there must be accountability to the people who are meant to be served. This highlights a tension with the inclusive potential of public platforms. Decisions are sometimes made with the intent to secure further investments and funding for the model, and the sustainability of open platforms remains in question.

This tension between the public (both governmental organizations and NGOs) and private sectors in the generation and curation of open resources also shows up when trying to scale openness initiatives. For instance, when open science platforms connect to the private sector, those partnerships “tend to value the protection of data and forms of collaboration that offer value for money” (chapter 13). Given resource constraints (not just money, but also the time commitment required), it can be very hard for research institutions to prioritize openness, as well as open practices more generally (chapter 13).

Knowledge Commons Need New Governance Models

Knowledge and the digital commons that support the dissemination and use of that knowledge constitute public goods (chapter 7). Knowledge flows through innovation systems and influences how science, education, and data support positive development outcomes (chapter 3). Open innovation, integral to the informal sectors of many economies in the Global South, is supported by people’s ability to unlock access to knowledge (chapter 3). There are many emerging models for the production and provision of digital public goods, but, as this volume shows, most of them struggle to be truly

inclusive (for the reasons discussed previously)—and in the absence of successful alternative models, governments play a critical role in ensuring that openness is inclusive.

Governing these public goods requires the rethinking of laws—for instance, around intellectual property rights. Contrary to the way that intellectual property (IP) is often framed—as a key to innovation—there is evidence that stronger IP regimes do *not* play a significant role in spurring innovation (chapter 7). Moreover, IP is not critical to the informal economy, and the informal economy is what dominates much of the developing world—for instance, nearly two-thirds of the GDP in sub-Saharan Africa and half of the GDP of India. Open practices dominate the informal economy (chapter 3), and this drives some types of innovation.⁶ Therefore, governing the digital commons requires rethinking copyright and reframing the governmental, private-sector, and not-for-profit roles in this process in order to mediate the tensions among openness, access, and the appropriation of knowledge.

Governments and Digital Public Goods

Though not always explicit in this volume, governments are the key players in the production, distribution, and use of digital public goods. Through legal and regulatory regimes, governments help shape the ecosystem in which openness plays out and incentivize open access policies. Governments shape social and economic progress by supporting development policies that allow inclusion and political economic participation through legal regimes, regulations, policies, and agenda setting. Sustainable and equitable human progress is shaped by knowledge and supported by a flourishing, accessible knowledge commons—and governments, as the institutions through which public goods are held, play a critical role in supporting the digital commons and knowledge as public goods. This is complicated, as governments in the abstract are the institutions that hold the social contract with society—but, in reality, this contract is failing in so many instances around the globe that it is tough to speak about the role of the state in terms of normative principles that are not evident in reality. Collectively, through governments or other mechanisms, we need to tackle the governance of digital public goods (chapters 3, 7, and 15).

Figure 16.1 shows the constituting ideas of open development in relation to inclusion and the knowledge commons, updated from figure 2.1 in chapter 2.

Key Takeaways on Facilitating Inclusion in Open Practices

Inclusion occurs when institutional and hierarchical barriers to knowledge and participation are removed or lessened, as well as when diversity is enhanced. Over time, distributing

