

Human capabilities and information and communication technology: the communicative connection

William F. Birdsall

Published online: 22 December 2010
© Springer Science+Business Media B.V. 2010

Abstract The potential contributions information and communication technology (ICT) can make to advancing human capabilities are acknowledged by both the capability approach (CA) and ICT communities. However, there is a lack of genuine engagement between the two communities. This paper addresses the question: How can a collaborative dialogue between the CA and ICT communities be advanced? A prerequisite to exploring collaboratively the potential use of particular technologies with specific capabilities is a conceptual framework within which a dialogue can be undertaken to advance the operationalization of capabilities through the use of ICT. A communicative connection constituted of a dialogic space consisting of the CA and ICT communities and a set of normative values and objectives is proposed. The normative values of the communicative connection are derived from the human right to communicate (RTC) which serves as axiomatic principle of the communicative connection. The shared objectives are to operationalize through the use of ICT both the capability and the right to communicate, which are distinct but present in and reinforce each other. Alternative concepts of communication and freedom of expression to those held by the two communities is presented along with a comparison of the values embodied in the RTC and found in the CA.

Keywords Capability approach community · Information and communication technology community · Right to communicate · Communicative connection · Dialogic space

W. F. Birdsall (✉)
34 Roy Archibald Drive #202, Bedford, Nova Scotia B4A 4K6,
Canada
e-mail: billbirdsall@accesswave.ca

Introduction

Are the capability approach (CA) community and the information and communication technology (ICT) community two solitudes lacking an understanding of the contribution each could make to the other? Ilse Oosterlaken, whose research embraces CA and technology design, has recently observed that as “obvious” as it is to make a connection between technology and capabilities, “philosophers working on the capability approach so far do not seem to have sufficiently realized the relevance of technology, engineering, and design for capability expansion” (Oosterlaken 2009, 94). However, there is evidence that within the CA community there is a considerable degree of recognition of the potential relevance of information and communication technology (ICT) to capabilities.

The potential contributions ICT can make to advancing human capabilities is acknowledged by Amartya Sen and Martha Nussbaum, leading philosophers of CA (Sen 2005, 160; Nussbaum 2006, 208). As well, the link between ICT and capabilities has been continuously recognized in the Human Development Reports issued annually by the United Nations Development Program (UNDP), the core philosophy of which is the capability approach found in the work of Amartya Sen (United Nations Development Programme 2009, 14). The importance of ICT is discussed in Human Development Reports on globalization, human rights, human development, developing democracy, poverty and cultural diversity (±United Nations Development Program 2001, 1999, 2000, 2002, 2003, 2004). The Human Development and Capability Association (HDCA), established in 2004 with Amartya Sen and Martha Nussbaum its first presidents, has an active thematic group on technology and design. A HDCA textbook, *An Introduction to the Human Development and Capability Approach*, provides

numerous examples of the impact of ICT on various social and economic public policy sectors crucial to the enhancement of human capabilities (Deneulin and Shahani 2009).

From the ICT community there is an increasing amount of attention devoted to capabilities and ICT including global mapping of digital access using the Human Development Index (Birdsall and Birdsall 2005); the use of Sen's ideas in analyzing access to ICT (Alampay 2006); a capability approach to computer ethics (Johnstone 2007); Sen's work and e-development (Zheng 2007); the relationship of ICT and development within a CA paradigm (Oosterlaken, van den Hoven, Kandachar, and Mani 2009); CA as a framework for technical design (Oosterlaken 2009); the application of Sen's capability model to the digital divide (Wresch 2009); the use of CA in addressing ethical questions relating to the use of information technology (Coeckelbergh 2010).

