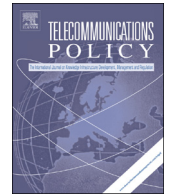




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## Representing participation in ICT4D projects

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## ABSTRACT

How do the discourses of participation inform deployment of information and communication technologies for development (ICT4D)? Discourses here mean narratives that assign roles to actors, and specify causes and outcomes for events. Based on the theory and practice of international development we identify two dimensions to participation and ICT4D: whether participation 1) is hierarchical/top-down or agent-driven/bottom-up, and 2) involves conflict or cooperation. Based on these dimensions we articulate four ideal types of discourse that permeate ICT and development efforts: stakeholder-based discourses that emphasize consensus, networked efforts among actors collaborating in network arrangements, mobilization discourses that account for contestation over meanings of participation, and oppositional discourses from 'grassroots' actors that also include conflict. We conclude that ICT4D efforts, depending on the context of their implementation, are permeated by multiple discourses about participation. Our four ideal types of participation discourses are, therefore, useful starting points to discuss the intricate dynamics of participation in ICT4D projects.

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## 1. Introduction

Discourses about participation – involving people and civil society in the governance and deployment of technology for development purposes – challenge an older representative model in which science and technology were expertize driven, with implicit or explicit support from political and commercial institutions. Discourses here mean narratives in scholarly or policy-based writings that assign roles to actors, and specify causes and outcomes for events. The dominant scientific discourses believed science and technology to be value-free and objective, resting upon rigorous method and empirical observation, and 'protected' from everyday politics (Brown, 2009). Governance and power in these technological practices were often imagined as top-down (Sarewitz, 1996). Such hierarchical orderings informed governance in the form of a techno-state, which created and enforced the underlying collective understandings about technology.<sup>1</sup>

Despite the hierarchical understandings about technology, participatory discourses have become increasingly salient in the global governance of information and communication technologies for development. In the 1970s, this took the form of the New World Information and Communication Order (NWICO) through the United Nations Educational, Scientific and Cultural Organization, which questioned the global imbalances in information flows and corporate ownership especially between the North and the South (The MacBride Commission, 1980). NWICO devolved into a feisty cold-war and North–

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**Table 1**  
Representing discourses of participation.

	Structured/hierarchical	Agentic/horizontal
<b>Consensual</b> (state-dominated)	<p><i>Stakeholder discourse</i>  <i>Literature:</i> United Nations, International Organizations, Governments  <i>Examples:</i> ICT4D at World Bank, Government-led initiatives</p>	<p><i>Network consensual discourse</i>  <i>Literature:</i> transnational and national societal networks  <i>Examples:</i> networks of service delivery in ICT4D projects, crowdsourcing</p>
<b>Conflictual</b> (societal pressures)	<p><i>Performative mobilization discourse</i>  <i>Literature:</i> advocacy and performance strategies  <i>Examples:</i> World Summit for Information Society; social movements' use of ICTs and social media.</p>	<p><i>Oppositional discourse</i>  <i>Literature:</i> critical theory, organizational behavior  <i>Examples:</i> Community radio, community content creation</p>

South ideological contest featuring proxy battles between what the West and its 'free' media, and what the East called its state-led 'responsible' media (Singh, 2011). Nevertheless, it was one of the first international instances of a global debate on the norms and rules governing information technologies. In our current era, the global debates on Internet governance and the World Summit on Information Society have been similar even if less feisty than the NWICO counterpart, and much more focused on participation as a key principle (Frau-Meigs et al., 2012; Flyverbom, 2011). World Bank's *Infodev* division, at the forefront of implementing an inclusive ICT4D agenda notes: "We do this in partnership with other development programs, with World Bank/IFC colleagues, and with stakeholders from the public, private and civil society sectors in the developing world" (Infodev, 2012). A conservative estimate of community-driven development projects at the World Bank calculated them to be \$85 billion in the last decade (Mansuri and Rao, 2013:ix).

How does the discourse of participation inform the deployment of information and communication technologies for development (ICT4D)? The 40 years of global advocacy from a variety of actors to make technology-driven development more inclusive offer a unique opportunity to assess participatory discourses. As an academic field and development priority, ICT4D is still in the making, and we have limited empirical knowledge of how participation and ICT4D intersect. Therefore we need integrative research efforts (such as literature reviews and analyses) that can enhance our understanding of the ICT4D-participation nexus, as well as innovative suggestions for future avenues for research in this area. Reflecting on scholarly and policy literatures on the topic, we identify two dimensions or tensions that underpin contemporary discussions of participatory development and ICT4D: whether participation is hierarchical/top-down or agent-driven/bottom-up, and involves conflict or cooperation among actors. Based on these dimensions we forward four ideal types<sup>2</sup> of discourse that permeate ICT and development efforts: 1) *stakeholder discourses* that emphasize mostly top-down interactions and consensus among participants; 2) *networked discourses* focusing on similarly structured, but more horizontal interactions and collaborations based on shared interests; 3) *mobilization discourses* highlighting agent-driven or bottom-up efforts and interactions that involve contestation over the meanings and effects of participation, and; 4) *oppositional discourses* stressing conflict among actors and 'grassroots' and other bottom-up and agent-driven forms of participation.

This article contributes to research on participatory development and ICT4D in two parallel ways. First, it shows that there are multiple understandings of participation at play. We argue that these understandings can be understood as discourses that allow for a variety of policy positions affecting the role of actors and infrastructural options or development efforts. Second, our four ideal types seek to show the relevance of taking into account both dimensions to the major debates in the literature on participatory development: the extent to which participatory development is hierarchical or bottom-up agent-driven, and if such participation is consensual or conflictual (see Table 1).

