

Exploring the tensions and incongruities of Internet governance in Africa

Dr Kerry Holden
School of Geography
Queen Mary, University of London
Mile End
London E1 4NS
k.holden@qmul.ac.uk

Dr Aaron Van Klyton*
International Business and Economics
Greenwich Maritime Campus, 30 Park Row
QA359
University of Greenwich
London, UK SE10 9LS
Email correspondence: va21@gre.ac.uk

*Corresponding author

Abstract

Drawing on a series of in-depth interviews and statistical analysis of policy reports and documents, this paper examines how African nation states interact with Internet governance at the international level. There is a dominant paradigm at work that values the multistakeholder approach and encourages dialogue and equal representation. While, in principle, this model has developed for the good of all participating countries, we illuminate tensions and incongruities experienced by African nation states. We use three analytical frames that focus on the way countries are measured and ranked as ICT ready - what we refer to as accumulating evaluative value, the forms of resistance that emerge in order to counter the universalising values of Internet governance, and the way spatial geographies of internet use and access are mapped out politically. We draw attention to a paradox of stakeholder participation arguing that African nations experience continual disempowerment and alienation in their compliance with international directives.

Keywords: Internet governance, Africa, multistakeholder, audit, localism, urban/rural divide

Introduction

Although the performance of Africa's mobile networks over the past decade has been remarkable, the telecommunications sector in the rest of the world has also evolved rapidly. Many countries now regard broadband Internet as central to their long-term economic development strategies, and many companies realize that the use of ICT is the key to maintaining profitability. In Africa, however, the Internet is still in its infancy. In most countries, access is limited and slow. Where broadband is available, it is typically very expensive—far beyond the financial means of the majority of Africans. Ensuring that networks are capable of delivering broadband Internet access at affordable prices is the next major challenge on the horizon for policy (Williams, Mayer, & Minges, 2011, World Bank Report).

The World Bank, quoted above, promotes a universally held belief in information and communication technologies (ICTs) as central to the future prosperity of every society. ICTs are presented here as one of the driving forces of social transformation and economic growth, connecting communities across the globe and delivering goods and services with ever greater speed and efficiency. In realising the potential benefits of ICTs, the governance structure at the international level has adopted a participatory, multistakeholder model that seats representatives from business, government and non-governmental organisations (NGOs) around the table to form consensus about how the Internet should be run. This model and the entailed role of each stakeholder emerged from the 2005 World Summit on the Information Society (Hill, 2014) in order to assuage concerns about the United States' cultural and economic dominance over the Internet. While the international governance structure promotes a dialogic model emphasising representativeness and fairness, the costs of 'joining' and sustaining membership should not be underestimated, particularly for African countries hoping to develop their economies through ICT investment. In this paper we examine what this multistakeholder model means for seven African countries, which are Ethiopia, Ghana, Kenya, Liberia, Sierra Leone, Uganda and Zimbabwe.

The story of ICTs in Africa is about achieving sustainable economic growth and societal progress through the development and application of digital technologies. ICTs are positioned as a panacea to long-standing social problems and economic stagnation that have historically characterised African societies. Technological innovation in mobile telephony in particular is already seen to have increased the speed and efficiency of financial transactions and communications, decreasing wait times, bureaucracy and the propensity for corruption (James, 2009). While advances can be seen in some areas, overwhelmingly the story is still one of a continent playing catch up. The opening quote expresses a widely held view that African countries suffer from deficits in ICT provision, access and use compared to the rest of the world. Furthermore, this lag is considered representative of the low economic status of African countries on the global stage and has come to be encapsulated in the concept of the digital divide that separates the connected North from the disconnected South (Norris, 2001).

Academic and policy literature on the digital divide has predominantly focused on its causes (Fuchs and Horak, 2008; Norris, 2001; van Dijk and Hacker, 2003), the efficacy of intervention policies designed to decrease the gap (Gebremichael and Jackson, 2006; Kozma et al., 2004), and on patterns of state uptake of ICT provision (Strover, 2003). In this body of literature the digital divide is explained as a social fact with an emphasis on assessing various schemes and initiatives designed to close it. Limited attention is given to discussing the discursive influence of the concept of the digital divide in framing and configuring the role of ICTs in Africa. This extends to understanding and resolving in-country disparities between those that have access to ICTs and the mainly rural and urban poor that do not.

In this paper, we examine how African nation states are represented and participate in international Internet and ICT governance. As stakeholders at the international level, African nation states are automatically disadvantaged because they are seen to occupy the negative side of the digital divide. This division emerges as a dominant discourse for marking out the limits of their participation.

One necessity that concerns us is the centralisation of government offices to accommodate ICT. Each of the African nation states we studied had in recent years consolidated its ICT services under a single ministerial banner and established a corresponding national regulatory body. It is centralisation at the national level that supports international deliberation, but it also means that despite pretensions to transcend national boundaries, Internet governance is ever more tightly bound to state power. Bekkers (in Boymal et al., 2007, p. 409) succinctly states that 'politics and technology have power as their central focus, and large technological innovation at a societal level is deeply interwoven with politics in modern societies.' International efforts have coalesced around the centralisation and subsequent harmonisation of ICT policies amongst participating states. In Africa, much of the promise of the Internet, in relation to bringing prosperity and promoting social development (Hargittai and Hsieh, 2013; United Nations Department of Social and Economic Affairs, 2014), is tied to the state's ability to unite ICT under the remit of a single ministry.

In our analysis, we draw upon a series of in depth interviews with ministers and ICT officials from the seven countries. We also include content analysis of over 50 policy documents and reports taken from International, pan African and national arenas to demonstrate statistical variability in word usage. Our findings reveal three interlinked problems that inhabit the unfolding narrative of ICT provision and access in African countries. First, there is the problem of achieving fair representation and being heard at the international level. Secondly, there are subtle effects related to interoperability, such as those associated with the impact of accounting practices and audit cultures, which remain unacknowledged in much of the policy literature. Thirdly, there is the question of just what the state has remit over in African societies and the extent to which national policy is able to reflect and respond to local needs.

The structure of this paper is formed around the articulation of three interrelated framing devices that we use to address the problems outlined above. We introduce the first of these framing devices, which concerns the accumulation of what we refer to as 'evaluative value'. This concept finds inspiration in the work of James Scott (1999), whose book *Seeing Like a State* explored the ways in which nation states

have used particular methodologies in order to visualize their citizenry and the kinds of large scale programmes they have commissioned to intervene in and improve societal conditions. For our purposes, 'evaluative value' encapsulates the standardising methods and means by which states seek to visualize and measure their ICT activities in order for them to have meaning at the international level.

The second framing device concerns relations between the universalizing discourses of international fora and the conceptualisation of local need. The imperative to obtain evaluative value, to make ICT measurable, comparable and operable, consolidates what DeNardis (2014) has argued as a greater centralisation of Internet governance at the national level that promotes an outwards facing policy profile. We demonstrate how Internet governance is predicated on universalizing principles of need, access and beneficence that recapitulate development discourses. This creates a dichotomy for African states in which they are obliged to participate in international fora in the hopes of being seen as an equal player, however, they become subject to discourses that perpetuate global inequalities positioning them as either developing or underdeveloped. We identified resistance to these sorts of encounters that tend to augment state control over ICTs thus undermining the very ethos of the multistakeholder model of internet governance.