While there is a growing awareness within the ICT and CA communities of the *potential* relevance of each to the other, Oosterlaken is correct to the extent that little attention is given in the CA community to the issue of how the real world application of ICT can contribute to expanding specific human capabilities. As well, the research undertaken within the ICT community tends, as Coeckelbergh observes, to focus on developing countries and applied ethics (2010). Thus, there is within the ICT community marginal attention given to how ICT can expand specific capabilities. In short, there is little genuine engagement between the two communities. A "Bibliography on the Capability Approach 2009–2010 of over fifty citations includes only one paper relating to technology, that being Oosterlaken's article (Vigorito 2010, 475–477). In recognition of the twentieth anniversary of its Human Development Report the United Nations Development Programme has during 2008–2010 held consultation meetings and seminars around the world, commissioned research papers, and solicited posted comments as part of its review whether the HDR and the Human Development Index (HDI) should be revamped. In examining the records of this extensive process (available at <http://hdr.undp.org/en/>) it is striking there is almost no mention of ICT and human development. An example of one line of discussion might have been whether the sophisticated Information and Communication Technology Index (IDI) of the International Telecommunications Union (ITU), another UN agency, has been developing over the years should be incorporated into a revised HDI (International Telecommunications Union 2010a).

The disconnect between CA and ICT may derive from challenges within CA itself. As Oosterlaken describes, within the CA community there are differences over how to select relevant capabilities, what constitutes any particular capability, and how to operationalize capabilities.

Oosterlaken does point out, however, that in addressing such issues there is a recognition by CA researchers of the need for "close collaboration between capability theorists and experts in relevant fields of application" which should, in her view, include experts involved in technology design (2009, 93). How, then, can a close collaborative dialogue between the CA and ICT communities be advanced?

Any delineation of human capabilities can be so encompassing of the human experience, while the potential application of ICT to capabilities appears so seemingly unlimited, there is the challenge of ascertaining a constructive framework within which to carry out such a dialogue. A prerequisite to exploring the potential use of particular technologies with specific capabilities is the need to delineate a conceptual framework within which a dialogue can be undertaken to advance the operationalization of capabilities through the use of ICT. This paper proposes a communicative connection constituted of a dialogic space of the CA and ICT communities, shared normative values, and specific objectives within which the ICT and CA communities can articulate operational means of enhancing capabilities through the use of ICT. It is recognized that neither CA nor ICT are homogenous communities; both contain a diversity of values, expertise, institutional associations, and so forth. However, it is not expected those engaged in the dialogic space are representative of their total community, rather, they are there out of their personal and professional interests, commitment, and expertise. The fact that HDCA membership already includes individuals from the ICT community is indicative such dialogic participants would come forward from both communities. (There is no reason participants from other communities could not be included in the dialogic space as appropriate, such as the RTC community, however, the focus of this paper is specifically on the CA and ITC communities.)

Why a *communicative* connection? While not the only dialogic space that might be constructed between the two communities, they share communication as a phenomenon fundamental to the exercise of human capabilities and to the development of ICT. Furthermore, it will be shown that when CA does focus on aspects of communication it is within the context of communication rights while ICT has a long history of association with the development of communication rights. Thus, it is possible to delineate a communicative connection between the two communities consisting of a dialogic space of normative values derived from a human rights perspective, specifically, the human right to communicate (RTC). It has been argued that since communication is so fundamental to being human, the RTC is a basic human right to the extent that all other rights are compromised when individuals cannot exercise their right to communicate (McIver, Birdsall, and Rasmussen 2003;

Harms 2002; on basic rights see Shue 1980, 19). The RTC thus serves as the axiomatic principle of the communicative connection by providing a potential value based framework shared by CA and ICT to explore the use of ICT in the operationalization of human capabilities. The RTC also enlarges the conceptions of communication and freedom of expression currently held by the CA and ICT communities. As will be seen, the essence of the RTC is dialogue, an essence that makes it especially appropriate as the axial concept of the communicative connection dialogic space.

Nussbaum contends:

The most important theoretical development in human rights during the past two decades has been the elaboration of the ‘Human Development Approach,’ otherwise known as the ‘Capability Approach,’ embodied in the Human Development Reports of the United Nations Development Program, and in theoretical work by Amartya Sen, myself, and by now, hundreds of young scholars in various nations (Nussbaum 2007, 21).