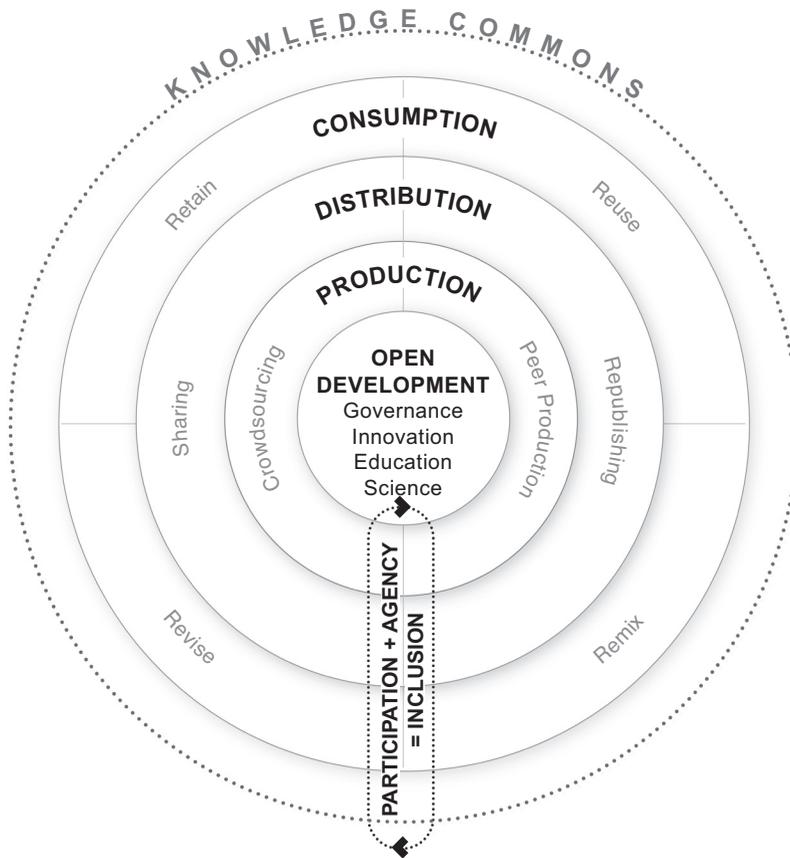


Figure 16.1

Reconsidering open development-as-inclusion in the knowledge commons: using, sharing, and producing knowledge are participatory practices, which in turn help one to recognize one’s own agency in the production of knowledge. Participation and agency support inclusion and together shape the contours of the knowledge commons.

knowledge and disrupting hierarchies that prevent access and use can help tackle inequality and support pro-poor human development; these are the underlying norms of open development. What follows are some key takeaways in facilitating these shifts.

Reclaim the digital knowledge commons for development. The digital commons and knowledge itself are public goods, and it is time to reclaim this space. The relationship between knowledge and human development undergirds sustainable and equitable human progress, and it is facilitated by broadening inclusion. Knowledge equity and the growth and barrier-free sharing of knowledge requires investing in and

facilitating the knowledge commons. This means reframing the business model for open initiatives from a knowledge economy, where knowledge is primarily commodified for profit, to a knowledge society, where knowledge is primarily treated as a public good. It also means rethinking the role of government in the open provision of goods and services, revamping IP policies, and investing in knowledge.

Make inclusion the goal. Inclusion must be an explicit goal if it is to be actualized in an open development initiative. Although inclusion is defined in a multitude of ways, it is exercised through broad, meaningful, and diverse participation. Facilitating that inclusion requires an understanding of structural inequality because how openness is operationalized and the contexts in which it is embedded determine who benefits. Without properly unpacking the contexts, and instituting safeguards, the availability of information may empower the empowered. “While openness implies a normative principle of inclusion, if we do not explicitly populate it with inclusion principles, it will only reflect the dominant paradigms existing in society” (chapter 4). We must design for equity from the start.

Start local. If you want to be inclusive, you have to be sufficiently local in your scope to be able to address structural impediments to inclusion and ensure open resources are relevant. The example of Darakht-e Danesh in Afghanistan is instructive. It is through local interaction that the challenges of structural inequality can be addressed. Large-scale open development initiatives cannot always sufficiently understand or unpack the multitude of challenging contexts—and will struggle to be inclusive, given the realities of our world. Contextual, local initiatives can directly target and overcome these challenges.

Focus on who is involved. Who has voice and agency? To reclaim the digital commons and ensure that it is inclusive, we have to advance, expand, and diversify who is able to produce, distribute, and use knowledge resources. Open development is about human agency in these open practices and the governance of the commons.

Aim for equitable governance. Maximize access, equity, and sustainability in governing the knowledge commons. This places a clear focus on institutional and technical arrangements and their link to equity, but it also requires tackling at least some of the underlying systemic inequalities that shape how open practices play out.

Prioritize gender equality. Making inclusion an explicit goal means ensuring gender equality because there are differences in how women and men leverage open resources. This is supported by gender-sensitive policymaking, gender parity in representation and participation, and by engaging women’s civil society organizations. It also translates into facilitating equitable and safe spaces that allow women’s equal

participation, whether that means engaging men and women separately to participate in discussions, offering separate hours in computer labs, or offering childcare so that women can take part in workshops.

Develop an engagement strategy. Research and practice need to focus on the *engagement* connecting the supply of open informational resources with their uses, and to understand how it is used by or benefits marginalized communities. For example, from the OER work, we know that educators based in the Global South “would not have participated in OER creation activities without the intervention of an outside organization that had the capacity to help them develop materials and demonstrate what OEP looks like” (chapter 12). In most instances, without that concerted effort, open development initiatives undertaken in contexts of severely unequal distributions of access and skills will tend to entrench existing inequalities, if not actually make them worse. Facilitating inclusion in open practices is about developing a quality engagement strategy.