Our final framing device builds on the previous two and focuses on spatial difference, and in particular on the distinction in ICT policy between the urban and the rural. In accumulating evaluative value, we found that African nation states deploy a blanket policy in which the distinction between urban and rural is made, but only in order to treat them as the same. The rural and urban are conceived as being on the same pathway to development with the urban slightly further along. We draw attention to the tendency in these countries to impose verisimilitude on radically different geographical, political and cultural domains.

We conclude by commenting on the need for more empirical studies to illustrate the plight of African countries and societies in the inevitable march towards universalised digitisation.

Methodology

We set out to understand the current state of Internet governance in seven African countries. We identified three groups of countries based on the following interrelated criteria: the level of ICT advancement; the level of donor activity and collaborative partnerships in developing ICTs; and political culture and history. While we use these somewhat artificial criteria to group the countries, we recognise that it may not be representative of an 'African' experience of Internet governance. However, our goal is to highlight the range of experiences that many resource-strapped countries have in relation to this issue. These countries represent a broad range of historical and social contexts that impact on the way in which ICT policies are formulated and implemented.

Sierra Leone and Liberia have struggled to ignite their economies in the shadow of civil war. As post-conflict countries, both have been the recipients of international aid and donor investment in nascent ICT infrastructure aimed at rebuilding each nation respectively. This is exemplified by Sierra Leone's plans to build a technology park close

to its capital city, Freetown, in order to catalyse a self-generating technology industry. Ghana, Kenya and Uganda represent eastern and western regions in Africa, but all three consider their ICT sectors as advanced in comparison to other African countries as they host both educational training, industrial start-ups as a result of high levels of donor activity and collaborative partnerships (particularly between universities). These countries reflect on their progress as paving the way across the continent towards new models of African innovation. Zimbabwe represents southern Africa, but its political history has put it at odds with international policy processes. Ethiopia in East Africa not only has a unique history of African independence, but also one of the lowest Internet penetration rates in the whole of Africa. The political cultures and histories of these two countries has meant that while they have retained ICT policy strategies independent of the West, they have struggled to embed a strong ICT sector. Consequently, we believe that these seven countries provide a useful starting point as a preliminary study in understanding the factors that underpin the implementation of Internet governance directives at the national level.

We conducted in-depth interviews with Ministers and senior ICT officials in each of the seven countries listed above. A table of participants is listed below with the corresponding code used to identify them in the discussion¹.

Country	Identifying code	Most recent ICT policy
Kenya	K ICT 1	2014
Ghana	G ICT 1	2005
Uganda	U MP 1	2012
Ethiopia	E ICT 1	2009
Zimbabwe	Z MP 1	2005
Liberia	L MP 1	2009
Sierra Leone	SL MP 1	2005

Using a mixed methods approach

Secondary empirical data was collected using a mixed methods approach triangulating interview data with computer assisted text analysis to give a more complete understanding of how the three framing devices outlined above play out in the study. The content analysis uses an 800,000-word corpus from policy and policy-related documents compiled from international, regional, and national institutions (Rooney,

¹ The research project met with the highest ethical standards. All participants were sent in advance an information sheet describing the research project and the researchers details, as well as an informed consent form, which they were required to sign and send back prior to interview. Interviews were digitally recorded and later transcribed. Data analysis involved using thematic induction coding, used mainly in grounded theory.

2005). The documents were analysed using Leximancer software. The software uses a machine learning optimisation approach that facilitates intercoder reliability as it produces the co-occurrence matrix. The software also allows users to inspect the ranked list of terms that comprise the word frequency to ensure that the meanings and usage are accurately interpreted.

Documents were included in the corpus if they related directly to Internet governance directives or implementation. At the international level, documents were taken from key organisations such as the World Bank and Organisation of Economic Cooperation and Development (OECD), the United Nations and ICANN. Among these umbrella groups, documents from agencies that deal directly with Internet governance issues were included; most prominently, the World Summit on the Information Society (WSIS) and the International Telecommunications Union (ITU). These documents collectively construct a framework, some more directly than others, of how Internet governance should occur at the national level. Documents from the pan-African (or regional) level were drawn from collaborations between civil society groups and state-civil society collaborations across the continent. This group does not produce new policies, per se, but are instrumental in finding or articulating mechanisms for the implementation of policy across Africa. Examples include the Africa Internet Governance Forum (AfIGF), the African Telecommunications Union (ATU), and Collaboration on International ICT Policy in East and Southern Africa (CIPESA). For national documents, ICT policies and directly supporting documents from the seven countries were included in the corpus. A master list of potential documents was generated through keyword searches regarding Internet governance in the search engine, Google. The organisations associated with the documents were catalogued and then scrutinised to determine whether their self-descriptions qualified them as key actors in global Internet governance debates (Stein, 2009). The documents were scrutinised separately by both authors to ensure that they were relevant before including them in the corpus.

Output from the content analysis was divided into two groups: concepts that were unique to each stakeholder group (unique terms) and concepts that were common across all three (shared terms). The concepts that were shared across the groups were given rankings for each group as a measure of comparative weight given to each concept. The resulting three sets of rankings of the common terms were input into SPSS to derive a Spearman's rank coefficient correlation.²

From centralisation to 'evaluative value'

In the seven countries studied, we observed that in the last ten years each had invested in a dedicated ministry of ICT. Up until that point individual agencies oversaw various aspects of telecommunications, postal and courier services and so on. With the growing inevitability of digital technologies facilitated by the Internet, countries began to unify their services to acquire and enhance ICTs. This process was accompanied by

² Spearman's rank is an appropriate method because it complements the ranking output of the content analysis. Spearman is also ideal because rank correlation coefficients are less influenced by statistical anomalies (Barrow, 2009) and can help to assess the degree of complementarity among the three datasets (Jayawickrama and Thangavelu, 2010).

the creation of adjunct regulatory bodies responsible for delivering infrastructure and access.

We set up this section to explore two contradictory findings that lead us to the development of the first framing device that is 'evaluative value'. Using content analysis, we demonstrate how national policy mirrors international rhetoric and thus signifies that at least rhetorically, African nation states are in unison with policy articulated at the international level. Contrary to this statistical picture, participants narrate a deeply flawed relationship to international ICT governance that results from a series of deficits that include limited access to expertise, funding and institutional will.

The table below shows the shared terms among the three groups of documents and their respective rankings. The output of the Spearman's Rho test shows (table 1) that while some disparity exists across the three groups, all three variables are significant and positively correlated. Hence, the relatively low disparity would suggest that the nation-state is for the most part prioritising values more or less along the same lines as the international community.