If the CA has been “the most important theoretical development in human rights,” conversely, it is hoped the communicative connection, whose axis is the RTC, can contribute to a greater engagement between the CA and ICT communities, leading ultimately to the effective use of ICT in the operationalization of human capabilities. I begin with a description of the communicative connection, followed by subsequent sections examining the relationship between the RTC and ICT, the inclusion of communication rights in the CA, and a comparison of RTC and CA values. I conclude with several brief examples of possible initial dialogues that might be undertaken within the communicative connection.

The communicative connection

The communicative connection derives from the fundamental importance of the human capability to communicate. Communication is a cognitive capability inherent both genetically universally and culturally locally; people are born with the capacity to learn a language but the language they learn will be determined by the cultural context in which they are born (Renfrew 2008, 90). Human communication is a complex verbal and non-verbal interactive process of sharing messages that is essential to personal self-fulfillment. Because communication is inherent to being a fully functioning human being, it is fundamental to exercising the full range of human capabilities. The list of capabilities posed by

Nussbaum, to be examined later, “isolates those human capabilities that can be convincingly argued to be of central importance in any human life, whatever else the person pursues or chooses” (Nussbaum 2000, 74). In this context, the capability to communicate is “of central importance in any human life.” It is intrinsically of central importance to human life and instrumental in allowing people to exercise the full range of human capabilities. Achieving the capability to communicate was for humans the breakaway from nature. This breakaway was accelerated by the capacity of humans to transform the material world, that is, to create tools and techniques to enhance their chances of survival. Thus, as long as humans have communicated with each other they have striven to enhance their ability to communicate over time and space through the use of technology. As with human capabilities, it is now recognized communication is a fundamental component of developments in information and *communication* technology.

Why the RTC as the axiomatic principle between the CA and ICT communities? As we will see, identification of the need for the RTC arose out of technological innovations in ICT during the 1960s but the relation between ICT and such rights as freedom of expression can be traced back centuries (McIver and Birdsall 2004; Dakrouy 2009a). Thus, communication is joined in a symbiotic relationship with human capabilities, human rights, and technology. While logical distinctions can be made between human capabilities and rights, there is also within the CA community acknowledgement that human rights and capabilities are connected with special prominence given to communication rights. Human capabilities and rights are distinct but they reinforce and are present in each other. Because of this relationship the objectives of the communicative connection embraces the operationalization of both the capability and the right to communicate through the use of ICT.

A further consideration regarding the RTC is in response to the criticism that CA is “politics light;” that is, there is a deficit of attention given in the CA community to the importance of political struggles to achieving policy objectives (Stewart 2010, 390). The nature and achievement of specific human rights—and of capabilities—are not ultimately decided by philosophers but through peoples’ political struggles against injustices (Dershowitz 2004). For example, whether rights or capabilities reside in the individual, the community, or both, a point examined later, will in the end be determined in specific contexts through often lengthy political struggles, the case of the rights of Indigenous peoples being a vivid example. The RTC then is a link to real world struggles for communication capabilities and rights in the context of current developments in global communication.

The components, then, of communicative connection can be represented as follows:

Communicative connection		
Dialogic space		
Communities	Values	Objective
Capability approach	1. Universality and cultural diversity	Through the use of ICT operationalize both the capability & the right to communicate
Information & Communication Technology	2. Individual & community rights	
	3. Traditional freedoms and human rights	
	4. Participation	
	5. Positive right in global	

Right to communicate and information and communication technology

While there is a long history of the development of communication technologies along with communication rights, it was not until the adoption in 1948 of the United Nations *Universal Declaration of Human Rights* (UDHR) that such rights were recognized in a formal international agreement as *universal* human rights possessed by everyone. A number of UDHR articles address communication rights including privacy (Article 12); thought, conscience, and religion (Article 18); peaceful assembly and association (Article 20); education (Article 26); and participation in the cultural life of the community and intellectual property rights (Article 27). But the key article is 19 which states: “Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers” (United Nations 1948). The primary objective of the formulation of this right was to insure the free flow of information, a particular concern arising out of the control of the mass media established by the Nazis government in Germany.

