

7 Establishing Public-ness in the Network: New Moorings for Development—A Critique of the Concepts of Openness and Open Development

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The public sector is at present the decisive actor to develop and shape the network society. Individual innovators, counter-cultural communities, and business firms have done their job at inventing a new society and diffusing it around the world. The shaping and guiding of this society is, as has always been the case in other societies, in the hands of the public sector, regardless of ideological discourses hiding this reality. And yet, the public sector is the sphere of society where new communication technologies are the least diffused and where organizational obstacles to innovation and networking are the most pronounced. Thus, reform of the public sector commands everything else in the process of productive shaping of the network society.

—Manuel Castells¹

The term *openness* is uniquely associated with the new communication paradigm made possible by the Internet. As the disruptive influence of Internet-based information and communication technologies (ICTs) is felt across social structures and institutions, the dominant techno-utopian vision of openness carries the promise of unbridled freedom. But does the concept of *openness*, or more specifically, related ideas like *open society* and *open development*, provide useful points of departure for thinking about social change and development in the information society? In this chapter we focus on some recent theorizations of openness in relation to development, especially the hypothesis that *open social systems* generate positive development outcomes.² This chapter offers a critique of this vision, and briefly addresses alternative theoretical points of departure for development in the information or network society. Specifically, we argue that development in the information society would be better served by the concept of public-ness than the concept of openness.

It is first useful to identify areas where the term *openness* has come to have a relatively clear and well-established meaning, and has proved its

conceptual usefulness. These areas are: (1) information and knowledge systems; and (2) information and communication technology (ICT) architectures. In the first case, greater access to information and knowledge, which in essence is a nonrival good, significantly enhances people's overall life opportunities. Given that new ICTs enable near-seamless communication and uninterrupted information flows, a good case can be made for open information and knowledge systems as key enablers of development, in all areas. It is obviously advantageous for people to have as much access to information as possible about the workings of social systems that impact their lives, especially the governance systems that are supposed to be accountable to them. In fact, *open government* is a term that predates the use of the term *openness* in the technology or information society arena. It basically implies "the notion that the people have the right to access the documents and proceedings of government."³

The second domain where the term *openness* has been applied usefully is regarding the architecture of ICTs, which increasingly mediate a large part of our social existence. An open ICT architecture, in terms of software, connectivity, hardware, content, and so forth, is important to ensure a level playing field for all, and for egalitarian social outcomes in the information society. Openness in this context means that the basic elements of our socio-technical architecture cannot be captured and controlled by a few powerful entities, and that people not only have easy access to them, but are also enabled to build, change, and rebuild them in a collaborative and bottom-up manner. Many researchers and practitioners, including some contributors to this book, argue persuasively that open technology models may be more favorable to development. Such models can allow freer and easier propagation of technology. Also, contextual modifications can be suited to address marginalized groups who may not be served by proprietary models of technology. Such models also enable faster and richer development of technology, through the collaborative effort of many people.

Whereas open information and knowledge systems, and open ICT architectures, can arguably be expected to promote development, they may not provide enough of a basis to generalize the validity and desirability of the concept of openness across the domain of development. For example, a recent working paper by Matthew L. Smith and colleagues on Open ICT4D argues that: "there are many processes that can be made more open through the use of ICTs and that doing so will generate development outcomes that are accomplished: (a) in a more efficient and/or effective manner, and/or (b) in ways that earlier were not possible."⁴ It is not clear on what basis a general connection between openness and positive development outcomes

has been made. The feel-good quality of openness seems to simply have been reified uncritically vis-à-vis structures and processes of development.

In the pages that follow, we consider the implications of extending the idea of openness beyond its specific use in the areas of information systems and ICT architectures. We first analyze how terms like *openness*, *access*, *participation* and *collaboration* are being subtly co-opted by a neoliberal discourse on the information society. We then consider some specific information society practices that exemplify and reinforce such co-optation, and follow that with a brief examination of how the concept of openness has been employed by those who resist the very ideology of development. We conclude by proposing an alternative approach to theorizing development in the information society founded in the idea of public-ness rather than openness.

The Theory of Openness

We take *openness* to mean, broadly, decreased constraints on social interactions. The principal social impact of new ICTs stems from their ability to reduce the cost, and improve the effectiveness, of mediated social transactions and interactions. Thus, in the emerging information society, a much more complex array of transactions is possible outside the boundaries of existing organizations and institutions. These can take place in relatively unstructured or flexible ways. The resulting social changes are the basis for the claim that networks are emerging as the principal organizational form of the information society.⁵

ICT-mediated social interactions can significantly strain the dominant vertical-hierarchical institutional paradigm, pushing it in the direction of more horizontal and flexible social structures. This shift holds out the promise of a more equitable distribution of power, an idea that informs the typical technocratic worldview. But such a promise cannot simply be taken at face value. As Manuel Castells argues, networks left to their own devices can cause even deeper exclusion than the world has yet known.⁶ This insight needs to centrally inform any theorization around new social processes and structures in the emerging information society, especially in relation to development.

New ICTs do provide a new set of possibilities to overcome the typical constraints of vertical-hierarchical organizations and institutions. These possibilities, however, require to be actively harnessed through appropriate institutional design. Such design should follow first, a basic normative vision of the desired society and, second, a nuanced understanding of the

full implications of techno-social transformations, going beyond simple techno-optimism.

For example, in their Open ICT4D paper, Smith and his colleagues argue that, “openness is a way of organizing social activities that favours: (a) universal over restricted access, (b) universal over restricted participation, and (c) collaborative over centralized production.”⁷ At first blush, enabling greater access (to communication tools and information), greater participation (in groups/institutions) as well as greater collaboration (as against centralized production) certainly appears useful. But the Open ICT4D framework seems to overlook the ever-present dimension of power manifest in new forms of networked relationships. The outward appearance of access, participation, and collaboration can mask less desirable social and political outcomes undermining equity and social justice.