Leverage intermediaries. In a world of unequal access/skills and unequal power within information networks, intermediaries can be the critical links in the inclusive potential of open practices. They can be established knowledge brokers who are able to access opportunities—and decision-making venues—in order to act on behalf of excluded communities. Intermediation is really about having a model for engagement, facilitating participation, and supporting capacity development.

Incentivize openness. Institutional support for open practices makes a difference for their use. Currently, there are few examples of institutional support across the Global South (chapter 12), but policy frameworks incentivizing open education, science, and data support the knowledge commons. For instance, at the university level, institutions can encourage academics and authors as agents and owners of knowledge, protect the autonomy at the heart of commons-based structures for knowledge, and develop and support collaborative initiatives in knowledge dissemination (chapter 6). It could also include supporting marginalized scholars to curate their scholarship in ways that ensure that it can be discovered, contributing to the richness of the knowledge commons.

Focus on quality use and capabilities. For optimal inclusion, people need to not just have affordable and diverse access to the Internet, they also need to know how to use multiple devices and have the skills and capabilities to benefit from the resources they find. This represents a shift toward quality engagement and use, focusing not just on use-as-is, but rather on broader consumption practices, such as use-as-remix. This is not just the provision of goods but rather the capability to use. So, to tackle inclusion challenges, the delivery mechanism of open provision is what matters.

Final Thoughts: Rethinking Development?

We started this volume hoping to find that the practices of openness tend toward inclusion, tackling inequality, and helping to realize a new imaginary for development. What we learned, though, is that achieving inclusion is a bit like swimming upstream; any open initiative in the production, distribution, and use of knowledge must fight strong exclusionary currents. Sometimes these are structural and epistemological barriers—gender, socioeconomic status, historical positionality, and physical location barriers. And sometimes these are market barriers, where open practices get coopted by the bottom-line interests of bigger fish. Either way, on the whole, openness continues to be shaped by institutional, structural, and market arrangements rather than the other way around. At least that's been the case so far. Thus, in inequitable contexts, without a well-defined, targeted engagement element, openness initiatives may struggle with inclusive challenges.

Yet less equitable outcomes are not inevitable, and how we construct and govern open practices in our knowledge domains shapes equitability. This issue requires a healthy amount of pragmatism: figuring out the institutional arrangements for open practices and their link to equity, addressing underlying systemic inequalities that shape open practices, and, furthermore, understanding that governments play a critical role in facilitating and incentivizing openness. Concerted, pragmatic efforts, typically done locally, tend to be the most promising in terms of inclusive outcomes. As this volume shows, efforts can be made to promote inclusion within openness initiatives at all scales and levels. And as openness initiatives achieve success—for instance, demonstrating efficient use of resources (think of cost-saving for OER in public education) and bringing greater accountability into the public sphere (think of open and participatory budgeting)—the potential impact will cumulatively grow.

The extent to which open activities can truly offer an alternative or augmented approach to development, and ultimately their ability to do so, remain to be seen. Yet the redefinition of open development as a series of knowledge production, distribution, and use practices introduces a critical piece for human agency in terms of actualizing inclusion and improving knowledge governance, even if we happen to be witnessing a phase of “closure.” Putting these knowledge tools at the core of human development helps us contextualize and rethink a range of challenges for development and openness activities moving forward. The hope is that if knowledge is recognized as the core of development (including the institutional shifts that this implies), then development policies, practices, and actions at all levels will be able to continue to actualize the open development imaginary.

Notes

1. Social inclusion, as represented by the World Bank, is about improving the terms for people and communities to participate in society—such as giving people a voice in decisions affecting their lives and equal access to markets, services, and political, social, and physical spaces.
2. This is not that surprising, given that the programming on open development at IDRC is emerging from the “Technology and Innovation” program area. The prevalence of digital open resources does not mean that we are going to change the definition of *open development*, but rather we will continue to interrogate the challenges of what the digital piece of open practices means for development.
3. Other gender-related issues include that women preferred to avoid “conflict during discussions, were worried about being wrong, and were willing to go along with their male colleagues” (as noted in chapter 4). Similarly, in the open science network, women said they were not comfortable going to meetings, and even if they did go, the men preferred to be the ones expressing their views (also noted in chapter 4).
4. Conceptualize, create, curate, circulate, certify, critique, loCate, customize, combine, and copy.
5. Reuse, revise, remix, redistribute, and retain.
6. However, as chapter 8 shows, the promises of novel innovations to spread access tend to fall short of expectations. Sophisticated open access arrangements require institutional expertise to control or manage resources, and this kind of expertise is often absent.

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