Table 1 Correlations

		Country-Level Group	Pan-African Group	Int'l Group	
Spearman's rho	Country-Level Group	Correlation Coefficient	1.000	.724**	.615**
		Sig. (2-tailed)	.	.000	.000
		N	33	33	33
	Pan-African Group	Correlation Coefficient	.724**	1.000	.838**
		Sig. (2-tailed)	.000	.	.000
		N	33	33	33
	International Group	Correlation Coefficient	.615**	.838**	1.000
		Sig. (2-tailed)	.000	.000	.
		N	33	33	33

** . Correlation is significant at the 0.01 level (2-tailed).

Country Word-Like	Count	Rank	Relevance	Pan-African Word-Like	Count	Rank	Relevance	Global Word-Like	Count	Rank	Relevance
development	850	1	90%	development	457	1	54%	countries	1855	1	70%
services	658	2	70%	services	366	2	43%	services	1459	2	55%
sector	563	3	60%	access	312	3	37%	access	1434	3	54%
information	553	4	59%	national	300	4	36%	development	1426	4	54%
policy	383	5	41%	countries	281	5	33%	information	1115	5	42%
access	335	6	36%	sector	228	6	27%	use	1089	6	41%
public	331	7	35%	information	223	7	26%	service	1061	7	40%
service	330	8	35%	government	220	8	26%	data	865	8	33%
data	330	9	35%	public	209	9	25%	government	819	9	31%
national	311	10	33%	network	207	10	25%	public	777	10	29%
government	301	11	32%	policy	194	11	23%	sector	694	11	26%
use	291	12	31%	use	186	12	22%	including	684	12	26%
infrastructure	274	13	29%	service	173	13	20%	infrastructure	679	13	26%
support	262	14	28%	infrastructure	163	14	19%	national	646	14	24%
country	231	15	24%	including	162	15	19%	country	619	15	23%
capacity	187	16	20%	support	157	16	19%	network	561	16	21%
including	172	17	18%	data	147	17	17%	available	552	17	21%
system	172	18	18%	local	142	18	17%	policy	502	18	19%
network	171	19	18%	country	141	19	17%	support	470	19	18%
local	159	20	17%	capacity	116	20	14%	used	419	20	16%
networks	138	21	15%	based	104	21	12%	local	397	21	15%
project	136	22	14%	networks	95	22	11%	capacity	384	22	14%
based	119	23	13%	system	92	23	11%	networks	370	23	14%
used	108	24	11%	available	92	24	11%	based	309	24	12%
countries	85	25	9%	project	77	25	9%	system	223	25	8%
available	70	26	7%	used	70	26	8%	project	161	26	6%

Table 2 Output from content analysis: list of shared terms, rank and relevance in 50 policy documents.

The high correlation of the pan-African to the global group could be due to the consistently greater participation of pan-African representatives at international conferences and through formal and informal linkages. For example, ICANN has representation at many high-level pan-African meetings. The pan-African group can be likened to ‘techno-elites’ (Castells, 2003, p. 39) in that they are constituted by a community of technologically competent members, who are acknowledged by their peers and often educated in the West. Moreover, our participants alluded to the traffic of people and knowledge between the national and the pan-African level, thereby highlighting the functional role of this intermediate body.

The farthest groups apart, the country-level and the international level are still positively correlated. These findings counter the experiences of participants when they describe widening disparities between policy making at international and national levels. The creation of a single government ministry and attending regulatory body meant that ICT had a home in government, but moreover, it also promoted the representation of national interests at the international level (as demonstrated in the content analysis). According to the DeNardis (2014, p. 230), centralisation is presumed to be one of the more fruitful ways to ensure not only better representation, but also that the apt governing mechanisms are in place to respond to and implement international directives and protocols. She observes that ‘the presumption behind the enforcement of multistakeholderism is government centralisation because government has the necessary legitimacy to create the processes to foster and enforce multistakeholder approaches.’ Thus, the process of centralisation at the national level has enabled a synthesis of Internet governance at regional and international levels. In addition, centralisation appears to have lent a new legitimacy to countries in the Global South by increasing their visibility at international fora.

While the statistical analysis illustrates consistency in rhetoric, participants reflect on the practical demands of what they consider effective engagement in international fora. The Kenyan participant quoted below alludes to the limitations of the state, providing a pointed perspective on the question of participation and change management:

I think that [participation at the international level] has been a big issue and the other issue will be change management. That has been slow, totally, well non-existent (laughter). This is a very big challenge: to convince management to allow participation at the international level. So we kind of miss out on what goes on internationally because we do not participate.

When this participant was questioned further regarding the potential benefits of attending international conferences for ICT development, he remarked the following:

Well, we would learn from best practices. We would learn from best practices elsewhere by interacting and meeting people at this forum. Then it totally changes the approach with which we deal with ICT as a sector. It not only changes how we *prioritise* such issues because we probably could be having resources but we are just not putting it to the right use or we are giving the *wrong area priorities* where we shouldn't be putting them. Because there is really nothing new that we are doing in the country that has not been done elsewhere. It will be of immense value to us if we learn from different experiences and to create a different framework so that some of these things can be implemented once we come back [home].

Most participants expressed concerns about a lack of access to meetings. While African governments aspire to be included in international discussions, and have centralised their governing structures accordingly, this participant laments the lack of will on behalf of the government to enable that participation. Other participants, Liberia for example, lamented the lack of available funds to attend international meetings and participate in the development of policy at that level. Participants allude to a causal relationship between deliberations occurring at the international level and the institutional capacities enabling national policy processes.

According to participants, institutional capacities are manifest in the size and composition of delegations sent to important meetings such as the ITU meeting in Geneva, Switzerland. While new ICT ministries were created in order to operate as authoritative interlocutors for participating in international fora, many African states simply lack the human resource, expertise, diplomatic experience and finances to send effective delegations. From the perspective of the following participant, richer countries are more effective at the international level because they have greater resources.

In the UK, if you are going to discuss the issue of Internet governance, you find it's a team of around 30 [people] at an IT event. Two people concentrating on online protection, for children ... others are concentrating on cyber security, others are concentrating on social media so and so forth, now for Uganda one individual is sent to participate in all those processes, and you will find that the problem is not getting access but how effective we are when we get to those meetings.

U MP 1

In comparison to Western states, African governments do not have access to the ecologies of expertise on various aspects of Internet governance. Consequently, African governments make limited contributions to the agendas and outcomes of international meetings. An additional concern is that the institutions and organisations that are formed in Africa to deal with Internet governance are inherited from predominantly Western models. This registers as a from institution building 'know-how' that is imported by African states. As Oyeyinka and Gehl Sampath (2011, p. 376) argue, African states continue to experience a classic problem in knowledge and policy transfer because the institutional models exported from the West 'were products of an organic institutionally-building process, rather than mechanically given. The institutional forms were created, refined and adapted to given [Western] contexts over a long historical period'. What this means for African states is that their national institutions are not always adapted to African historical and social contexts, and consequently they continue to exhibit a misalignment between the development goals of the state and its institutional capacities to deliver.

Another concern is that weak delegations lead to underrepresentation at the international level, with participants intimating a sense that the national voice is 'drowned out':

One challenge is poor representation and therefore, the voice is drowned out against other countries that are well represented.

Z ICT 1

When we go to these meetings we find the usual people, you know the usual suspects, you know some people from Senegal, some people from Nigeria ... I think that representation is ... strong. You know, most of the time we are always **drowned out** by the other countries anyway. So I think the problem has to do with funding, how to get more people with a view to participate, basically for them to go.

G ICT 1

Populating meetings and conferences with representatives is presented here as a means to increasing the volume of the national voice. From the perspective of participants Internet governance emerges as territorial in the sense that the greater a country's representation (in terms of physical presence), the greater their stake in discussions and their potential to influence policy (Turner, 2006, p. 420).