For example, enhanced access to information provided by mobiles is often based on privatization and commodification of information and knowledge.⁸ It is possible for such enhanced access to have a negative overall impact on development through increasing dependencies and establishing permanent channels of net value outflow from already disadvantaged communities. A similar tendency toward information commoditization characterizes most existing telecenter models (as we will discuss below).

The term *participation* is keenly debated in development studies.⁹ Decades of scholarship show how participatory models, through their exclusive focus on specific programmatic processes, can contribute to the de-politicization of development practice.¹⁰ Christian Fuchs describes how labor and consumer participation is subsumed within the narrow profit-seeking parameters of corporate interests.¹¹ In the information society context, popular media often obtains participation through premium or higher cost short message service (SMS). Apart from serving as a good revenue model, questionable measures of the popular sentiment obtained in this manner can in fact be used to manipulate public opinion.¹² Facebook allows users to vote on its statement of user rights and responsibilities.¹³ But user participation in this open governance model does not extend to real hard issues, like whether Facebook needs to clearly distinguish paid-for information/communication from ‘regular’ interactions on its platform. Some may, therefore, justifiably interpret Facebook’s limited user participation model as a preemptive mechanism against public interest regulation. The real issue therefore is not just more participation, but what kind of participation and to what avail, on whose terms does it take place, and how it recasts power.¹⁴

The term *collaboration* refers to the dynamics of a community, and when used in reference to political economy, implies collective decisions about

contributions to, and the appropriation of, the commons. In the context of networked production systems, the use of the term *collaboration* has been critiqued for the selective inclusions and systemic exclusions that networks produce.¹⁵ In the digital order defined by Web 2.0, voluntary community labor is expropriated for private profit. All the high deities of Web 2.0—Google, Facebook, YouTube, Apple—subscribe to a model of collaboration that is mediated, selective, and oriented to private profit. How do such new meanings of collaboration—where the private may encapsulate the public rather than the other way around—correspond to traditional theories of community and the commons?

In sum, what may be touted as greater openness may not translate into positive developmental outcomes given specific institutional contexts, especially with regard to enhancing development capabilities. As we have seen, enhanced access may come at the cost of decreased participation, higher participation may not increase collaborative outcomes, and greater collaboration may lead to private appropriation and decreased overall access to resources for the majority. This puts a question mark on the validity and value of any composite index consisting of these three elements as a measure of openness. There remain critical questions about the actual implications of what gets called access, participation, or collaboration. Any open development framework should address these questions centrally. Use of notions like access, participation, and collaboration will be meaningful only when seen from within larger social realities or constructs. It is therefore necessary to adequately problematize these notions and, for instance, address questions such as:

- Does access to more information and communication resources strengthen the public sphere in developing countries and, if so, under what conditions?
- Given the new opportunities for enhancing participation, how can democracy in the emerging information society bring citizenship to the hitherto marginalized?
- If collaboration through digital means implies new relations of production, what are their distributional implications, and how would they recast the concepts of community and commons?

The Practice of Openness

In this section, we briefly examine how the concept of openness has been employed in some specific areas of contemporary ICTD and information

society practice. First we take two examples from the ICTD space, and then two instances of policy development models in information society.

Telecenters and Mobiles as the Centerpieces of ICT4D

The telecenter was arguably the centerpiece of ICT4D thinking and strategy until about 2006, only recently supplanted by a fixation with “mobiles for development.”¹⁶ Here we first examine the dominant thinking and practices concerning telecenters for development before turning to the more recent area of mobiles for development. The quest for appropriate business models to ensure telecenter sustainability has been a key imperative in ICT4D. Community level business models involving local entrepreneurs have been invariably prescribed in order to ensure efficiency and innovation in ICT4D practice.¹⁷ It is also common, especially in India, for corporations to own chains of telecenters, whose business models are oriented toward controlling, and later seeking rent from, the new channels of communications and outreach that integrate communities into global market systems.¹⁸

As can be expected, such new development practices, promoted in the name of opening up access to information and other resources, and open partnerships, do not align well with traditional community-centric development thinking and practice. As a result of this, groups whose interests ought to converge, such as community media (especially community radio) groups and ICT4D practitioners, have had a very difficult relationship, if at all. It is not easy to reconcile exogenous profit-motivated business models with community-centric development models.

One of the main commodities sold at telecenters is information, including information that is fundamental to the process of developing and transforming communities. Commodification of information, through privatization and monetization, is important for the telecenter business model. For example, e-Choupal,¹⁹ one of the world’s largest telecenter chains, is owned and run by a multinational commodities company, ITC Limited, which is in the business of agriculture procurement. Its village telecenters were opened with much fanfare as a win-win model of delivering public services more effectively by applying business practices.

But these telecenters have almost exclusively served the needs of better-off farmers.²⁰ Rather than reducing social disparities within the community, e-Choupal has increased the dependency of local farmers on a monopoly buyer and supplier. The telecentres serve as the primary site for farmers to sell their agricultural produce, as well as for buying agriculture-related services. e-Choupal telecenters have considerable control over both the

type of information that farmers access, as well as the services and products that they are able to get. Such significant dependence of local communities on a single corporate entity for their information needs and market linkages erodes local autonomy, with considerable long-term negative impacts. Such key development issues, however, hardly ever find mention in the dominant ICT4D discourse. Rather, value is placed on the financial sustainability of e-Choupal's telecenter model, which ostensibly incorporates the tenets of openness and collaboration across social sectors—profit and non-profit, public, community, and private.