However, a technological innovation in communication in the 1960s began a dramatic change in the communication environment: the launching of communication satellites. Satellites set the stage for two-way, interactive communication between individuals over global networks. In light of this development it was recognized by Jean d’Arcy, pioneer of French and European television and Director of the United Nations Radio and Visual Services Division, that

Article 19 in the UDHR was no longer a sufficient formulation of freedom of expression in the emerging era of global interactive communication. In a seminal article published in 1969, he identified the need for a human right to communicate (d’Arcy 1969; Dakroury 2009b). Jean d’Arcy made the important distinction between the traditional mass-media one-way flow of information to passive audiences and the true nature of communication, that is, the two-way, interactive exchange of information. He foresaw the demise of longstanding mass media economic, social, and technological structures and the emergence of new structures of global personal communication. Long before it was technologically feasible, d’Arcy established the critical link between universal human rights and global interactive communication. It is important to emphasize this distinction between the interactive natures of communication held by the RTC and traditional concepts of communication and freedom of expression held in both the ICT and CA communities. Here I examine the ICT conception of communication and freedom of expression; in the next section that held by CA.

Definitions of ICT are as varied as the vast array of uses of the ICT itself. However, it is common that “communication” is characterized as the transfer of data between technical devices. Indeed, it was not until computing and telecommunications became more closely technologically linked in the 1990s that the term “communication” became part of the “information and communication technology” phrase. Even so, communication still reflected the model of communication conceived with regard to telephony signal transmission. The initial model of this conception is that proposed by Claude E. Shannon, working at the Bell Laboratories, in his influential paper, “A mathematical theory of communication,” published 1948 and subsequently popularized in a book by Shannon and Warren Weaver in 1949 ((Shannon 1948; Shannon and Weaver 1949). In Shannon’s model a message was conceived as a signal in a one way transmission from an “Information Source” to a “Destination.” As the destination, according to the Shannon, could be either a person or a thing, the former was in essence objectified as a thing. Clearly, no interactive communication is envisioned in this conception of communication. While Shannon’s conception of communication was a vastly influential model adopted by a wide range of disciplines it was the future obsolescence of this technological and social structure d’Arcy anticipated over forty years ago. It is the emphasis the RTC gives to the human component of communication that binds the right and the capability to communicate.

When d’Arcy identified the need for a RTC there were policy experts and academics who understood the significance of his insight. Efforts to formulate such a right were undertaken by UNESCO in the 1970s and early 80s but

were abandoned in the Cold War atmosphere chilling many human rights initiatives (Fisher 2002, Cmiel 2004). Because few people had any direct experience with global communication systems at that time there was no political critical mass to sustain a RTC movement. But again, dramatic innovations in ICT changed the communicative environment, giving rise to a renewed interest in the RTC. The innovations in ICT beginning in the 1990s—the development of the Internet, the creation of the World Wide Web, the availability of personal computers and mobile telecommunication devices, the widespread participation in social networking—made it possible, despite a still substantial digital divide, for millions of people to participate in global, interactive communication. The ITU expects in 2010 global mobile cellular subscriptions to reach five billion and mobile broadband access to exceed one billion with particular advances in developing nations (ITU 2010b). These technological developments are, of course, enmeshed in and contributing to changing political, social, cultural, and economic structure and values including an emphasis on the economic value of information in a global economy, greater corporate concentration in all media and communication sectors, global pressures on cultural pluralism, challenges to individual rights arising out of national and international security concerns and out of market corporate behavior, all of which impinge on freedom of expression which brings us back to the Shannon model.