The focus on discourses is important: instead of showing the 'effectiveness' of various forms of participation, our intention is to show how governance and policy formation revolves around, and leads to, different discourses about participation. Conventional approaches treat the 'problem' (such as participation) that policies are intended to solve as given or pre-existing, and evaluate their effectiveness. However, our research sees the very identification of problems and suggestions about solutions as a more intricate affair, and stresses the productive and constitutive role of such articulations in the making of new approaches to development. Thus, attention to the role of discourses and 'problematizations' (Foucault, 1991; Bacchi, 2009; Baiocchi, Heller, & Silva, 2011) helps us note that "in many cases it is the constitution of these issues as sites of policy which are at stake" (Larner and Walters 2004: 11). In the case of participation, the focus on representations, 'problematizations' and discourses opens up questions about the identities of the issues and actors involved, and allows us to capture the varieties and intricacies of participatory efforts. Rather than a monolithic model, our argument, in fact, is that participatory discourses in ICT4D take multiple shapes and must be studied in a pluralist manner. Methodologically, our pluralist, discourse-oriented approach revolves around careful attention to the ways in which different initiatives are informed by, produce and problematize particular understandings of participation, to the ways in which actors are included or excluded in these representations, and to the ways in which ICT4D is shaped through such articulations.

<sup>2</sup> By ideal types we mean analytical constructs that articulate features of a given phenomenon in an abstract and exaggerated form for the purposes of analysis, in line with Max Weber's original formulation (Jupp, 2006).

## 2. Ideal types in representing participation in ICT4D projects

The recent emphasis on participatory discourses in technology departs from both the liberal and critical view. Liberal approaches often relegate science and technology to experts and expertize even in pluralist politics (Guston 2007; Heeks 2009; Unwin, 2009). Critical approaches believe strongly that many forms of participation merely mask corporate or political domination (Cleaver 1999; Comor 2001; Harding 1991; Hickey & Mohan, 2004; Hickey and Mohan 2005; Mosco 2014). Despite their emphasis on expertize or domination, both sets of literatures do acknowledge either the need for participation in technology or the actual emergence of participatory approaches. The literature on participation and related discussions is heterogeneous and extensive. Notwithstanding overlap and variability, we classify the literatures on the basis of our two explanatory dimensions: (1) the degree to which participation is imagined as top-down and structure driven or bottom-up and agency driven, (2) the presence of conflict versus consensus that defines participation. These two dimensions aggregate a wide range of arguments, logics and approaches that underpin contemporary discussions of participation with relevance for our investigation of ICT4D. Thus, the literature we draw on includes development discussions of participation (Cooke and Kothari, 2001; Mansuri and Rao 2013; Heller and Rao 2015), discussions of international organizations and global governance (Martens, 2006; Ottaway, 2001) and discussions of networks and advocacy in international politics (Keck and Sikkink, 1997; Slaughter, 2004). Based on our review of the relevant literature, we consider these two dimensions to be useful for attempts to distinguish and chart the variety of ways in which discourses about participation inform ICT4D. On the basis of these two dimensions, we specify four 'ideal types' in thinking of participation that are specified in Table 1 and discussed further below.

These four analytical constructs that make up the two-by-two matrix – *stakeholder discourses*, *networked discourses*, *mobilization discourses*, and *oppositional discourses* – allow us to bring together the relevant literature on participation and organize it along the two dimensions outlined above. These four ideal types are a valuable starting point for a conceptualization of the multiple ways in which discourses about participation inform the ICT4D domain.

### 2.1. Stakeholder discourse

Stakeholder-based discourses emphasize the structured way in which participation is introduced and organized through hierarchically driven interactions and acknowledge the necessity and the dominant predilection for consensus among participants in these approaches.

The structured and consensual discourse about technology governance and development at the global level can be traced back to the presence of strong states or great powers in the international system (Gilpin, 1983; Eriksson & Giacomello 2007). Historically most global governance efforts were imagined as hierarchical activities more or less following Thucydides' maxim that the strong do what they can and the weak suffer what they must. However, such ideas go beyond the global level. When governance is imagined in a top-down context, it can be surprisingly free of conflict, if only because the weak at the bottom have no recourse but to accept the diktats of the strong. In Scott's (1987) text *Weapons of the Weak*, the peasants in Malaysia find ways to not acquiesce to the landlords but their efforts are marginal to the presence of centralized control in their lives. In *Seeing Like a State*, Scott (1998) spells out the logic underlying state authority including the scaling of its efforts through a large bureaucracy and the categorizations of activities for management. Foucault's logic of the Panopticon speaks of similar centralized control, both explicitly organized and implicitly obeyed through what he calls 'governmentality.'

Stakeholder approaches involve authority but, unlike historic hierarchical interactions, they can also involve consultation and dialog. In contemporary accounts, stakeholder-based approaches are often presented as novel forms of multi-level global governance involving cross-sectoral interaction and hybrid forms of organization (Hallström & Boström, 2010; Enderlein et al, 2010). In this literature, stakeholder participation is considered central to the legitimacy and the effective governance of transnational phenomena. Such participation requires collective and inclusive efforts to solve complex problems that cannot be addressed by states or intergovernmental institutions alone.