In our analysis, centralising ICT governance sought to accomplish two objectives for improving ICTs in African nation states. First, as mentioned above it sought to enhance visibility for African countries by their being able to present a unified, symbolic and literal figurehead at international meetings. It also meant that the governing mechanisms were in place to respond to and accept international directives. While synthesis could now occur across nation states, centralisation has also positioned African countries within international benchmarking and ranking systems. Being counted in this way has had important implications for attracting donor funding as well as foreign direct investment for projects enabling ICT provision, such as the technology parks in Ghana and soon to be in Sierra Leone. While participants lamented that centralisation did not necessarily result in being heard at the international level, they

showed an astute awareness of the power of being counted and then ranked. This is demonstrated by the Ghanaian participant, when he says:

We are actually increasing the access and the penetration from time to time and clearly we feel that people have benefited from the technology in the country, but just to indicate also there is a United Nations measurement called the e-government index that we can look at ... and this year we have achieved a lot and we have been given the title of the most improved country in the developing nations ... [our] ranking was 172 from the total of 190 nation member states but in the 2014 evaluation we have achieved 153. This is major achievement of around 15 points. This is getting some positive development, but clearly we have to work hard and there is an enormous interest in this research.

This participant articulates an evaluative process in which Ghana has leapt up 15 points in an international league table measuring the relationship between e-government and sustainable development (United Nations Department of Social and Economic Affairs, 2014). The methodology used to calculate this league table is not dissimilar to thousands of classificatory systems that set out each year to measure the world in its various dimensions (Bowker and Star, 2000). There are sets of indicators and reporting functions, information gateways, classifications and algorithmic equations that draw together a harmonised picture of what e-governance looks like and its success at improving universal benchmarks in poverty reduction, political participation and reduced corruption.

Being included in the United Nations e-government survey serves as an example of what we refer to as evaluative value. Drawing on the work of scholars such as Scott (1999) and Power (1999), evaluative value can be understood as an accounting practice that generates comparative data, and by virtue of this promises greater visibility, representation and ultimately legitimacy in multistakeholder fora. Indeed, the *measurable* nation state is itself prerequisite condition to participation in the multistakeholder model. Using Power's (1999) influential argument about the rise of audit society, we argue that the ability to measure ICT activities in both public and private spheres means that the state itself becomes a measurable object. In this way, the possibilities of governments to count ICT-related activities is in effect a means to accumulate a type of value that permits entry to and is taken seriously within regional and international arenas. It also means that fundamental changes have taken shape at the state level to render it measurable that include transparency protocols, administrative infrastructures and evaluative processes. This produces quantified knowledge that serves as a key diagnostic tool that identifies problems that beset African countries and informs the interventionist strategies aimed at resolving them.

As the participant from Ghana illustrates, in order to compete globally there is an imperative for African countries to establish their place in the ranking order and realise their worth in relation to others. As discussed in the next section, the accumulation of evaluative value is the adoption of standardising and harmonising processes that are underpinned by universalising principles.

Universalising principles and forms of resistance

The universalising principles we discuss in this section emerged from our data collection and are concerned with the articulation of norms of practice and behaviour that condition participation at the international level. They often embodied a moral force that compels African governments in particular to adopt more open and transparent modes of governance, to exhibit the will to participate and the aspiration to improve. As the Sierra Leonean participant demonstrates, the willingness of states to be counted and accountable to the universalising processes of the multistakeholder model itself becomes a behavioural expectation.

Yes, we are always open. We are very concerned that we have to comply with international best practices. We have to be open about what we are doing. Therefore, there are so many different surveys; people come in and surveys. ... We open our doors and talk to them. Sometimes three times per month. We are open. The surveys, the people range from everywhere. We are a member of the ITU, we are also a member of the Commonwealth Communications Organisation, etc. And those organisations themselves usually (conduct) surveys with us.

SL MP 1

The paradox of accumulating evaluative value is alluded to in this quote. The participant describes complying with the systematic and institutionalised accounting processes of multilateral and international governance agencies that aim to quantify state activities. The benefits of compliance, it would seem, are recognition, representation and state autonomy. However, being continually surveyed also reinforces the geopolitical position of poorer African countries such as Sierra Leone. We argue that the accumulation of evaluative value creates a cyclical relationship that is constitutive of global power imbalances: countries are obliged to participate at the international level through knowledge systems, such as surveys, which aspire to give them a representative voice, but in actual fact become the evidence base for their apparent underdevelopment. For participants of this study, one way of breaking this cycle is to resist the universalising call of international directives.

Nash (2013) shows that the guiding principles in the Declaration of Freedom developed at the 2003 UN World Summit on the Information Society (WSIS) serve to establish the Internet as a domain free from the rule of states and monopoly of corporations. The Declaration, and its enveloping values, underpin the multistakeholder model. It was agreed upon by governments, businesses and civil society organisations in an effort to create a universal vision of the Internet's function in any given society.

By implication, African nation states are compelled to respond to international political discourse that operates within the politico-administrative logic of the West and is underpinned by a set of liberal and universalising values, such as those exemplified in the Declaration. This means that at the international level, the policy process moves along the historical grooves cut by development programs and initiatives, which are well documented and critiqued, and include the *laissez-faire* economic optimism of structural adjustment programmes and the democratic impulses of good governance projects. These development histories are culturally specific, and they affect the way Internet governance takes shape. The oft-mentioned 'digital divide' is an expression of this historical trajectory. It represents more than a gap in access to ICTs, it is

symptomatic of gaps between rich and poor, developed and developing, knowledge-based societies and agrarian communities (Graham, 2011). Living with the knowledge of having deficits obliges African governments to show the will to participate and to improve by complying with universal policies that seek to close these gaps (in Li, 2007).

In response to the contradictions inherent in the multistakeholder model and the paradox of evaluative value, forms of resistance were manifest in several strategies found in the interview data and content analysis: the exercise of monopolistic power over telecommunications in Ethiopia; the insistence of employing home-grown talent in the ICT sector in Uganda and Sierra Leone; and the development of local content³ which all participants discussed. As the following participant explains, the Ethiopian government's monopoly of its telecommunications industry is a way to resist the international community's attempts to impose market liberalisation.

We are focused on what is an advantage to our national interest. So based on that we will find a way to change, manage or adjust the policy issues (as appropriate). We are not actually driven to implement something from the "top" or from international perspective. I can actually give you many examples so that you can see the "moral" position. We have a number of international donors who are pushing us, but we want to fix the national infrastructure first before we go to the market liberalisation model. We need to wait and even though they are actually forcing us, pushing us our government is not actually willing to do so because ... our objective is to actually meet the national demand ... I want to specify that our telecomm is not open to externals, even Ethiopians cannot invest in telecomm as an operator. It is totally as a monopoly at this point in time.

The 'moral position' that this participant refers to is the responsibility to serve national interests and needs over and above compliance at the international level. He argues that the exercise of monopolistic power is the only way to serve this purpose at the moment. By implication, Ethiopia's national interests and needs would be eclipsed by the deregulation of its telecommunications market.