According to Hamelink, the current expression of rights as expressed in such international standards as the UDHR reflects the general perception of communication as the transfer of messages derived from Shannon's unidirectional model of communication. Hamelink notes:

... all the provisions in the “freedom of information” articles in international human rights law address one-way processes of transport, reception, consultation, allocation, and do not pertain to the two-way process of conversation. Even if the news and entertainment media would have a maximum freedom of expression and would have fullest possible access to information sources, this would not guarantee that people are enabled to participate in societal dialogues (Hamelink 2004, n.p).

The result of this one-way flow of information is that “freedom of expression, even where fully protected to the highest standards, is simply incapable, in the context of today's media and communication structures, of guaranteeing that everyone's voice can be heard in society” (O Siochru 2010, 50). The result of a continuing drive toward greater corporate concentration in the traditional print and broadcasting sectors along with a freedom of expression confined within a narrow constitutional legal framework is that individuals are confronted with “multiple structures

and forces that in practice limit freedom of expression for most people while augmenting it disproportionately for a powerful minority” (O Siochru 2010, 50).

While the Internet and accompanying new media are proclaimed as means of democratizing communication the challenge of a media elite and corporate domination remains. Empirical analysis of the Web traffic for political blogs finds few citizens consult them; those blogs that attract any significant number of people are very few; the authors of high profile blogs are highly educated and literate, what Hindman in his analysis of Web blog traffic characterizes as the “new media elite (Hindman 2009, 102; see also Coleman and Blumler 2009, 136–137). The prominence and concentration of visits to such sites is reinforced by the linkages established and traffic directed by a few dominant search engines. The result is that many may participate but “many voices are left out” (Hindman 2009, 128). As well, older media corporations are being replaced by new media multinationals such as Google, Microsoft, Facebook, and Apple (Ritzer 2010, 286). Hindman describes this corporate concentration as “Googlearchy,” that is, “online concentration comes from the sheer size of the medium and the inability of any citizen, no matter how sophisticated and civic-minded, to cover it all” (2009, 57). As Coleman and Blumler observe in their study of the Internet and democracy: “With commerce increasingly in the driving seat of Internet development, *few* of its big players are *out* to boost citizenship” (2009, 67, their emphasis). At the present the result of the new media concentration is that:

The Internet does provide any citizen a *potential* audience of billions, in the same way that *potentially* anyone can win the lottery. In their enthusiasm, many have forgotten to do the math, and that math shows that the odds of hitting it big online are vanishingly small (Hindman 2009, 101, his emphasis).

The evidence thus far is that currently the creation of some type of democratic commons in cyberspace remains a complex challenge. As Coleman and Blumler conclude “...it cannot be denied that the short history of e-democracy is littered with failed projects, dead web sites, earnest intentions that were never taken up and thoughtful dialogues that led nowhere” (2009, 195). Ultimately, the result is that freedom of expression is what has been characterized as a “two-tiered freedom” whereby many people “have drastically different communication means at their disposal, and the realization of freedom of expression is stratified” (Raboy and Shtern 2010, 252). In short, some have more capability and right to communicate than others. Thus, the technological and social structures of the media have not yet been transformed as d'Arcy expected which means the need for a RTC and enhanced capability to communicate is more acute than ever. And indeed, there is a growing communicative

consciousness whereby individuals are increasingly aware of and reflect upon the central role that communication, ICT, and public policies play in their lives. They are becoming more conscious current developments call into question traditional concepts of freedom of expression. A World Public Opinion survey undertaken in 2007/2008 of over 47,000 respondents in twenty-five nations found that “Large majorities in all nations endorse the importance of freedom of expression,” that “All publics polled support the principle that the media should be free of government control,” and that governments should not limit access to the Internet (WorldPublicOpinion.Org 2008, 8). A recent BBC survey of over 27,000 people in twenty-six countries found that almost four out of five believe access to the Internet is a fundamental right. In response to the survey, the Dr. Hamadoun Toure, Secretary-General of the International Telecommunications Union (ITU) is quoted as saying: “The right to communicate cannot be ignored” (BBC 2010).