The recent policy discourse in global governance, especially in international organizations, often speaks to stakeholderism and the need to bring multiple players into decision-making for technology (UNESCO, 2005; United Nations Development Program, 2001; The World Bank, 1998). The discourse of multiple stakeholders addresses both the scholarly and practice-oriented demands to reach beyond 'member-states' as global actors, especially in implementing global initiatives at the societal level. At the practical level, this discourse, perhaps reflecting the bureaucratic jargon of international agencies, represents participation as a seemingly consensual activity. For example, in thinking through Internet governance, the United Nations has discussed matters ranging from communication rights to cyber-security protocols and tried to involve private and civil-society actors with an often-unstated assumption that such involvement can be executed through consensual approaches. In 2003, then Secretary-General of the UN, Kofi Annan, described the World Summit on the Information Society in the following way: "This global gathering will be a unique opportunity for all key players to develop a shared vision of ways to bridge the digital divide and create a truly global information society. It will be an opportunity to develop specific solutions and tools and adopt a realistic and viable plan of action" (<http://www.itu.int/wsis/annan.html>).

The United Nations system, as an answer to managing post-war global problems, initially limited itself chiefly to defining this management in terms of nation-states even though there were alternatives: for example, UNESCO was initially discussed as a civil society organization, and ILO has a tri-partite structure that includes nation-states, labor groups, and corporations (Martens, 2006). At the UN Secretariat itself ECOSOC allowed for NGO participation, although it is a relatively

weak body (Willets, 2000). In terms of technology, the 'consensus' at the global level, fostered through nation-states themselves, was that technology was best left to states and experts. Technology was narrowly defined in apparatus terms and thus the hold of engineers over telecommunication networks nationally found a global counterpart at the International Telecommunication Union, which 'maintained' both national monopolies and the engineering worldviews that sanctioned the need for national networks (Cowhey 1990). Participation, therefore, remained nation-state and elite-driven.

It is appropriate to discuss the factors leading to acknowledgment of participatory politics in technology at the inter-state level. While beyond the scope of this article, it must be remembered that this acknowledgment of the need for participation reflects broader patterns in the weakening of state authority in national and international contexts and the rise of transnational politics. These emergent developments have introduced multiple discourses with multiple actors to bear upon prior structures of authority (Avant, Finnemore, Susan, & Sell, 2011; Hurrell, 2008; Rosenau, 1997). Furthermore, states' acceptance of participatory politics also responds to the factors underlying participation in the other three models described below, many of which might even seek to marginalize the state.

Stakeholderism as a discourse, therefore, allows a role for non-state actors to be involved in global governance. A few elements for this discourse can be isolated. First, the discourse, sanctioned through interstate politics, preserves for the state not just a *primus inter pares* role, but presents the state as legitimizing the presence of any other actor. Endless debates on the entry and subsequent role of NGOs in international politics are reflective of this (O'Brien, Goetz, Scholte, & Williams, 2000). Second, non-state actors are often posited as stakeholders with whom UN experts or other officials must hold discussions, or they are allowed a 'seat at the table' under limited circumstances. The World Bank's approach to development in general has used this sort of stakeholder method. Third, the discourse seems to assume that such consultations will lead to consensus although this is seldom explicitly stated. The world of inter-state diplomacy, although full of conflict, often operates through centuries old diplomatic protocols, which can create the 'appearance' of consensus even if there's underlying conflict. The United Nations agencies, in fact, mostly operate on consensus-based voting, which prevent open conflicts even if such voting mechanisms allow strong states to coerce the weak away from any form of defection (Steinberg, 2002) or, conversely, allow the weak to make a difference in diplomatic negotiations (Singh, 2008). Thus, the presence of 'consensus' may actually mask deep underlying conflicts.

## 2.2. Networked discourse

Another consensus-based approach looks at participatory international politics from a non-state perspective. This discourse does not preclude the nation-state, but provides precedence to transnational factors that mobilizes actors to participate. Thus, actors' participation, rather than hierarchical coercion or suasion, drives this approach. The consensus-based assumption in these discourses favors the language of networks and stresses horizontal interactions and collaborations based on shared interests.

Consensus-based network discourses are mostly of two types in the literature. The first tends to account for transnational networks of 'intra-state' actors coordinating their activities with each other. Newman (2009) writes of data privacy directorates in European and other states coordinating their practices. Slaughter (2004) uses the term 'horizontal networks' to describe similar work of transnational actors, but she also accounts for 'vertical networks' that involve various hierarchies of actors coordinating across a similar task. Issues of environmental governance might involve coordination among regulatory authorities in a horizontal fashion but could involve actors from the grassroots, national, and global levels in other issues.

A second approach toward network consensus goes beyond state actors to describe the participation of private actors and civil society in technological activities. Smith and Katherine (2013) provide many examples of actors at local and global levels to organize toward social and economic empowerment through information sharing and collaboration, especially through use of open-source technologies in development. Mueller et al. (2013) describe how ensuring cybersecurity on the Enderlein et al. (2010) or imposing intellectual property norms (Sell, 2003).

A few common elements of the networked consensus discourse may be outlined. First, agency driven approaches are often marked with actors of the same type consensually coordinating on an issue. Even the vertical networks that Slaughter (2004) mentions seem to work better when they include similar types of actors – for example, interstate, state-level, and sub-state government officials. Consensus may be harder when involving different types of actors. Second, the consensus in these approaches is agency driven and, therefore, to the extent that it exists it does not mask underlying tensions. Third, it follows that although agency-driven, these networks are not open. The very presence of consensus might be due to the exclusive network that brings together like-minded actors to coordinate.

## 2.3. Mobilization discourse

Structured and hierarchical settings seldom produce the kind of consensus that can be termed participatory. In fact, the first step toward getting structures to listen might be conflict through advocacy networks and a series of theatrical techniques that Appadurai (2015) terms 'performative failures'. We use the term *mobilization discourses* to refer to approaches that highlight agent-driven, 'performative' efforts and interactions involving contestation over the meanings and effects of participation.