While Ethiopia maintains a strong hold over its telecommunications industry, other countries are staking out national autonomy through labour. This involves nurturing a labour force of technicians, engineers and scientists to create new applications and advance technology, as well as the administrative support capable of consulting at different scales, national and international, and on a wide range of projects. As the following Sierra Leonean participant explains, a challenge African countries face is employing their own people to develop and deliver ICT projects:

When we are working with UK organisations or American organisations or any international organisation, they have to supply their own consultants. For instance, this project will cost \$100M USD and at the end of day, 70%-80% of that money goes back to them, in terms of ICT consultant expenses and so on. We believe that it is local consultants that should be used and save that money to pay on the project. As a matter of fact, local consultants cost far far less than international consultants. But the organisations will insist that they want their own consultants to work on the project and our local people will just work with them. At the end of the day, we found that the local

³ Local content refers to two specific types of content: local content generated in-country, and local language content that is specific to ethnicities within country. While these two types of content are distinct we group them under the label of local content in this paper.

people do all of the job and the international consultants take all of the money. So that is the big challenge.

As this participant points out, internationally funded projects tend to use their own consultants instead of tapping into a pool of home-grown talent. A consequence of this, which the participant underscores, is the perpetuation of global political and economic imbalances. This participant went on to discuss in detail the fact that a French consulting firm is currently underwriting the Sierra Leonean National Telecommunications Act of Parliament (van Klyton and Liyanage, 2015). International investments in ICT facilitate the flow of capital back to the West and do very little for building up human resources, skills and capacity in country. In response to these sorts of arrangements, a key imperative is for countries like Sierra Leone to quickly build up a critical mass of expertise and skilled labour that can then be employed to deliver and advise on ICTs, a sentiment echoed across participants in this study.

We believe that the [critical mass of knowledge] will give our country what we need for the development that we are undertaking in ICT. Of course, the internet governance and other projects that we have will be faster and done efficiently if we have a 'depository' of professional ICT people...If we want to fast track the process, we need to have our own home-grown technicians and programmers, etc. that will move the process of ICT in the country.

SL ICT 1

By expanding the national pool of skilled and consultative labour, African countries also envisage an increase in local language content and even greater representation of national interests and needs. Language content and skilled labour are considered by participants to be synergistic and are perceived to contribute toward social and economic development, and in particular improvements in literacy levels, educational attainment and political participation. This process would then strengthen the capacities of social institutions, such as universities and libraries, to innovate. As the Ghanaian participant explains:

The NGOs and all of those organisations are responsible for helping to relate that kind of growth that we need to pull people up for content. Because what is the use of creating an internet all the way to the rural areas, districts and villages and all they do is pull of content from America and from Europe. We have to build our own (Internet) content in Ghana so that we can stay on our bandwidth and we can use the internet for interesting things in Africa.

The need for local content, as expressed here, is vital to generating an autonomous, culturally specific voice. Local content is described as leading towards economic independence by creating demand for national ICT products and services. Similarly, the Ugandan participant linked the generation of local content to social development, and thus accumulating the sort of evaluative value discussed earlier.

By all means it should have local content and also in indigenous languages to ensure that there is an increase in the use of the Internet. Because if you look at India which has a good **ICT index** according to the UN much of the content is in local languages. The

content that you will find online is in their local language. So we are also concerned about development, we need ICT and the Internet to develop. It is important ... that those ones [who don't read or write in English] should be kept at the core and develop content that is appropriate to them so this is what we push especially if we are an agricultural country. We are pushing our research and agricultural farming methods and so on and localise it so that the farmers can use the Internet as a development tool. So that they can get information in the local languages.

The Ethiopian participant also forged a link between local content and development as demonstrative of good citizenry:

Clearly we are now increasing the capacity towards making technology available to citizens and as time is going we do actually exercise citizens ... using technology for day-to-day activity. And we are actually saying that ICT is important for the national development plan. And clearly it is feasible to the citizens to make their life easier and giving pride in their people by and through communications and internet exchange and so on.

Citizens can give 'pride to their people' by engaging with ICTs and learning to communicate online in their own languages, using their own symbols and signification systems, to connect across cultural divides and promote local businesses and services. While local content is conceptualised as a common good that delivers a number of social benefits, calibrating its effectiveness and use in society is difficult (Grazzi and Vergara, 2012). Only one participant reported a state-led initiative for identifying and classifying local and foreign content and measuring the ratio between them.

Right now, what we are doing. We have enacted a **Local Content Policy**, but we still know the constraints that we have, we do not really have as much local content that we want. So we have put in place measures, we are looking at three years from now. By 2017/2018, we are looking to enforce the 60/40 local content policy; So whatever we are doing 60% has to be local content and 40% foreign. But because we cannot provide 60% of local content at the moment, we are open to 60% international content. But soon, we would like to have 60% local content and 40% international content.

SL ICT 1

Sierra Leone have devised a 'Local Content Policy' in which a threshold of 60% local content is considered sufficient to support social development and economic independence. However, at present, Sierra Leone is not in a position to enforce this threshold, but through its Cadre⁴ programme of nurturing young talent, it aims to be ready in three years.

While the aspirations of local content development for internet might be valiant, several real challenges prevent an easy implementation. Salawu (2010) discusses six challenges to local content development in an African context that range from codification, funding, the acquisition of materials in indigenous languages to the technology required to digitise records. In addition, there is also the challenge of addressing the 'local norms and values' in the use of the technology.

⁴ Cadre is

To reflect participants' emphasis on local content, we would expect to find expressions of local needs and interests prioritised in policy documents. However, in the content analysis that we conducted such corresponding sentiments and ideas were missing.

Table 3

Country-Level Word-Like	Count	Relevance	Rank	Pan-African Word-Like	Count	Relevance	Rank	Global Word-Like	Count	Relevance	Rank
description	396	0.36	6	telephone	518	0.29	15	providers	798	0.3	12
standard	584	0.36	7	main	441	0.25	19	developing	789	0.3	13
ensure	364	0.33	10	internet	407	0.23	22	people	534	0.2	30
economy	345	0.31	13	regional	358	0.2	27	open	533	0.2	31
security	226	0.21	24	operators	350	0.2	30	global	533	0.2	32
framework	170	0.15	40	financial	347	0.2	31	content	532	0.2	33
environment	142	0.13	46	regulatory	302	0.17	38	important	517	0.2	35
activities	140	0.13	48	population	290	0.16	43	skills	516	0.19	38
levels	262	0.12	49	citizens	254	0.14	51	example	508	0.19	39
computer	128	0.12	50	stakeholders	241	0.14	55	partnership(s)	796	0.18	42
requirements	122	0.11	53	change	219	0.12	62	world	458	0.17	47
software	115	0.1	54	place	211	0.12	66	rules	421	0.16	51
strategy	109	0.1	56	order	206	0.12	67	potential	413	0.16	53
equipment	77	0.07	58	important	206	0.12	68	developed	399	0.15	54
				example	205	0.12	69	technologies	383	0.14	58
				africa	195	0.11	72	different	379	0.14	59
				initiatives	186	0.1	76	technical	327	0.12	70
				media	176	0.1	77	women	307	0.12	72
								community	283	0.11	73
								knowledge	273	0.1	74
								cost(s)	577	0.1	75
								value	261	0.1	76
								web	253	0.1	78
								million	229	0.09	81
								case	217	0.08	85
								http	210	0.08	86
								group	197	0.07	88

Table 3 shows the most frequently occurring terms that are unique to each stakeholder group; that is, terms that are not shared by the other groups. The international group has the longest list, no doubt because the documents in this group tended to be larger and more plentiful. In the language of international policy development there are a number of universalizing principles that relate to *partnerships*, *global*, *open*, *world* and so on that endorse the multistakeholder approach. However, DeNardis (2014, p. 227) argues that multistakeholderism should not be viewed as 'a value in itself applied universally but as a question of what form of administration is necessary in any particular context'. Hence, a different set of keywords emerge at the local level, *computer*, *equipment*, *software*, and *requirements*. In the content analysis, policy documents appear to show nation-states working on the administrative capacities to respond to multistakeholderism rather than echoing the rhetoric of doing so. At the local level, content analysis illustrates that word frequency leans towards delivery and provision while concepts related to language and culture, connected communities, case studies and examples are absent.