Interestingly, through its flagship e-governance program, the Indian government is well on its way to building two hundred thousand village telecenters using a model similar to e-Choupal. The primary actors in this scheme are private companies, each of which will run a chain of telecenters within a large geographical area. Like the promoters of e-Choupal, these companies mainly seek to establish ICT-enabled channels for developing new markets for their services and products, which monopoly channels they can then rent out to other service providers, including government departments. Models such as these, which privatize the delivery of public services, may not serve the best interests of the people who most depend on such basic services.²¹

Interestingly, by relying on private companies to run village telecenters, the Indian e-governance scheme uses a model of public service delivery that largely bypasses village self-governance bodies. This goes against the mainstream trend of decentralization and devolution in Indian governance reform efforts. This is a clear instance of how democratic participation can actually be reduced in pursuit of what otherwise appears to be an open, collaborative model of development.

This example demonstrates how development programs that seem to facilitate open collaboration may promote the commoditization of what should be public information, displace the centrality of the notions of community and commons in development, and build new forms of social and economic dependency. Ironically, such so called "open" models can eventually result in more closed channels of information controlled by vested interests and, in the long run, more closed information systems, thus undermining effective access to information as well as information-dependent resources. The new avenues of development information and other services being created through these market-based models also seem to be accompanied by a scaling back of traditional public extension and support services (like marketing support for agriculture produce). The likely impacts of these structural changes have not been examined enough.²²

While the telecenter model was very popular in the early years of this century, it has more recently come to be seen as something of a failure.²³ But rather than examine the real reasons behind telecenter model failure, the dominant discourse has latched on to mobiles as the new motif for ICT4D.²⁴ This new approach jettisons the social enterprise (or collaborative/multi-stakeholder) approach of telecenters, along with its public model of access, even if to priced information. The mobile-for-development model leaves no room even for public private partnership. It is a purely private and commercial affair based on individualized access. Openness, in this new approach, is now seen in terms of the astronomical increase in access that relatively inexpensive mobiles have provided.

Mobiles have no doubt revolutionized peer-to-peer voice and simple text communication, and this underpins important structural shifts that are very meaningful to development. We would argue, however, that to have real transformative potential, mobile phones must be Internet-enabled. However, unfortunately, mobile Internet models typically subvert the traditional openness of the Internet, and its foundational principle of net neutrality.²⁵ Internet-on-mobile is characterized by tight control and anticompetitive practices by the telecoms and their business partners, with considerable vertical integration across connectivity, hardware, software, application, and content. Interestingly, it seems that the United States Federal Communications Commission was bowing to the pressure of telecommunication companies when it exempted Internet-on-mobile from its most important provisions about net neutrality. Many civil society groups have protested against this exemption.²⁶ Such problematic aspects of the emerging architecture of mobile Internet means that the mobile for development model can further amplify the commodification of information along with subversion of community-centered development models that began with the commercialization and corporatization of telecenters.

The work of Smith and colleagues on Open ICT4D (previously mentioned) suggests that mobile telephony will be one of two contemporary ICT phenomena that drive open development (the other being Web 2.0, whose dominant characteristics vis-à-vis openness we critique later in this chapter).²⁷ It is difficult to understand how the concept of openness gets so centrally associated with mobiles, just on the strength of the fact that they have revolutionized the number of people connected to ICT infrastructure in developing countries. What about the considerable danger to openness posed by the currently dominant model of Internet-on-mobile, especially with the mobile platform set to become the main mode of accessing the Internet in the not too distant future? Under closer examination,

the theoretical robustness of openness hence comes into question, particularly as a way to inform development practice.

The Open Policy Model of ICT4D

In an increasingly complex society, the limitations of a purely representational democracy are obvious. Efforts aimed at deepening democracy attempt to address these limitations. Democratic ideals face considerable constraints in their practical application, however, not only because of elite resistance but also due to techno-structural constraints of large social systems. It is certainly not easy to organize substantive participation outside elections.

ICTs present exciting possibilities to strengthen and even transform the institutional structures of democracy. But the new political model of multi-stakeholder governance, which seems closely associated with the information society neologism of openness, seems to legitimize the political influence of powerful interests rather than ensuring fundamental rights of participation and collaboration to people. Here we will briefly review two examples of the multi-stakeholder governance model—one at the global level, and another at national level—that, in practice, have caused this kind of a negative impact.

The first case is of the working of the United Nation's Internet Governance Forum (IGF). The Internet is the central paradigm of the emerging information society, but its global governance presents major challenges, particularly as a result of its transnational form and its rapid evolution. The reaction of most developing country governments has been knee jerk, asserting the traditional statist paradigm of international governance. Meanwhile, the fact that the Internet has emerged as a central element in their geoeconomic and geopolitical strategies means that the developed countries also resist exploration of a global Internet governance system that is suitably democratic and participatory.²⁸

Distributed global management of the basic technical infrastructure of the Internet, based on technocratic principles, has had an important role in shaping the Internet as it is today.²⁹ But as the influence of the Internet is increasingly felt in most social, economic, and cultural areas, the imperative for appropriate political governance of the global Internet has grown in urgency.³⁰

The IGF³¹ is a policy dialogue forum mandated by the World Summit on the Information Society (WSIS) held in Tunis in 2005. Within this space, the business sector and the technical community seem to speak largely in one voice.³² Together they are motivated by their fear of increased governmental

claim over the Internet. Their principal, and perhaps the only, political aim is to resist any such move. This is not an entirely misplaced concern—it is imperative to protect the Internet from the ever growing danger of totalitarian state control. However, a general resistance to any kind of political governance of the Internet has resulted in downplaying many crucial social, economic, political, and cultural issues that the forum should be addressing urgently. Although it was set up as a policy dialogue forum, the IGF has not engaged in any worthwhile discussion toward development of any new policies or institutional frameworks. The incumbent powers that control the IGF, mostly through its Multi-Stakeholder Advisory Group, have effectively repurposed the IGF as a capacity-building forum, circumscribing its political and governance role by simply claiming absence of consensus for any policy or institutional proposal on which consensus may be tough to achieve. It is not difficult to see why big business interests would like to perpetuate the governance vacuum. Any positive movement toward the required political governance of the Internet in global public interest would obviously impede the juggernaut of global capital, which now increasingly controls and shapes the Internet.