The global advocacy and social movements literature is replete with examples of actors mobilizing on issues that encompass multiple actors. It often involves advocacy especially from actors who perceive their ideas and presence as



marginalized in a structure dominated by powerful actors. Clearly, [Keck and Sikkink's \(1997\)](#) seminal work on transnational advocacy networks fall in this category. They document how diverse and fluid networks of NGOs, scientists and other non-state actors develop strategies around global issues and are able to shape policy-making through various forms of collective action, both within and on the boundaries of existing governance institutions. These include transnational advocacy networks – such as those for violence against women and environmental protection – consisting of multiple actors and where a great deal of contestation and negotiation takes place.

Coordination across various types of actors and epistemes is not easy and apart from conflict, it may also involve a series of global performances, a few of which might be deemed failures. For instance, [Appadurai \(2004\)](#) notes the 'politics of shit' that involved slum-dwellers' advocacy for better toilets, including at one point the construction of a slum toilet in UN Headquarters, which drew then Secretary General Kofi Annan's attention. Continuing further, [Appadurai \(2015\)](#) writes that advocacy is often a series of performances that both continue existing practices while uncoding the ideologies that sustain them. Appadurai's explicit homage here is to gender and queer theory ([Butler, 1990](#)). Returning to politics of shit, he notes that slum-dwellers' organizations around the world did not coalesce instantaneously or figure out immediately how to make authorities responsive: their strategies were, in fact, honed through slowly getting to understand each other and through a series of failed performances. James [Scott's \(1987\)](#) ethnography of the weak may be understood in a similar light: the weak have not 'consensually' accepted authority; in fact, the passive aggressiveness of peasants in small acts of disobedience, like not understanding commands or paying taxes on time, may be the performative theater for conflict. At the international level, such performative discourses can also be found in the highly visible 'naming and shaming' practices adopted especially among humanitarian and human rights groups in order to force powerful actors to change the course of their action ([Steele, 2007](#)). [Sell \(2013\)](#) notes the advocacy and mobilization – among civil society organizations and businesses – that defeated the proposed highly restrictive intellectual property legislation in the U.S. Congress in 2012.

Three elements of performative mobilization discourses are important. First, such mobilization exists for the purposes of making those in power act in a different way. Second, rather than accommodation, mobilization for advocacy might involve a great degree of conflict. Third, such conflict might be the first step toward getting the powerful to rethink their actions, even though subsequent stages of participation might feature other forms of conflict.

#### 2.4. *Oppositional discourses*

Oppositional discourses are agent-driven but rather than working through existing structures through conflict or consensus, they explicitly situate themselves outside of formal organizations and institutions. Any accommodation within existing structures can be seen as cooption, and therefore, they are marked with a high degree of conflict in seeking alternative paths to influence, such as those driven by civil society actors and 'grassroots' movements.

Building on critical theory, such approaches specify an alternative worldview and consider participation as a form of veiled domination and control, which – in the name of inclusion and empowerment – serves to maintain inequality and domination, particularly by undermining resistance through inclusion ([Cooke and Kothari, 2001](#)). In such accounts, participation is described as an "unjust and illegitimate exercise of power" and a "moral tyranny" ([Cooke and Kothari, 2001](#), p. 3–4). This part of the literature on participation seeks to show how participation may function as a 'control mechanism' ([Hailey, 2001](#)) and a form of 'domination', unless participants decide to "resist inclusion" and "opt out of the participatory process" ([Kothari, 2001a, 2001b](#), p. 151).

Although often cast in less oppositional terms, the literature on neo-corporatism also stresses how participatory arrangements create, rather than solve problems about legitimacy, and may weaken the possible contributions of all parties and create new bureaucracies. For instance, [Ottaway](#) compares current forms of participation to the orchestrated, deceitful participation schemes that we know from authoritarian regimes: "Corporatism in its fascist, authoritarian form thus turned from a system of representation to one of control, with the government as the gatekeeper that allowed a few carefully chosen, compliant organizations at the table, excluding and indeed repressing all others" ([Ottaway, 2001](#): 269). Such forms of critique also suggest opting out of participatory schemes, and point to resistance as a more viable path towards transformations in global governance. For instance, [Ottaway \(2001: 287\)](#) argues that "there has already been an improvement in the functioning of many international organizations because of the growth of the NGO sector and of the pressure it has put on them and on international business. But we should not forget that this change is emerging not as the result of new cooperative relations among international agencies, NGOs, and business, but because of the adversarial, conflictual relations among them that is forcing international organizations, transnational business, and even NGOs to modify their behavior and redefine their expectations." Such efforts and transformations result from actors contesting and negotiating structured attempts at creating consensual forms of participation, rather than participating in those forms foisted upon them. A key point in this strain of literature on participation is that the most viable and efficient form of resistance is to avoid structured participation schemes altogether, and instead favor locally determined forms of development ([Mohan & Stokke, 2000](#)). [Castells \(1999\)](#) provides several examples of social movements challenging authority through information networks. Recent examples in the media of police violence globally can also be understood as oppositional discourses ([Schneider, 2014](#)).