Contrary to the content analysis, participants discursively constructed local needs, interests and difference as synonymous with national identity. As such, the ever globalising trends of the Internet posed a distinct threat to the preservation of local cultures and by virtue of this, ideas of nationhood (Mueller, 2010). According to one participant it is the duty of the state to protect its national interests by prescribing policy and legislation designed to monitor, control and promote certain types of internet access and content. This is a form of resistance that would appear, from the interview

data at least, to reassert state control in a way that defies the very foundations of the multistakeholder model.

There are issues that we think should be on the agenda that should be debated or discussed, issues of the insecurity that social networks bring. We are getting a bit worried about their negative influence on society, and in particular the controlling board of ICANN is controlled by significant interests, that is code for the global tech [industry].

Z MP 1

In this quotation, the Zimbabwean participant states that he is concerned that national culture is at risk of being eroded by unbridled Internet access. Collins (2010) supports this assumption by arguing that globalisation of media and technology, such as ICT, threatens social cohesion, which can be a destabilising factor in developing and developed nations alike. The right to a national identity, underpinned by distinct sets of cultural norms and practices and the accompanying symbolic systems, is reconfigured to accommodate the Internet. Nationhood is conceived as an imagined online community (Anderson, 1991). However, bringing about a unity between the Internet and nationhood is also the cause of consternation because it unleashes an unresolved tension at the international level. The nation state is weakened through the advances of new technologies and universalising principles of freedom of access (Mueller, 2010), and yet at the same time it is reenacted as the most powerful vehicle of ICT governance and delivery (Shirazi et al., 2010). The same participant goes on to vent frustration at some of the consequences of this unresolved tension concerning the extension of state power over Internet content.

We are also concerned about the fact that not much truth is coming out, particularly to African Countries with regards to the threat of the Internet. They talk about the fact that there shouldn't be less of an Internet in the Western world, which they talk a lot about, and yet, if it so happens they can pull down social networks. I remember when there was a disturbance [London riots], the Prime Minister came out very strong about what he thought was the cause of the disturbance, he cited social networks and their threats to civility ... but then there are these double standards, when the Muslim world talks very loud about the negative impacts of social networks, at the same time [the international community] says that we shouldn't interfere, then we have double standards.

Z MP 1

In the scenario described by this participant, Internet use becomes an outlet for good, responsible citizenry. However, from the perspective of the international community the kind of control that this participant is referring to, that is the state's ability to block or filter content, could be seen as an attempt to 'recreate the kind of control they once had over traditional territorial media' (Mueller, 2010, p. 197). Attempts at forging this kind of control evoke painful memories of war and dictatorship that plagued African nation states in the decades after independence.

The frustration felt by participants stems from the apparent double standard exercised by the international community and might account for the disparity between interview data and content analysis. Participants point to the dynamics of a discrete power structure of Internet governance that exacerbates the geo-political conflict between the North and the South, and also draws attention to the myth that binds them

to each other, multistakeholderism. Mueller (2010, p. 265) argues that the process of multistakeholderism, as a cipher for global equality, is plagued by 'plasticity and imprecision'. He further notes that the power and rights of a stakeholder are not clearly defined and if 'not properly institutionalised', this framework can reinforce already existing imbalances, giving powerful actors more authority over the 'categories of representation.'

The local needs that participants refer to are wrapped up in a discourse of national identity that operates in symbiosis with international policy. This relationship is co-productive (Jasanoff, 2006) and embodies the actual uncertainty that surrounds the role of African nation states in Internet governance and their influence as stakeholders. Participants are presenting local need as a form of resistance, when in actuality they are engaged in the politics of representation referred to by Mueller (2010). Paradoxically, the national identity that is reasserted in the international community of Internet governance could well fundamentally undermine the guiding principles of that community.

The Rural/Urban Divide

While the problem of the state and its stakeholder role continues to vex African countries, we noticed that an understanding of what constitutes spatial and cultural difference was absent from both sets of data. By this, we mean that while rural and urban areas are defined as distinct they are placed on the same scale of development. In this section, we illustrate how the rural/urban divide is given verisimilitude. However, our concerns turn on how to account for the material conditions that produce the urban/rural divide, and which mean that they do not share verisimilitude and indeed may never exist on the same scales of development and perhaps neither should they. This lack of distinction is an effect of centralised policy processes required to achieve stakeholder status. States cannot appear to house discord, disunity and incongruity that would jeopardise the harmonisation of a unified policy discourse.

Nowhere is this absence of an understanding of spatial difference more stark than in the blanket policies developed to provide ICT in rural and urban areas. The Kenyan 'Pasha centres' meaning 'to inform' in Swahili and the telecommunications centres of Zimbabwe are testimony to huge investment streams taking shape to bring ICT to rural communities.

Rural development featured as a key theme emerging from the interview data. All of the participants stated that there is one ICT policy and not parallel policies for rural and urban development. For example, the Ethiopian and Ghanaian participants elaborated on their uniform ICT policies, which are focussed on provision.

It is the same policy nationwide but we do actually work very hard in reaching the rural areas. For example we do have a connectivity issue which is rural connectivity issue ... we are very proud to actually put around 15,000 points of access all over the country without actually discriminating in the locations within 5 km distance.

E ICT 1

One policy for all. Like basically for those who want to move, you know, that is why we give [network] licenses. Once you have connectivity in a city, maybe 300 km from Accra,

it does not really matter. So long as you have the same kind of bandwidth and same kind of electricity... so we give people the incentive to move to the rural areas, in that case we can create a rural area migration. So basically we give tax breaks to the people who want to create and these kinds of IT industries in the rural areas. So shortly we are going to see a migration, you know, in those areas. Once the policies have been implemented.

G ICT 1

Both sets of policies described here contain strategies that have been implemented in order to address the rural/urban divide. In Ethiopia, access points have been constructed every five kilometres, which as this participant further explained enabled hospitals and schools in remote areas to get online access. The Ghanaian participant described the kind of tax breaks and incentives on offer for rural ICT ventures in the hopes of 'creating rural migration' from urban centres. This participant implies that there is a geographical direction to ICT development emanating from the city outwards, and thus the city serves as a precursor to growth in the rural communities.