At the same time as its political functions are actively circumscribed, the IGF is held out as an exemplary model for enhancing participation of developing countries and marginalized sections in global Internet governance. Meanwhile, real Internet governance is done by industry cartels, the U.S. government through its prime location in the digital ecology, and by plurilateral treaties among the rich nations, a good example of which is the Anti-Counterfeiting Treaty Agreement being currently developed.³³ (In fact, segmentation and fragmentation of governance, and its privatization, is a global phenomenon that has advanced rapidly in the network age.³⁴) The OECD has an active Internet policy-making apparatus. Such plurilateral treaties and policy frameworks are bound to form the default Internet governance system globally, given the inherently transnational nature of the Internet. Policies and policy frameworks negotiated in an undemocratic manner (as far as developing countries are concerned) get presented post facto to developing countries for accession. Any such offer may be difficult to refuse unless a country is ready to risk isolation from the Internet economy, a risk few would be willing to take.

Since global governance of the Internet is characterized by obvious democratic deficit, new means for legitimization of the new order are sought. Some prominent actors in the Civil Society Internet Governance Caucus—one of the main global spaces for civil society groups working on Internet governance—openly speak of multi-stakeholderism as a replacement for

democratic institutions at the global level.³⁵ This demonstrates the problem in speaking about the virtues of openness and participation outside specific institutional analyses (in this case, concerning the norms and institutions of democracy). The global Internet governance space is a very pertinent example where the concept of openness has been applied, but with outcomes that cannot be considered conducive to democracy and development.

Another example of how open multi-stakeholder processes can undermine democracy and collaboration comes from India. A few years ago a multi-stakeholder process was used to developing a new “ICT in schools” policy.³⁶ The whole policy process was initiated and anchored by two civil society groups, one of them a multi-donor initiative of a few countries of the Global North, and another, an Indian civil society organization, a good part of whose funding seems to come from the large number of business-supported ICT4D conferences that it hosts. Not surprisingly, industry interests dominated the process, while educationists, with expertise and legitimacy, were mostly ignored. No further surprise, then, that the draft policy seemed to aim more at institutionalizing avenues for economic exploitation of India’s public education system than serving the educational imperatives of the Indian public.³⁷ The draft policy ignored important progressive possibilities like the use of free and open source software, open and collaborative content, and forming peer-to-peer online communities of teachers.

As a result of pressure by some civil society groups, the minister of education scrapped the multi-stakeholder process, and asked a departmental committee to develop a new policy draft, while taking inputs from all. Although relatively closed and bureaucratic in its processes, the new draft was more progressive on all the counts mentioned above. This example shows how the apparent openness of a policy development process, when not seen critically in light of its actual political context, can lead to negative implications for development.

Certain current practices of the multi-stakeholder governance model, therefore, offers a good example of how the concept of openness can be employed in ways that subvert democratic norms and institutions. Openness may, in such circumstances, become a legitimizing veneer for processes that actually undermine the public interest, especially in terms of equity and social justice.

Openness and the *Problématique* of Development

The concept of open development connects in significant ways to what is emerging as a central problem in development. This problem relates to

postmodernist critiques of development, which argue that the development project violates people's subjective notions of what is important to them, and how they should obtain it.³⁸ This ideology is principally driven by a strong, and considerably successful, neoliberal attack on most nonmarket institutions. It has also gained some mainstream traction in an environment where there is a strong discontent with most public institutions³⁹ and their perceived nonperformance. There seems to be considerable skepticism in many quarters today about the very idea of development, as it is traditionally understood.⁴⁰

The resulting *laissez faire* approach advocates leaving people to sort out their strategies and paths, without external assistance or planning. Development defined in this way requires no more than the removal of all constraints to—what are thought to be—autonomous and self-propelled possibilities. The most powerful proponents of such a view are the neoliberals, who basically see public and community institutions as constraining, and market mechanisms as liberating. Such an anarchic view of development, however, also finds sympathy among most techies. In their paper, “The Californian Ideology,” Richard Barbrook and Andy Cameron analyze cyberlibertarian thinking in the Silicon valley, describing its neoliberal tendencies and noting its spread across the globe.⁴¹ The coming together of these two, rather different ideologies, results in a powerful challenge to traditional development institutions, especially in the ICT4D space. Whether intended or not, in such a context of ascendant neoliberal ideology, propositions like open development may actually buttress the undermining of traditional development thinking and practice. In their paper on Open ICT4D, Smith and his colleagues approving the “planners versus searchers” typology of William Easterly, an ardent critic of the traditional development project. “Planners attempt to impose from above via top-down plans and structures. In contrast, searchers are the ones close to the ground who search for solutions to local problems. It is only through searchers, Easterly argues, that locally appropriate innovations can emerge. Here we posit that the enhanced spread of information and opportunities for innovation should—theoretically—enable (provided the other contextual supporting aspects are available, for example, bank credit) more opportunities for this type of local searching and innovation.”⁴² There may be some truth in this assertion. But it is also necessary to recognize that, in reality, good searches benefit greatly from planning and institutionalized support. Participatory development is about locally owned and directed initiatives, situated within such, at least partly exogenous, support structures. Appropriate uses of ICTs can certainly strengthen participatory development. But it is not clear what open development can

add that participatory development does not already have, other than, perhaps (1) reducing or abolishing funding and other such public supports for local development; and/or (2) providing ideological support for market-led local community development processes, as has been discussed earlier.