We can also identify other critical, but less radical accounts of oppositional discourses. For instance, the so-called 'transformationalist' literature on participation has sought "to re-constitute participation as a viable and legitimate approach within development" ([Hickey & Mohan, 2004](#)). Such accounts address concerns about manipulation and cooptation, and unpack the ideological underpinnings and power relations at work in participatory initiatives in less normative ways. Along

similar lines, scholars have sought to capture the intricate ways in which actors simultaneously engage in and resist participatory arrangements, such as when Bang and Sørensen (1999) so-called 'everyday makers' which actively resist the categorizations and representations of participation. That is, "if they participate, they do it on their own terms, rather than on terms established by the state" (and other institutions, one may add) (Li and Marsh, 2008: 248). Such readings of participation tie in closely with the focus on representations, problematizations, and discourses in our approach.

Three elements of oppositional discourses deserve attention: First, they are largely conflict-oriented, and focused on demasking the intentions and strategies of those positing participation as a (simple) solution to problems of governance, exclusion and accountability. Second, they involve work on the boundaries and terms of participation, rather than more structural transformations. Third, they are marked by negotiations within the discourse or literature about the degree and forms of resistance and critique to be waged against participatory initiatives. Taken together, oppositional approaches address the ways in which actors engage in and resist participation, whether in the shape of opting out, pursuing dual strategies of engaging and attacking, or by questioning and problematizing the very terms and categorizations at work in participation projects.

### 3. Information and communication technology for development (ICT4D)

The acronym ICT4D encompasses development initiatives, which prioritize the role of information technologies and infrastructures. Specifically, these deal with the implementation of development projects at the grassroots level whose rationale is informed by ideas that originated from international organizations, governments, and NGOs. ICT4D projects seek to improve the material and social conditions among marginalized and poor groups through information technology applications mostly in the developing world. While the term ICT4D is relatively new, originating around 2000, the origins of the thinking behind this discourse can be traced back to the sub-field of development communication, the rollout of information infrastructures in the developing world in the last 15 years especially in mobile telephony, and the broad acceptance among a variety of actors that the Internet is important for development (see Table 2). Even in the developing world, Internet growth rates have been quite high though overall Internet density is limited.

Most ICT4D discourses now speak to societal inclusion and participation as key elements of project implementation. Nevertheless, the forms of participation vary. In development communication models, perhaps the best-known cases of participation, although by no means the modal examples, come from the consensual networked discourse. In the following, we provide a number of illustrations of how different discourses about participation inform the policies or the deployment of information and communication technologies for purposes of development. These discussions are organized along the lines of the four ideal types outlined above in order to articulate the value of our typology for studies of participation in the ICT4D domain.

#### 3.1. Stakeholder discourses in ICT4D

Many participatory initiatives in ICT4D are top-down and hierarchically driven, especially those formulated among global agencies. Such efforts have often taken the shape of structured and formal consultations with (often carefully) selected non-governmental organizations. At the UN, these participation initiatives often granted NGOs 'consultative status' at particular stages of policy and priority development, but rarely provided more than opportunities to give advice or observe decision-making processes (Willets, 2000). During the 1990s, these formalistic and marginal possibilities for participation gave way to more inclusive initiatives, often operating in the name of 'partnerships' and, more recently, in the name of 'multi-stakeholder' arrangements. Such forms of participation are all informed by what we term stakeholder discourses, and hold onto a focus on structured and hierarchically driven interactions and a belief in consensus as the outcome of interactions among the actors involved.

**Table 2**

Growth rates of information infrastructures.

Source: The World Bank, World Databank: World Development Indicators (WDI) & Global Development Finance (GDF). Available at [databank.worldbank.org](http://databank.worldbank.org) Accessed June 23, 2014.

Category	Income levels	1995	2000	2005	2010	2012
<b>Internet users per 100</b>	High income	3.2	27.3	53.8	69.6	75.4
	Middle income		1.6	7.7	22.9	29.9
	Low income		0.1	0.9	3.9	6.2
<b>Mobiles per 100</b>	High income	6.7	43.7	83.4	115.5	122.9
	Middle income	0.3	4.9	24.9	73.6	87.7
	Low income		0.3	4.6	23.0	47.2
<b>Telephone lines per 100</b>	High income	44.2	50.9	48.1	45.7	43.6
	Middle income	4.1	8.3	14.3	13.1	12.3
	Low income	0.5	0.6	0.9	1.1	1.0

A few examples from the ICT4D domain can illustrate these developments. In the 1990s, the World Bank and the International Telecommunication Union began to prioritize ICTs. Early pioneers at the World Bank had sought to urge governments to prioritize telecommunications. These efforts culminated in World Bank's flagship program in ICTs called Infodev. The discourse on participation found resonance at the G8 summit in Okinawa that eventually led to the formulation of Millennium Development Goals. The theme of *The World Bank, 1998/99 World Development Report* was *Knowledge Society and the Knowledge Gap*, which spoke to the importance of ICTs. Agencies such as UNDP and World Bank, at the forefront of implementing ICT4D projects, had been trying to respond to pressures for participation. The formulation of MDGs would also promise resources. In practice, the MDGs have remained underfunded, and international organizations have struggled with initiatives that are truly participatory.

At the ITU, a major restructuring in 1992 led to the creation of a division aimed at development (ITU-D) as one of the three major divisions within its secretariat, along with ITU-S dealing with standardization and ITU-R dealing with radio-telecommunication. By the end of the 1990s, the ITU was calling for a multilateral multi-stakeholder summit to discuss the implications of an information society in the developing world. These efforts led to the convening of the first World Summit on Information Society in Geneva in 2003.