This communicative consciousness is being translated into political action and national public policy in support of values embodied in the RTC. Rick Falkvinge, founder of the Swedish Pirate Party, formed in opposition to government Internet policy and with sister parties in over thirty countries, recently observed: “When somebody wants to shut down your right to communicate in private, or the fact that government wants to eavesdrop on anybody and anything to have some semblance of control over what the public is up to, young people in particular today, take offense to that” (Socolovsky 2009). RTC values are being entrenched in national communication and foreign policies. An increasing number of countries are implementing broadband universal access strategies with Finland making access to broadband Internet a human right for all its citizens effective July 1, 2010, and Spain making it a legal right effective 2011 (De Santis 2010). The “freedom to connect” to the Internet as a universal human right was recently enunciated as a component of United States foreign policy by Secretary of State Hilary Rodham Clinton (Clinton 2010).

As a result of this intensifying communicative consciousness and its political manifestations there is a burst of renewed interest in researching and promoting a right to communicate (Harms 2002; McIver, Birdsall, and Rasmussen 2003; Rasmussen 2004; Birdsall 2006; Hicks 2007; Hamelink and Hoffmann 2008; Rideout 2008; Birdsall 2009; Dakroury 2009a; Dakroury et al. 2009; Raboy and Shtern 2010). This discourse is only just beginning to discern a possible connection between the right to communicate and CA (Lee 2008; Poneis and Britz 2008, Rideout 2008). It is the combination of the renewed scholarly and political interest in the values of the RTC that links the communicative connection to the real world struggle for enhanced capabilities and human rights. Which

brings us to the question: how does CA deal with communication in the context of human rights?

Capabilities and communication rights

Before examining the place of communications rights in CA we need to understand the relationship of CA and human rights in general. The CA community acknowledges a connection between capabilities and human rights. The HDCA has an active thematic group on human rights and has published a Briefing Note on *The HDCA Approach and Human Rights* (Vizard 2006). CA leaders have extensively discussed CA and human rights (examples being Nussbaum 2000, 96–101; Sen 2005; Nussbaum 2006, 284–291; Nussbaum 2007; Sen 2009, 355–387). Nussbaum in particular has noted that “the capabilities account is one way of further fleshing out an account of human rights” (2000, 149); CA is “closely allied” with the human rights approach (2006, 284); CA should not be seen as a “rival” to the human rights approach; CA can be viewed “as one species of a human rights approach” (2006, 78). Sen also links capabilities and rights in that both approaches share a common motivation of social justice (2005, 152; Sen 2009, 355–387).

While Sen and Nussbaum discuss the similarities between capabilities and human rights they also make distinctions between the two with Sen cautioning: “the two concepts—human rights and capabilities—go well with each other, so long as we do not try to subsume either entirely within the other” (Sen 2005, 163).

I accept distinctions can be made between human rights and capabilities but also strongly endorse the position that the two approaches complement and reinforce each other, a position acknowledged by the HDCA whose 2010 conference is devoted to “Integrating Human Rights and Human Development.” Papers are called for exploring the link between the human rights and capability approaches to development (Human Development and Capability Association 2010). In her HDCA briefing note on human rights and capabilities Polly Vizard asserts that “When human development and human rights advance together, they reinforce each other—expanding people’s capabilities and respecting, protecting and promoting their human rights” (Vizard 2006, 4). It is in this vein that the RTC is adopted as the axiomatic principle, not as a substitute for capabilities. It is the ethos of the communicative connection’s objectives that enhancement of either the capability or the right communicate strengthens the other. As stressed earlier, the right and the capability to communicate are distinct but each is present in and reinforces the other.