According to Kyem (2012, p. 231) advancements in ICT technology have meant that rural areas have developed 'new virtual relationships with urban centres that are uninhibited by conventional notions of distance and communication'. Kyem argues that the digital divide is shrinking and that rural and the urban are now connected through networks of knowledge and information in addition to physical infrastructure. Under the apparatus of centralised policy the rural has received renewed attention on its role in national economic growth and social development. The rural becomes a focal point once again as pathways to development through ICT are opened up to remote, agrarian communities. The impetus to include the rural in development strategies, and to renew it, is demonstrated in the testimonies of participants. Their comments echo Graham (2011, p. 215) who states that ICT can be seen as a means to move 'people and places temporally along a pre-defined path to development.'

In the following quotation, the Ethiopian participant reflects on this drive to standardise and scale the use of the Internet in both rural and urban areas.

In terms of internet penetration it is very low, nationally. But access which is already existing which is no bigger than two or 3% of the total population is located in bigger cities not only in Addis [Ababa] but there are some major cities that we call original cities, at least 4 or 5. And the Internet is actually very popular and we do have also many people participating in social networks and so on and clearly in the urban areas the Internet is more popular and people are using it for day-to-day activity. Clearly we have to work to improve or do the opposite in rural areas.

E ICT 1

This participant points to levels of connectivity being considerably lower in rural areas when compared to urban centres. An objective that he outlines is to even out and possibly reverse this trend.

While harmonisation is one of the key objectives of centralised policy and regulation, several reasons emerged in the data that cast doubt on the congruity of rural and urban contexts. First we show how a saturation of information shapes urban experience in ways that are materially distinct from rural living. Secondly, the activities

of the private sector need to be considered and understood. Finally, mobile technologies are outpacing institutional efforts to unify ICT activities across countries.

According to Rao (2005, p. 364), the use of information is one factor that may distinguish urban from rural living. He argues that the city holds a greater saturation of connectivity and information access that gives urban dwellers advantages over rural communities, which 'may be exploited by the unscrupulous because of information that urbanites may be privy to while others may not.' In his view, urban populations are often more privileged through greater concentrations of economic activity, education and so on, and this may perpetuate the divide despite the efforts of African governments to reverse migration from cities to rural areas and increase connectivity.

The response from Kenya shows another factor that contributes to the distinction between rural and urban living. This concerns the distribution of private sector interest and investment.

Actually in the developed, urban centres, and there are various levels of development like in Nairobi, we don't have this community centre because almost everywhere is connected. We have this community centre in the rural area because we want to set up connectivity where the connectivity is actually really good and people will want to come and get information there. The communication companies cannot come to set up connectivity everywhere where it does not make sense economically. So the government decided to set up this community centres so that we can be able to reach or get information to the most affordable level possible.

In this quotation, the participant attributes the persistence of the urban/rural divide to the strategies of the private sector. Companies are simply not willing to set up services in these areas because the associated high costs make it unattractive. This complaint was echoed in the testimonies of three participants (Uganda, Ghana, and Ethiopia). Hence, states have had to intervene where market forces have proved unhelpful in this regard. Mobile technologies generated from within the private sector have been much discussed with regards to their impact on economic development (James, 2014), potentially outstrip institutional approaches to social and economic development. In interviews, mobile technologies were mentioned insofar as they reduced the need for rural ICT services in the form of the initiatives akin to the Kenyan 'Pasha centres', whereby a room or office is fitted with a computer and online access. As the quotation below makes clear, in Uganda the proliferation of rural services was abandoned in the light of increased usage of mobile technologies.

In Uganda, in the past, we have [had] what you call multipurpose telecommunication centres. In the[se] centres, ... the purpose was for people to go and use the Internet. What we found was that anybody who can walk to an Internet cafe to use the Internet can access the most affordable platform. Their mobile phones are so very cheap you can buy a data band or something like that for £1 ... so the people who are frequenting the Internet centres can in essence use the Internet with their mobile phones. Shifts in technology for mobile phones ... have made the Internet centres redundant.

As the Ugandan participant explains, mobile technologies such as smartphones and tablets are considerably cheaper and more efficient than setting up and maintaining rural service centres.

In this section, we have elaborated on the accumulation of evaluative value has implications for the spatialisation and indeed the geographical dimensions of ICT policy making. Reintroducing a geographical understanding of the uneven terrain of ICT use and provision (Graham et al., 2014) and, we argue, undermines a single national policy that complies with international directives. It is this critique that forms our third framing device. ICTs present ways in which to renew interest in rural development away from the expanding urban centres by narrowing virtual distances, while at the same time uniting policy under a centralised doctrine. An effect of this is that the urban and the rural are measured along the same scales of development. What constitutes their differences and the geographical distribution of state apparatus in each locale is absent from the data we collected.

Conclusion

In this paper we have drawn on content analysis and interview data to illustrate how Internet governance finds articulation and is practiced in seven African countries. The experience of these countries illustrates how inseparable national policymaking is from the political deliberations happening at the international level. The international level depends on state participation, forming what DeNardis (2014), Hill (2014) and others have argued is a multistakeholder model that involves states, private sector and NGOs engaging in consensus building through dialogue. African governments have achieved stakeholder status by making significant changes to the institutional structure of national governance. This has included, most prominently, centralising the governing mechanisms for ICT under a single ministerial office and establishing an attending regulatory body. While centralisation has increased the visibility of African countries, we developed three analytical frames that interrogate the paradoxical relationship between African states and international governance.

Centralisation has enabled governments to measure and account for their ICT activities, needs and usage. We argued that this process leads to the accumulation of evaluative value, whereby the ability to be measured is a value in itself that promises greater representation and access to resources. Being measurable and ranked internationally enables countries to understand and visualise their worth (and in that, problems and deficits inherent to the country), and make appeals to receive investment and aid on that basis. We illustrate how the ranking of African countries also serves to reinforce their comparatively weaker position within the multistakeholder model. Consequently, compliance at the international level, in the form of the adoption of policies and institutional change, translates into continued unequal representation and the perpetuation of global inequalities. For participants, this paradox results in many issues prescient in African societies being overlooked or underrepresented at the international level. The content analysis illustrated synthesis between national, international and pan-African policy rhetoric, but in practice, effective engagement was described by participants as much more difficult to attain and sustain. We identified forms of resistance in which ideas of local needs and content, and monopolistic control were presented as ways for the state to act as custodian of its people, restoring national identity, autonomy and pride. In this way, attempts to counter the hegemonic currents of international ICT governance, and resist the paradox of participation, were inevitably

rooted in the reinstatement of state control, thus defying the ethos of Internet governance.

This ambiguous role of African states led to our final framing device concerned with the spatialisation of internet governance. In all the countries we looked at, the rural/urban divide is attended to through a unified policy which placed them on a single development track heading towards full connectivity and access. This unified vision is the product of centralised policy making. We argued that it displaces the social and cultural specificity of each context, and leaves aside the question as to whether rural and urban communities should be treated the same at all.

For African states, participation in the multistakeholder model of Internet governance entails costs that remain unaccounted for in academic debate. The moral calling of participation is levied by a universalising political rationality. Fulfilling multistakeholder status requires that the nation state exercises degrees of reflexivity and a show of the will to improve. It also requires an alignment of national ICT policy objectives with international internet governance directives. The costs of these aspects of participation add up to a reformatting of state power in Africa based on the assumption that the state is the best vehicle for implementing policy. There are question marks over the reach and indeed economic role of state power in African societies, especially in providing infrastructure and services to rapidly expanding urban areas in cities such as Nairobi, Freetown and Accra. For the African countries studied, participation in Internet governance represents an instantiation of historical global inequities, while paradoxically promising fairer, more just and equal representation and influence. The case laid out here reveals the need to reflect on and rethink the multistakeholder model.