The United Nations itself moved toward prioritizing ICTs with the Economic and Social Council's Resolution 2000/29 on July 28, 2000, and ECOSOC's Decision 2001/210 on March 13, 2001, to convene the multi-stakeholder UN ICT Task Force. The UNICT started convening meetings by autumn 2001. The multi-stakeholder approach also paralleled the efforts of UN Secretary-General's Kofi Annan's "Global Compact" to create public-private partnerships, and thus UNICTTF brought several civil-society groups and businesses into the discussions. For example, Anriette Esterhuysen, Executive Director of the Association for Progressive Communication, chaired the ICT Policy and Governance working group, one of the four working groups that UNICTTF created (Flyverbom, 2011).

At global and national levels, experts design most ICT4D initiatives and participation takes the forms of stakeholderism. By 2003, between 70 and 90 national governments had e-Strategies in place in the world, linking ICTs with social and economic priorities, but examples of civil society or involvement in these initiatives are rare (Adamali and Coffey, 2006: 87). Telecenters that offered some access to government services, market information, and rudimentary computing facilities with telecommunication services were the first instance of the ICT4D applications that were decentralized and available at the local level (Best and Kumar, 2008). However, their roll-outs were rooted in top-down discourses of stakeholderism. The Indian government, for example, planned to roll out 100,000 rural telecenters as part of its National e-Governance Action Plan, which was approved in 2006 (Singh, 2013). There is little evidence of grassroots consultations in planning or rolling out the 'Community Service Centres' (CSCs) that followed. As Heeks (2009) points out, most telecenters around the developing world are planned with little regard to actual demand, needs, or user inputs. Furthermore, it is hard to make them financially viable. For example, the system of electronic land records in many Indian states now allows farmers to obtain land records for as little as Rs 10 (15 US cents). As Prakash and Dé (2007) show, the electronic *Bhoomi* system does not allow for any kind of mutation, interactivity, or resolution of disputes, which creates the need for these records.<sup>3</sup>

Stakeholder discourses play a crucial role in participation initiatives, particularly in intergovernmental organizations, and shape important forms of ICT deployment in development such as international organization or government-led initiatives to improve human well-being mentioned above. But participation also takes different shapes that deserve our attention.

### 3.2. Networked discourses in ICT4D

Not all ICT4D projects implemented within structures feature stakeholderism discourses. Global advocacy of various sorts seeks to challenge structures either to change practices or specify an entirely different worldview. In the former case, many of the grassroots pressures that global and national agencies confront might be first discerned in the ways that more horizontal collaborations between grassroots actors can emerge. Communication networks have been central to such structured participation based on horizontal interactions and collaborations driven by shared interest. As we will see, such initiatives are often facilitated by creative uses of digital technologies.

It is not hard to find examples of networked consensus among transnational civil society actors. At a more general level, the World Social Forum, which acts as the civil society response to the World Economic Forum, is an example (Conway, 2011). Although there are dissensions even in WSF, the presence of mostly civil society actors allows for consensus on several issues. Similar examples can be found in the case of information technologies. Ongoing discussions about global Internet governance, such as those facilitated by the Working Group on Internet Governance, the Internet Governance Forum, and other UN-based initiatives have been driven by expert and activist groups, who have not only engaged in extensive dialogs amongst themselves, but also sought to broaden participation and develop the procedures and workings of such meetings (Flyverbom, 2011). In ICT4D, e-Governance initiatives nationally and internationally have involved intra-state actors learning from each other. The sub-field of development communication also provides examples of vertical and

<sup>3</sup> The 'affixation' of property rights electronically might result in a decrease of future disputes. Government officials in India note that with land registrations online, and easily searchable, spurious sales of the same land, to multiple different buyers, are coming to an end (based on first author's field research, summer 2014).

horizontal networks of actors coordinating to provide services such as health communication campaigns, mobile banking, and agricultural knowledge-sharing (Unwin, 2008).

The deployment of many crowd-sourcing information technology platforms follows the logic of networked discourses. These platforms galvanize actors to participate in increasing the scope of the network, both for network expansion and content generation, but most participation remains consensual. The use of the first crowdsourcing and social mapping software platform Ushahidi is instructive. Named after the Swahili word for testimony or witness, Ushahidi was first made public in the December 2007 Kenyan elections (Vericat, 2010). The election had resulted in a political stalemate, with incumbent President Mwai Kibaki, of Kikuyu ethnicity, declared victorious – a result that challenger and opposition leader Raila Odinga of Luo origin contested. Voter fraud and manipulation were reported in the media and ethnic riots began in Kenya. Within a week of the election, over 100 people were reported killed. In total, over 300,000 people were forced to leave their homes during the violence and 1200 were killed (Wadhams, 2008). A small group of Kenyan software developers assembled and launched the Ushahidi platform in a few days. It allowed citizens to use a variety of media such as mobile phone, landlines, radio, or Internet, to monitor elections and report cases of violence, which were then centrally collected and reported on Google maps. These maps allowed people to avoid areas of violence, and journalists also picked up eye-witness accounts being reported on Ushahidi. Eventually a power-sharing arrangement was worked out between the two electoral contenders. Ushahidi contributed to conflict de-escalation and helped to create conditions for peace. Since then, the Ushahidi platform, a form of citizen journalism, peace media, and participation, has had a variety of applications, including reporting from conflict and disaster zones such as anti-immigrant violence in South Africa in mid-2008 and the Haiti earthquake in 2010. It was even deployed in the 2010 winter snowstorm in Washington, D.C., and during the severe Russian Winter of 2011–12.<sup>4</sup>

The success with Ushahidi has led to development of other similar platforms and generated a whole new field of social and crisis-mapping, even though many of the practitioners may not identify themselves with this name. The platforms have a common emphasis on information sharing through networks, crowd-sourcing, and some form of satellite surveillance. Apart from Ushahidi, similar platforms include ArcGIS.com, Sahana, and Google Crisis Response. Harvard's Satellite Sentinel Project – in part funded by actor George Clooney – is well-known for analyzing violence between Sudan and South Sudan with images and data collected through DigitalGlobe's satellites (Raymond, Howarth, & Hutson, 2012). The United Nations has also developed crisis-mapping platforms for its humanitarian response in various forms including UN Secretary-General's innovative Global Pulse project, which enables information exchanges on crises and disasters among organizations and individuals.<sup>5</sup> While crisis-mapping is largely a bottom-up phenomenon relying on crowd-sourcing, policy institutions can use it effectively to enable information sharing. This was the case with enabling the government to create transparency on Tsunami relief in Japan in April 2010, or for UN OCHA to respond to and track the political crisis in Libya in Spring/Summer 2011 (Dunn Cavelti, 2011).