What, then, of communication rights specifically in CA? One way of addressing this question is to examine

Nussbaum's list of central human capabilities (2007, 23–24; see Appendix). Nussbaum argues for a working list of capabilities central to a functioning human life, a list about which some level of widespread consensus can be achieved. The capabilities selected are not only instrumental in achieving whatever an individual wants to pursue but in themselves are intrinsic to defining a fully functioning human; they address the question: "What are people actually able to do and to be?" (Nussbaum 2009, 341). Examining Nussbaum's list (2007, 23–24) demonstrates the particular conception of CA regarding communication and freedom of speech. I argued earlier on the instrumental importance of communication to capabilities and, indeed, a case could be made for the importance of communication to each of the ten capabilities enunciated by Nussbaum. For example, in the case of the first capability, "Life," I have already indicated communication is an important part of what defines a human and crucial to individual self-fulfillment. "Being able to move freely from place to place" (Bodily Integrity) could be seen as relating to freedom of assembly or "Not having one's emotional development blighted by fear and anxiety" (Emotions) could be an aspect of freedom of expression while "Being able to have attachments to ...people outside ourselves" involves communication.

However, our focus is the relation of capabilities and communication rights and there are indeed capabilities that make explicit reference to this aspect of communication. In Capability (4), *Senses, Imagination, and Thought*, there is the acknowledgement of the importance of having the skills provided by an adequate education including literacy. There is also recognition of the importance of thought with regard to religion, politics, and artistic expression. In Capability 6, *Practical Reason*, there is reference to intellectual freedom of conscience and religion, important communicative elements of intellectual freedom. The reference in part A of Capability 7, *Affiliation*, to "various forms of social interaction" could presumably include all forms of communication. There is also explicit reference, although parenthetically, to protecting freedom of assembly and political speech. Part A of Capability 10, *Control over One's Environment*, further refers to freedom of speech and association. In part B, the reference to "having the freedom from unwarranted search and seizure" could be construed to include the right to privacy in communication. As can be seen, when there is explicit reference to communication it is consistently in the context of freedom of expression and related rights such as assembly which, Nussbaum stresses, are given a "central and nonnegotiable place" in support of capabilities (2006, 80).

It is also noteworthy Nussbaum uses communication rights as prime examples when she makes a distinction between basic, internal, and combined capabilities. Basic

capabilities are innate to individuals and prerequisites to the development of more advanced capabilities; the example she gives is the newborn child's capability for speech and language. Internal capabilities are more developed capabilities that allow the individual to function and which typically require support from their environment; children learn to speak their native language from those around them and acquire in time as well the internal capability for freedom of speech. Finally, combined capabilities are internal capabilities that are sufficiently combined with appropriately prepared external conditions to allow the individual to exercise them. Again, Nussbaum draws upon the need for favorable conditions allowing individuals to exercise their freedom of speech (2000, 84–85). It should be noted Nussbaum is not alone in her emphasis on the importance of freedom of expression. Sen sees freedom of expression as a "basic necessity ...for the practice of public reasoning, which is so crucial to social evaluation" (2009, 63). In discussing democratic processes he again stresses the importance of "free speech, access to information and freedom of dissent" (327). He also recognizes the important connection of freedom of expression in the current electronic environment in his observation that "With the development of the internet and its wide-ranging applications, and the advance made in information technology (not least in India), access to the web and the freedom of general communication has become a very important capability that is of interest and relevance to all Indians" (2005, 160).

However, the "central and nonnegotiable place" given to freedom of expression in CA is within the narrow, constitutional freedom of expression framework identified earlier as inadequate in the current environment of interactive communication through global networks. While there is an awareness of the importance of recent development in ICT, there is no real examination within the CA community of the implications of these developments for the capability to communicate or of capabilities in general. Nevertheless, an examination of the extent to which the values of the RTC are also found in CA reveals there is sufficient complementarity for a dialogue with the ICT community through the communicative connection.

Right to communicate and capability approach values

Like many other traditional and proposed rights, debate continues over the definition and interpretation of a RTC. Over the years academics, advocates, and policy experts have indeed explored possible formulations of such a right. Although the debate continues (for the current situation see Hamelink and Hoffmann 2008; Birdsall 2009; Dakrouy et al. 2009; Raboy and Shtern 2010), we can still derive a

set of five core RTC values from these efforts (Canada Department of Communications 1971; Richstad and Anderson 1981; Fisher 1982; Burch 2007; Harms 2002; Richstad 2003; Birdsall 2006) As well, these values can also be found reflected in a variety of international declarations, agreements, and policy statements relating to communication rights (Birdsall 2009).