Word Count: 10,517

Bibliography

- Anderson, B., 1991. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, 2nd Revised edition edition. ed. Verso Books, London ; New York.
- Barrow, M., 2009. *Statistics for Economics, Accounting and Business Studies*, 5th ed. Prentice Hall, Harlow, England, London ; New York.
- Bowker, G.C., Star, S.L., 2000. *Sorting Things Out: Classification and Its Consequences*. MIT Press, Boston, MA.
- Boymal, J., Martin, B., Lam, D., 2007. The political economy of Internet innovation policy in Vietnam. *Technology in Society* 29, 407–421. doi:10.1016/j.techsoc.2007.08.003
- Castells, M., 2003. *The Internet Galaxy: Reflections on the Internet, Business, and Society*, Reprint edition. ed. OUP Oxford, Oxford.
- Collins, R., 2010. *Three Myths of Internet Governance: Making Sense of Networks, Governance and Regulation*. Intellect, Bristol, UK; Chicago.
- Denardis, L., 2014. *The Global War for Internet Governance*. Yale University Press, New Haven.
- Fuchs, C., Horak, E., 2008. Africa and the digital divide. *Telematics and Informatics* 25, 99–116. doi:10.1016/j.tele.2006.06.004
- Gebremichael, M.D., Jackson, J.W., 2006. Bridging the gap in Sub-Saharan Africa: A holistic look at information poverty and the region's digital divide. *Government Information Quarterly* 23, 267–280. doi:10.1016/j.giq.2006.02.011
- Graham, M., 2011. Time machines and virtual portals The spatialities of the digital divide. *Progress in Development Studies* 11, 211–227. doi:10.1177/146499341001100303
- Graham, M., Hogan, B., Straumann, R.K., Medhat, A., 2014. *Uneven Geographies of User-Generated Information: Patterns of Increasing Informational Poverty (SSRN Scholarly Paper No. ID 2382617)*. Social Science Research Network, Rochester, NY.
- Grazzi, M., Vergara, S., 2012. ICT in developing countries: Are language barriers relevant? Evidence from Paraguay. *Information Economics and Policy* 24, 161–171. doi:10.1016/j.infoecopol.2011.11.001
- Hargittai, E., Hsieh, Y.P., 2013. Digital Inequality, in: *The Oxford Handbook of Internet Studies*, Oxford Handbooks. Oxford University Press, Oxford, UK, pp. 129–150.
- Hill, R., 2014. The Internet, its governance, and the multi-stakeholder model. *info* 16, 16–46. doi:10.1108/info-05-2013-0031
- James, J., 2014. Product use and welfare: The case of mobile phones in Africa. *Telematics and Informatics* 31, 356–363. doi:10.1016/j.tele.2013.08.007
- James, J., 2009. Leapfrogging in mobile telephony: A measure for comparing country performance. *Technological Forecasting and Social Change* 76, 991–998. doi:10.1016/j.techfore.2008.09.002
- Jasanoff, S., 2006. *States of Knowledge: The Co-production of Science and the Social Order*, New edition edition. ed. Routledge, London.

- Jayawickrama, A., Thangavelu, S.M., 2010. Trade linkages between China, India and Singapore: Changing comparative advantage of industrial products. *Journal of Economic Studies* 37, 248–266. doi:10.1108/01443581011061267
- Kozma, R., McGhee, R., Quellmalz, E., Zalles, D., 2004. Closing the digital divide: evaluation of the World Links program. *International Journal of Educational Development* 24, 361–381. doi:10.1016/j.ijedudev.2003.11.014
- Kyem, P.A.K., 2012. Is ICT the panacea to sub-Saharan Africa's development problems? Rethinking Africa's contentious engagement with the global information society. *Progress in Development Studies* 12, 231–244. doi:10.1177/146499341101200309
- Li, T.M., 2007. *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Duke University Press, Durham.
- Mueller, M., 2010. *Networks and States: The Global Politics of Internet Governance*, Reprint edition. ed. MIT Press, Cambridge, Mass.
- Nash, V., 2013. Analysing Freedom of Expression Online: Theoretical, Empirical, and Normative Contributions, in: Dutton, W.H. (Ed.), *The Oxford Handbook of Internet Studies*. Oxford University Press, Oxford, UK, pp. 441–463.
- Norris, P., 2001. *Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge University Press, Cambridge ; New York.
- Oyeyinka, B., Padmashree, G.S., 2011. Institutional Capacity and Policy Choices for Latecomer Technology Development, in: Noman, A., Botchwey, K., Stein, H., Stiglitz, J.E. (Eds.), *Good Growth and Governance in Africa Rethinking Development Strategies*. Oxford University Press, Oxford, UK.
- Power, M., 1999. *The Audit Society: Rituals of Verification*, New Ed edition. ed. OUP Oxford, Oxford; New York.
- Rao, S.S., 2005. Bridging digital divide: Efforts in India. *Telematics and Informatics, WSIS Special Issue The World Summit on the Information Society (WSIS) from an Asian-Pacific Region Perspective* 22, 361–375. doi:10.1016/j.tele.2005.01.007
- Rooney, D., 2005. Knowledge, economy, technology and society: The politics of discourse. *Telematics and Informatics, WSIS Special Issue The World Summit on the Information Society (WSIS) from an Asian-Pacific Region Perspective* 22, 405–422. doi:10.1016/j.tele.2004.11.007
- Salawu, B.A., 2010. Issues and challenges in the creation of institutional repositories with local content : critical reflections. *Information, society and justice journal* 3, 59–68.
- Scott, J., 1999. *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, New edition edition. ed. Yale University Press, New Haven.
- Shirazi, F., Ngwenyama, O., Morawczynski, O., 2010. ICT expansion and the digital divide in democratic freedoms: An analysis of the impact of ICT expansion, education and ICT filtering on democracy. *Telematics and Informatics* 27, 21–31. doi:10.1016/j.tele.2009.05.001

- Stein, L., 2009. Social movement web use in theory and practice: a content analysis of US movement websites. *New Media Society* 11, 749–771. doi:10.1177/1461444809105350
- Strover, S., 2003. Remapping the Digital Divide. *The Information Society* 19, 275–277. doi:10.1080/01972240309481
- Turner, S., 2006. The Philosophy of the Social Sciences in Organisational Studies, in: Clegg, S.R., Hardy, C., Lawrence, T., Nord, W. (Eds.), *The Sage Handbook of Organisation Studies*. SAGE Publications, London, United Kingdom, pp. 409–424.
- United Nations Department of Social and Economic Affairs, 2014. *E-Government for Future we Want, E-Government Survey*. United Nations, New York.
- van Dijk, J., Hacker, K., 2003. The Digital Divide as a Complex and Dynamic Phenomenon. *The Information Society* 19, 315–326. doi:10.1080/01972240309487
- van Klyton, A., Liyanage, L., 2015. Chinese investment in the Sierra Leone telecommunications industry: an affront to the West?, in: *China and Africa: Cooperation and Conflict*. Routledge, London, United Kingdom.