Interestingly, in his paper “The Ideology of Development,” William Easterly argues that development is “almost as deadly as the tired ideologies of the last century—communism, fascism, and socialism—that failed so miserably.”⁴³ He goes on to say: “Like other ideologies, this thinking favors collective goals such as national poverty reduction, national economic growth, and the global Millennium Development Goals, over the aspirations of individuals. . . . The only ‘answer’ to poverty reduction is freedom from being told the answer. Free societies and individuals are not guaranteed to succeed. They will make bad choices. But at least they bear the cost of those mistakes, and learn from them.”⁴⁴

The idea of open development may be tilting uncomfortably close to Easterly’s radically libertarian vision of development. For example, the Smith Open ICT4D paper argues that:

“If development consists of per-poor innovations [i.e., by the poor for the poor] and peer collaborations—what does this imply for development and development research? Most likely, this is an acceptance of a loss of control, and an increase in trust in the process—that is, the process of openness to lead to relatively unpredictable (hopefully positive) development outcomes.”⁴⁵

While this statement may have some validity in itself, the accent on unplanned bottom-up processes of development, with unpredictable outcomes, can easily veer toward antidevelopment views, as articulated by Easterly. Ascribing choices to marginalized communities, subject to deep structural disadvantages, which they simply may not have, and exhorting them to take risks that they may not be able to afford, is not a useful starting point for a new development theory. Creating choices always involve plans, funds, and, of course, capacity building and other enabling conditions. This requires ongoing institutional work close to, and with the participation of, communities. The apparent anti-institutional normativity of the open development model must be treated with great caution.

Establishing Public-ness in the Network: An Alternative to Openness

This chapter visited some practical experiences in the ICT4D and information society arenas in order to examine how certain elements of openness—greater access, participation, and collaboration—get applied in practice.

The analysis has shown these concepts of openness, access, participation and collaboration, as loosely used in ICT4D and information society spaces, to be inadequate, and often quite problematic. A few possible negative outcomes of an uncritical application of the concept of openness to development were touched upon. These include: threat to democratic institutions from multi-stakeholderism; the debilitating dependencies created when weak local markets are suddenly exposed to globalized business systems; displacement of community-centric development approaches by exogenous commercial models; curtailment of the crucial enabling role of public institutions in development; and, the subversion of local public/community informational ecologies and community media through increasing ICT-based commodification of information and communication.

Evidently, access (to information and means of communication) could just mean voice without agency, participation may only ensure presence without politics, and collaboration amounts to labor without appropriation, which provides neither remuneration nor a real commons. It may therefore be preferable to stick to traditional, historically embedded terms of development, such as voice and agency, political participation, and public good—rather than the new sanitized set of terms, such as openness, access, participation, and collaboration.

At the macro-structural level, the reliance on openness as a foundation for a new social paradigm has strong implications for the fine balance between private and public institutions⁴⁶ maintained through the social systems of the welfare state. The latter represents the basic political institutional framework that still characterizes all developed countries and most developing ones. The terms (*universal*) *access*, *participation*, and *collaboration* have typically been associated with the public and community institutional space. From such a background, one may well ask, can anything really be open, in its social meaning, without being public?⁴⁷ Even an open market is open only because of enabling and regulatory public institutions. Private business houses—singly or put together—cannot by themselves constitute an open market. Open market is a public system. Accordingly, even in digital spaces, private enclosures—however big and benign—cannot meaningfully support the concept of openness.

Openness through private sector provisioning (private openness) is a club good—non-rivalrous, but (potentially) excludable.⁴⁸ Because of its early capture by neoliberal forces, most of the digital phenomenon, in areas of its apparent openness, represents private openness (even if this term appears self-contradictory in the light of our earlier analysis). The much-vaunted Web 2.0 phenomenon basically builds on this model of private openness.

Its problems will become more apparent as private monopoly rent-seekers build up power through appropriating collective resources and labor, and use this gained power to achieve even higher levels of appropriation, in unending and perhaps unsustainable cycles.⁴⁹ Unfortunately the concept of public has largely been abandoned in the institutional thinking and ecology of the emerging information society. *Public*, as we argued earlier, is the sociopolitical framework and condition for real openness. Public is openness in the explicit context of real social relationships, with the qualities of rights and responsibilities, and with the necessary enabling conditions, all of which derive from a social contract (and not just some private contractual arrangements).

Earlier we mentioned that the considerable hostility against public institutions, and their subsequent creeping withdrawal,⁵⁰ is a key contemporary problem for development. It is true that the institution of the State is in considerable crisis, but it would be neither reasonable nor wise to discard or minimize the concept of public. We do not discard the concept of the free market just because it is dominated and manipulated by big business. Instead we work to improve the market while also learning to live with its imperfections. Why then should public institutions not merit similar indulgence? The asymmetrical treatment of public institutions suggests a political economy factor: powerful actors side with market institutions, which help them maintain and enhance their domination, while marginalized actors side with public institutions, which are their hope for equity and social justice. This happens even as the marginalized groups carry on their struggles against the various shortcomings and injustices of public systems. Development is concerned with assisting those who are marginalized from dominant social structures and systems. It is, therefore, quite appropriate for development theory and practice to focus on reestablishing the need, context, and the new meanings of “public” and public institutions in the emerging information-society institutional space. But as we have argued in this chapter, a different, institutionally situated understanding of openness is required if this is to be achieved.