Such social and crisis-mapping platforms enable actor agency and participation in ways that are often non-hierarchical and consensus-oriented.

### 3.3. Mobilization discourses in ICT4D

Participation initiatives in ICT4D are increasingly also informed by more wide-reaching conceptions of participation as agent-driven, conflictual and disruptive. Mobilization discourses inform approaches that problematize the terms and worldviews involved in participation and offer alternative avenues for mobilization and contestation. Often, they occur outside or in reaction to more formalized participation initiatives. For instance, while WSIS was a structure-driven effort it allowed for various forms of performative mobilizations and interactions that involved contestation over the meanings and effects of participation. The World Summit for Information Society (WSIS) began as a movement to consider information society ideas as broadly as possible. WSIS deliberations included multiple stakeholders – businesses, governments, civil society, international organizations, and experts – as part of a global movement toward what is being termed 'Mush' or multiple stakeholder diplomacy. WSIS convened two major global summits apart from numerous other forums: in 2003 in Geneva and in 2005 in Tunis, and the proceedings were highly-contested both in terms of the agenda items and the various types of actors who were discussing them. One of the transnational civil society campaigns that made it to the Tunis agenda was the Communication Rights for an Information Society (CRIS) campaign. The campaign resulted from the Platform for Communication Rights, a worldwide group of civil society NGOs including the powerful Association for Progressive Communication (APC), working in communication issues. They received help not only from UNESCO deliberations but also from particular national commissions for UNESCO. For example, the World Association of Community Broadcasters (AMARC) met in May 2005 in Canada to discuss CRIS issues at the invitation of the Canadian National Commission for UNESCO.

WSIS, like any other global initiative, has its own politics that have also to some extent served to marginalize UNESCO. By the time of the 2005 Tunis Summit, for example, Internet governance issues dominated the WSIS agenda: the ascendance of the Internet governance agenda was marked with high degree of rhetorical conflict. It was also partly a result of the push given to Internet governance at ITU and the appointment of the UN Secretary General's Working Group on Internet

<sup>4</sup> Ushahidi practices are well documented. Please see, for example, [blog.ushahidi.com](http://blog.ushahidi.com) and [community.ushahidi.com](http://community.ushahidi.com).

<sup>5</sup> <http://www.unisdr.org/archive/24223> accessed May 10, 2015.



Governance (WGIG). From its inception, WGIG was a high-profile group and attracted a great deal of opposition from the incumbent private player in Internet governance, the Internet Corporation for Assigned Names and Numbers (ICANN) backed by the United States (Singh, 2008). After the Tunis meeting, the Internet Governance Forum, which continues to convene meetings, picked up the Internet governance agenda. However, the net result was that Internet governance issues, rather than knowledge or information society issues, as broadly conceived earlier, began to dominate WSIS discussions after the 2003 Geneva summit (Flyverbom, 2011).

Mobilization discourses have also resulted in technology use and deployment among social movements and groups contesting the legitimacy of authorities, but in this case access to these technologies needs to be analyzed in terms of contestation rather than instrumental empowerment. The best-known example is the use of Twitter and Internet during Arab Spring. Hussain and Howard (2013) note that while democracy movements predate current information technologies, mobile phone diffusion remains a key causal factor behind 'regime fragility' and social movement success in their quantitative models of the Arab Spring. Castells (1999) similarly documents the role of mobile phones among types of social movements, including identity and indigenous rights movements. Sell (2013) provides examples of Internet-based mobilization, reaching far beyond the United States, that defeated proposed intellectual property rights restrictions in the U.S. Congress.

Mobilization discourses have both tried to affect infrastructural deployment and also been affected by them. In the former case, the WSIS model, had it been successful, would have made the Internet more society and state centric, rather than the ICANN corporate led model that exists. To its critics, that would have stunted Internet growth, while to its supporters it would have made Internet governance participatory (Singh, 2008, chapter 6). In terms of being affected by infrastructural deployment, the use of mobile phones and Internet among social movements is a good example. The lesson for ICT4D deployment is simple: technology access matters.

Problematizing top-down, structured approaches, such initiatives in ICT4D are informed by mobilization discourses that call for new terms, worldviews and actors to reframe participation. As we will see, there are important differences and similarities between such mobilization discourses and the more antagonistic and alternative approaches that we now turn to.

### 3.4. Oppositional discourses in ICT4D

Oppositional, progressive and critical discourses in ICT4D often explicitly situate themselves outside of structures: instead of trying to challenge a structure from within, they espouse a radically different approach to ICT4D. Such approaches seek to craft ICT4D projects that are driven outside of agencies of power, rather than allowing for participation at particular stages within existing hierarchies such as in consultative arrangements. Clearly, this implies rather different types of projects than those driven, funded and legitimated by international development organizations.