Following the analysis in this chapter, we see an institutional ecology⁵¹ of private openness or commercial openness emerging in the current context. Against this, we posit the need for new forms of public openness. Public openness denotes the commons- and social contract-based network opportunities of the information society, in contrast to those based on markets and private contracts. These new opportunities will need to be supported by an appropriate enabling institutional ecology, which upholds both negative and positive rights. For this purpose, it is important

to establish, and strengthen, key elements of public-ness in the network, which is the new dominant social-organizational paradigm of the network age. We, tentatively refer to this institutional ecology as the *network public*. While a full exploration of this alternative concept will not be possible here, a few explanations can be offered as starting points.

First, it is important to understand the difference between the concepts of *openness*, *commons*, and *public*. Openness largely connotes a set of negative rights, whereby freedom from constraints is implied without any further guarantee. The term *commons* is related to specific sharable resources. *Public* represents a much more complex institutional ecology built over ideas of rights, equity, commons, public goods, and distributive justice, arising out of a social contract.

Secondly, in the information or network age, it is difficult as well as illogical, to try and sustain industrial age public institutions in unaltered forms. At present, the relationship between democratic governments and people (or community) is largely determined by elections and mediated by a public sphere dominated by the mass media. The network age calls for innovations, especially at the boundaries between the state and the community, contributing to what we may refer to as the architecture of a new network public. Existing ideas and efforts around deepening democracy represent a good starting point for such innovations. Government adaptation to the networked context⁵² is one expression of an emerging network public, but much more will need to be done.

Third, the term *network public* as proposed here is much more than the “networked public sphere” described by Yochai Benkler⁵³ and others. Network public covers a much wider public institutional ecology, consisting of various public and community institutions in their diverse functions. Basically, the network public represents the public segment or aspect of the network society, formed of its spaces, and its flows. This public segment is not just (all) people-accessible, but also (all) people-owned. Thus the network public is rather different from the dominant conception of the network as a mere collection of connected private realms. In the latter conception, even the connections themselves are seen as private, and as based on private contracts.

While concepts of fluidity and connectedness dominate the network logic, and hence most theorizations of network/information society, the real world public-ness of our emerging social order will be represented by a plurality of considerably bounded, even if interconnected and relatively fluid, institutions. The network logic has to be seen in continuity with the pre-network age, spatially bound, social logic.

A network public at the local level may ensure public funds and other kinds of support for communities, community-based organizations, and local NGOs, among others, to work together in local development networks. Such support may for instance consist of public provisioning of basic connectivity, capacity building, and basic digital tools required to participate meaningfully in the information society. ICT-enabled modes of social interaction may play an increasing part in what Jan Nederveen Pieterse calls “reflexive development,” where in response to technological change, “development may become reflexive in a social and political sense, as a participatory, popular reflexivity, which can take the form of broad social debates and fora on development goals and methods.”⁵⁴ Technology alone cannot ensure such far-reaching social change; it will require a great amount of painstaking work to develop appropriate new institutions and social systems, as public goods, taking into consideration the possibilities presented by the new ICTs.

It is important to note that the new networking possibilities, and thus the network public, extend beyond the purely digital or even the informational realm, to larger social structures. ICTs provide opportunities for different development actors at different levels (micro, meso, and macro) to network together in ways that allow them to share competencies, resources, and outcomes. They can also create an effective space for development dialogue and discourse. This can be a significant improvement over sub-optimal, silo-based approaches to development.

An interesting example of moving from a purely public system to a network public system comes from Brazil’s experience with telecenters. Quoting from a posting to the Community Informatics Researcher e-list:

Brazil has had some bad experiences in the past when it tried to implement a national program for Telecentros in which the Federal Government was responsible for maintaining and coordinating the centers. . . . Back then, these Telecentros were called “Casa Brasil.” Some of them are still running but very few are providing access to digital technologies. Currently, the federal government, which now has a specific secretary for digital inclusion, is trying to change its role from executors to regulators and fund providers. Brazil’s new plan is to provide Telecentro “kits”: computers, routers, printers and money to NGOs, City Government and local organizations that are willing to follow the guidelines set up by the federal government. In the case of Vitoria, the Telecentros that I did my field work at, they were maintained by the City, and coordinated by the City and CDI (Committee for the Democratization of Informatics). CDI is an NGO that is specialized in developing Telecentros all over Brazil. The people that work at those Telecentros are called Inclusion Agents, and they are from the community where the centers are implemented. Since they are immersed in the community, they have the freedom to promote whatever workshop they feel the community needs, and it doesn’t always need to be related with computers.⁵⁵

Such a public network strategy is a good alternative to either government-run or corporate-run models. We expect such an approach to be more successful in promoting development.

At the meso-social structural level, a network public model will consist of networks of public authorities, development agencies, progressive techies, and the community in general, working together to build and sustain various digital and socio-technical artifacts and platforms that underpin our digital existence (software, social media, search engines, and so forth). Such collaborations can be developed and sustained fruitfully given appropriate networked work cultures and incentive structures. In this way, the voluntary communal labor of techies, other social actors and the wider community can be harnessed for common good, rather than for private appropriation by big businesses, in the Web 2.0 style. Open source software platforms and applications serving the *real* development needs of local communities can be developed and managed collectively, in sync with offline development activities.⁵⁶ Similarly, open search engines, open social networking applications, open APIs (Application Programming Interfaces), open content platforms, and the like, need to be developed and iteratively evolved through participatory use by communities. Progressive techie groups have found it very difficult to develop and sustain such basic digital public goods by themselves as a result of insufficient public and community support. On the other hand, regardless of the extent of budget or resource commitments, government alone cannot produce, sustain and distribute these networked digital public goods. Network publics will require institutional innovations by public authorities, NGOs, volunteer groups as well as communities, working together in a flexible but sustained manner.

At the macro-institutional level, the objective will be to understand, anticipate, and nudge the current rapidly moving and powerful techno-social developments toward more equitable forms and outcomes. At this level, the network public will be in the form of structures that can produce appropriate policies and regulations to support developmental efforts at the micro- and meso- structural levels. Appropriate ICT/Internet policies are required to help build a techno-social infrastructure that creates a level playing field for all. In this respect, the tensions that arise between global ICT-enabled networks and the nation-state based policy systems create a significant challenge. New policy/public institutions urgently need to be developed at the global level to meet this challenge. While internationalism may still remain at the core of such institutional developments for the foreseeable future, significant institutional innovations are required that take note of the fact that the Internet creates some uniquely global social

realities, such as new transnational publics. In this respect, for instance, the earlier mentioned Internet Governance Forum could become an important new institution contributing to Internet policy making, if it is seriously and sincerely nurtured for such a role. The Forum will have to reclaim its public-ness, meaning, in this case, its embeddedness in the larger political processes around the global Internet and the emerging network or information society.

Notes

1. M. Castells, "The Network Society: From Knowledge to Policy," in *The Network Society: From Knowledge to Policy*, ed. M. Castells and G. Cardoso (Washington, DC: Johns Hopkins Center for Transatlantic Relations, 2005), 17.
2. M. Smith et al., *Open ICT4D*, (IDRC Working Paper: Ottawa, 2008). http://web.idrc.ca/uploads/user-S/12271304441Open_ICT4D_Draft.pdf; M. Smith et al., "Open Development: A New Theory for ICT4D," *Information Technologies & International Development* 7, no. 1 (Spring, 2011): iii—ix. itidjournal.org/itid/article/view-File/692/290.
3. D. Lathrop and L. Ruma, eds. *Open Government: Collaboration Transparency, and Participation in Practice*. (Sebastopol, CA: O'Reilly, 2010).
4. M. Smith et al., *Open ICT4D*, 2008.
5. M. Castells, *The Rise of the Network Society* (Oxford: Blackwell Publishing, 2000).
6. Ibid.
7. Smith et al., *Open ICT4D*, 2008.
8. E. Noam, "Two Cheers for the Commodification of Information," *Journal of Intellectual Property Law*, Special Issue (June 27, 2001), <http://www.citi.columbia.edu/elinoam/articles/Commodification.htm>.
9. B. Cooke and U. Kothari, eds. *Participation: The New Tyranny*. (London: Zed Books, 2001).
10. See the discussion on "Varieties of Participation" in C. Sparks *Globalization, Development and the Mass Media* (Los Angeles: Sage, 2007) for an overview of these debates.
11. C. Fuchs, *Internet and Society: Social Theory in the Information Age* (New York: Routledge, 2008).
12. This phenomenon is frequently encountered in television news programs in India.

13. <http://www.facebook.com/legal/terms>.
14. Cooke and Kothari, *Participation*, 2001.
15. R. Tongia and E. J. Wilson III, "The Flip Side of Metcalfe's Law: Multiple and Growing Costs of Network Exclusion," paper presented at the Beyond Broadband Access Workshop, Washington D.C., March 13, 2010, <http://www.cstep.in/node/93>.
16. M. Gurstein, "The Mobile Revolution and the Rise of Possessive Individualism," *Gurstein's Community Informatics*, July 21, 2012, <http://gurstein.wordpress.com/2012/07/21/the-mobile-revolution-and-the-rise-and-rise-of-possessive-individualism>.
17. This was identified as an important issue in the report of the Digital Opportunity Initiative, *Creating a Development Dynamic*, July 2001, by UNDP, Markle Foundation, and Accenture.
18. M. Gurstein, "Towards a Critical Theory of Telecentres: In the Context of Community Informatics," in *Political Economy of the Information Society*, ed. P. Singh, A. Gurumurthy, and M. Swamy (Bengaluru: IT for Change, 2008), 9–23.
19. Insights about e-Choupal and, later in the section, about Indian government's countrywide telecenter project, come from IT for Change's direct field observations and research. For e-Choupal, see IT for Change, *e-Choupal—An Initiative of ITC* (Bengaluru: IT for Change, 2008).
20. N. Dangi and H. Singh, "e-Choupal: Hope or Hype?," *American Journal of Economics and Business Administration* 2, no. 2 (2010): 179–184.
21. UNISON, *Fighting Privatisation in Local Government: A UNISON Guide* www.unison.org.uk/acrobat/19989.pdf.
22. W. M. Rivera and J. W. Cary, "Chapter 22: Privatizing Agricultural Extension," in *Improving Agricultural Extension: A Reference Manual*, ed. B. E. Swanson, R. P. Bentz, and A. J. Sofranko (Rome: Food and Agriculture Organization of the United Nations, 1998), <http://www.fao.org/docrep/W5830E/w5830e0o.htm#the%20context%20for%20extension%20privatization>.
23. See, for example, J. Jellema and R. Westerveld, "Learning Lessons from Failure: The Ugandan Telecentre Experience in Perspective," *Policy & Development Summit*, 2001, itidjournal.org/itid/article/download/309/14.
24. A. Gurumurthy, "From Social Enterprises to Mobiles—Seeking a Peg to Hang a Premeditated ICTD Theory," *Information Technologies and International Development* 6, (Special Edition, 2010): 57–63.
25. Whereby, all data and content on the Internet has to be treated equally and without discrimination by the carriers.
26. R. Adhikari, "Free Press Sues FCC to Get Real About Net Neutrality," September 29, 2011, <http://www.ecommercetimes.com/story/73389.html>.