Scatamburio-D'Annibale, Suoranta, Jaramillio, and McLaren (2006) note the important role of "alternative media" in fostering dialogic communication. As opposed to corporate media, which they posit as legitimizing capitalist oppression, people-owned radio and television can lead to an "active, engaged, informed political participation". In particular, they note the importance of the Independent Media Center movement, a global progressive network "dedicated to "horizontal" and "non-hierarchical" forms of communication and organization... As in many other parts of Latin America, Indymedia Argentina represents media for the oppressed" (p. 7). Indymedia offers broadcasting possibilities through multimedia uses such as the Internet, radio and pirated TV signals, but most importantly its proponents celebrate its ability to provide alternative forms of story-telling.

Other forms of oppositional participation include various sorts of community-driven projects, initiatives using digital technologies in novel ways, and more antagonistic forms of mobilization that resist participation as such. The NGO Spatial Collective has worked with residents in the Mathare slum of Nairobi and provided them with GPS devices and storytelling software to narrate their stories to themselves and the outside world (Kovacic and Lundine, 2013). The tremendous growth of mobile telephony in Sub-Saharan Africa from 2 per 100 in 2002 to over 33 in 2008, has also enabled mobile telephony platforms such as the Grameen Foundation's Community Knowledge Workers in Uganda or Oxfam's PeaceNet in Rift Valley, Kenya, to link organizations and society to a "central reporting station" to avoid instability (Livingston, 2011). But Livingston also notes the potential of information networks for misinformation, propaganda, and manipulation. Participatory development advocates have also critically examined open data rollouts to examine "programs that are designed to make the existing system function more effectively, rather than to rethink the functioning of the existing system" (Reilly, 2013, p. 307).

## 4. Conclusion

Participation is often lauded as a solution to problems of exclusion and lack of trust and legitimacy, and as an antidote to conflict and resistance. At the same time, this increased focus on participation has spurred critique and cynicism, and there is a widespread awareness of the unfulfilled promises and perils of participation (Smith and Katherine, 2013). Across such different fields of inquiry as organization and management studies, International Relations and development studies, as well as social work and welfare studies, we can identify a wide spectrum of views on the potentials and pitfalls of participation: some see participation as a solution to domination, exclusion and control, while others consider participation to be a form of

domination and control. Those who are very enthusiastic about participation consider it to be a straightforward project, which only needs to be diffused, refined and institutionalized to lead to empowerment (Creighton, 2005; Houtzagers, 1999). Others see participation as a form of tyranny, which in the name of inclusion and empowerment serves to maintain inequality and domination (Cooke and Kothari, 2001). On the backdrop of such polarized conceptions of participation, this article has sought to unpack the multiple shapes taken by participation and deliberation in the areas of ICT4D by starting from a pluralist approach to the meanings, discourses and representations of participation. Furthermore, this article has also examined the implications of these four discourses for ICT4D project rollouts and policies.

Participatory efforts in the global governance of ICT4D are marked by a widespread focus on engaging and mobilizing non-state actors in policy-shaping processes, dialogs and more practical efforts on the local level. This article has sought to capture the plurality of discourses about participation, with a particular focus on how they articulate orientations towards consensus and conflict on the one hand, and the relationship between structured/hierarchical and more agent-driven forms of steering on the other hand. Along those lines, our analyses substantiate the argument that our four ideal types of participation discourses – stakeholder, networked, mobilization, and oppositional – are useful starting points if we want to capture the intricate dynamics of participation and deliberation in ICT4D projects.

ICT4D efforts are permeated by multiple discourses about participation. When state or actors with great resources solicit participation, the approach merely brings in non-state actors as stakeholders that are to be persuaded to expertly designed projects and outcomes. However, the networked and mobilization ideal types offer some preliminary confirmation that civil society or like-minded actors can make a difference in the forms of participation. The oppositional discourse may not be dominant but its articulation through actors situating themselves outside structural practices, in turn might seek to modify the habits of domination. Community radio practices or use of the Internet among marginalized communities do inform networked consensus and performative mobilization practices.

Some of this variation can be explained in temporal terms. Within particular initiatives, participation may develop from top-down and structured to more horizontal, agent-driven interactions over time and as projects and relations mature. Also, we can identify a more general transformation in participatory practices towards more experimentation and acceptance of more 'daring' and experimental forms of participation – effectively allowing for more new participatory approaches to gain traction.

Our conclusion is, therefore, rooted in a caution not to be overly optimistic about nascent forms of participation. First, ICT4D deployment remains beholden to states with great resources, and experts and technocrats tend to define the discourse on participation. Second, participation in ICT4D projects involves grassroots actors mostly as stakeholders and effective deliberation in terms of problem-solving is limited. Third, to the extent that effective deliberation takes place, it reflects pressures from global civil society and non-state actors. A corollary to the second and third points above is that participatory and processes are tied to structural positions and resources which come to play an important role in the categorization, inclusion and exclusion of particular groups as stakeholders, and the definition and delimitation of a given issue area.

One finding which challenges the distinction between consensus and conflict is that participation in ICT4D practices allows for what may be termed 'cooperation without consensus' – organized and regularized interactions among actors with very different and often incompatible goals. Thus, it seems that participation increasingly allows for difference and multiplicity, as well as experiments with procedures and forms of engagement beyond technocratic and expert-driven processes.

Future research on participation in the global governance of ICTs may give more attention to the representations and discourses underpinning the current institutionalization of participatory discourses of governance. With increased attention to the plurality of rationalities at work in participation, we may start to unpack not only practical initiatives and their effectiveness, but also problematize and investigate the power effects and influence in the reconfiguration of global governance.

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