27. Smith and others, *Open ICT4D*, 2008.
28. J. Von Bernstorff, "Democratic Global Internet Regulation? Governance Networks, International Law and the Shadow of Hegemony," *European Law Journal* 9, no. 4 (2003): 511–526.
29. S. O. Siochru, B. Girard, and A. Mahon, *Global Media Governance: A Beginner's Guide* (Lanham, MA: Rowman and Littlefield, 2002): 119–162; 143–162; V. Pickard "Neoliberal Visions and Revisions in Global Communications. Policy from NWICO to WSIS," *Journal of Communication Inquiry* 31, no. 2 (2007): 118–139.
30. This sentiment is strongly expressed in the Tunis Agenda of the World Summit on the Information Society (2005), and annual UN General Assembly resolutions in the subsequent years.
31. Most observations about the IGF are from IT for Change's direct engagement with the IGF. Similarly, later in the section, the insights about ICT in schools policy of government of India come from our direct engagement with the involved processes.
32. J. Malcolm, *Multi Stakeholder Governance and the Internet Governance Forum* (Perth: Terminus Press, 2008).
33. M. Kaminski, "Recent Development: The Origins and Potential Impact of the Anti-Counterfeiting Trade Agreement (ACTA)," *Yale Journal of International Law* 34, (Winter, 2009): 247.
34. <http://www.ericademon.co.uk/EV/EV2122.html>.
35. These e-discussions of the Civil Society Internet Governance Caucus are publicly available on its Web site www.igcaucus.org.
36. GeSCI (Centre for Science, Development, and Media Studies), *Toward a National Policy on ICT in School Education in India: A Multi Stakeholder Perspective* (Noida, IN: Centre for Science, Development and Media Studies, 2008) <http://www.gesci.org/assets/files/GESCI%20COMPENDIUM%202008.pdf>.
37. A. Raman, "Target Audience," November 24, 2008, <http://www.outlookindia.com/article.aspx?239023>.
38. F. Schuurman, *Beyond the Impasse: New Directions in Development Theory* (London: Zed Books, 1993).
39. M. J. Sandel, *Democracy's Discontent: America in Search of a Public Philosophy* (Cambridge, MA: Harvard University Press, 1996).
40. We mean here a traditional understanding of development, its dominant understanding in discourse around policy and practice. Our view in this regard may be colored to some extent by the Indian context.

41. R. Barbrook, and A. Cameron, "The California Ideology," August 1995, http://www.alamut.com/subj/ideologies/pessimism/califIdeo_I.html.
42. Smith et al., *Open ICT4D*, 14.
43. W. Easterly, "The Ideology of Development," *Foreign Policy*, July/August, 2007, 31.
44. *Ibid.*, 32–33.
45. Smith, *Open ICT4D*, 2008.
46. It is accepted that information society changes are so deep and broad that they affect the relative meaning and nature of the private and public realms as well. This requires serious theorization. However, the contention here is that the blurring of boundaries regarding these concepts hitherto has been mostly opportunistic, as a part of the neoliberal design.
47. The use of the word *public* here includes community institutions.
48. Access to cable television is a typical example of a club good, an entity to which someone can be restricted but a good whose use by one party does not reduce its value to others.
49. The strong parallel with Marxian analysis of the unsustainability of the relations of production in a capitalistic system is obvious. If the collapse of the system as predicted by Marx did not take place, it was because the distributive policies of the welfare state intervened. A similar reestablishing of the balance between public and private institutions will also be required in the emerging information society.
50. D. Grimshaw, and J. Rubery, "The End of the UK's Liberal Collectivist Social Model? The Implications of the Coalition Government's Policy during the Austerity Crisis," *Cambridge Journal of Economics* 36, no. 1 (2012): 105–126.
51. For an analysis of "the battle over the institutional ecology of the digitally networked environment," see Y. Benkler *Wealth of Networks* (New Haven: Yale University Press, 2006).
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55. D. Nemer, comment on S. Jalil "South Africa: USAASA Telecentre Fail Revealed," *Community Informatics Researcher*, September 10, 2012, <http://vancouvercommunity.net/lists/arc/ciresearchers/2012-09/msg00057.html>.

56. IT for Change runs a Public Software Centre with such an objective. A similar initiative is also run in Brazil, where it is led by the government, which partners with other agencies.

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This is a section of [doi:10.7551/mitpress/9724.001.0001](https://doi.org/10.7551/mitpress/9724.001.0001)

Open Development

Networked Innovations in International Development

**Edited by: Matthew L. Smith, Katherine M. A.
Reilly**

Citation:

*Open Development: Networked Innovations in International
Development*

Edited by: Matthew L. Smith, Katherine M. A. Reilly

DOI: 10.7551/mitpress/9724.001.0001

ISBN (electronic): 9780262319614

Publisher: The MIT Press

Published: 2014



The MIT Press

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A copublication with
International Development Research Centre
PO Box 8500
Ottawa, ON K1G 3H9
Canada
www.idrc.ca / info@idrc.ca
ISBN 978-1-55250-568-7 (IDRC e-book)

This book was set in Stone Serif and Stone Sans by the MIT Press. Printed and bound in the United States of America.

Library of Congress Cataloging-in-Publication Data

Open development : networked innovations in international development / edited by Matthew L. Smith, and Katherine M.A. Reilly ; foreword by Yochai Benkler.
pages cm

Includes bibliographical references and index.

ISBN 978-0-262-52541-1 (pbk. : alk. paper) 1. Information technology—Developing countries. 2. Economic development—Developing countries. 3. Social networks—Developing countries. I. Smith, Matthew L. editor of compilation. II. Reilly, Katherine M. A., 1974- editor of compilation.

HC59.72.I55O64 2014
303.48'33091724—dc23
2013016541

10 9 8 7 6 5 4 3 2 1