The five fundamental values found in various formulation of the RTC are: (1) it is a universal human right that also acknowledges cultural diversity; (2) it is possessed by both individuals and communities; (3) it encompasses traditional communication rights including intellectual freedom, privacy, intellectual property, cultural, and linguistic rights but within an encompassing human right framework; (4) it includes the right to participate in the development and governance of media of communication; and (5) it is a positive right in that the state has the responsibility to provide the resources enabling individuals and groups to exercise their right to communicate; however, because of the global nature of electronic, interactive communication action is often also required of international bodies as well.

A comparison of these values with those of the capabilities approach reveals considerable complementarity between the two. Each value is examined below in turn under the following headings: Universality and cultural diversity; Individual and community rights; Traditional freedoms and human rights; Exclusion and participation; Positive rights and global context.

Universality and cultural diversity

As already stressed, because communication is inherent to being human a RTC is a basic universal human right. While debate continues over the universality of rights, with particular regard to their intercultural implications, there is little widespread support for the concept of “cultural relativism.” A 2007/2008 survey of over 47,000 respondents in twenty-five nations provides decisive evidence there is global support across cultures for the universal values expressed in the UDHR (World Public Opinion.Org 2008). However, as there is also a cultural context to communication, a RTC must be expressed at the most general level while allowing for its specific formulation in accord with the cultural context at the local level. Advocates of a right to communicate have always espoused the need to respect local cultures, consequently, as Canadian constitutional lawyer Merrilee Rasmussen observes:

It is now clear that the right to communicate cannot be defined in specific terms, but must be understood ... more generically so that it can adapt to the fast pace of changing technology. It is also clear that the

generic nature of a right to communicate can only attain specific meaning in the context of individuals and communities’ (Rasmussen 2004, 137).

Thus, a right to communicate must be an open work reflecting the unique experiences of individual nations and cultures (Birdsall 2006).

For Nussbaum “The capabilities approach is fully universal: the capabilities ...are held to be important for each and every citizen, in each and every nation, and each person is to be treated as an end” (2006, 78). Arguing for cross-cultural norms and against cultural relativism (2006, 79), her work has been cited as an antidote to moral relativism (Lukes 2008, 145–151). However, she does express a need to recognize cultural variety within and among nations (2006, 295). For her it is crucial to stress that the capability approach gives great importance to the norm of pluralism in six ways (each of which could be applied as well to any human right including the RTC): the open-endedness of the capabilities; their specification at an abstract and general level; the list’s explicit grounding in political purpose rather than any metaphysical ideas that would privilege one set of ideas over another; the goal of achieving for people the capability without insisting on their functional use of the capability; the inclusion of such basic liberties as freedom of religion, association, and conscience; and the rationale that the list is for the purpose of political persuasion and not a license for intervention in or sanctions state sovereignty (2006, 79–80; also see Sen on public reasoning, cultural diversity and universality Sen 2005, 160–163).

Individual and community rights

Debate also continues over the issue of individual and community rights. The liberal human rights tradition of ethical individualism adopted by CA tends to privilege individual rights over community or group rights. However, as Howard argues, ethical individualism, “which posits the intrinsic value of the human person,” need not conflict with cultural rights and community (Howard 1995, 45). A high profile example of community rights is the case of Indigenous Peoples, a world-wide diversity of communities who successfully achieved international recognition of their rights in 2007 with the adoption of the United Nations Declaration on the Rights of Indigenous Peoples, a documents that embodies values of the RTC (Birdsall 2008). Innovations in global communication only heightened the need for such rights: “From the indigenous perspective, it is one thing for cultural records to lie mostly unused in archives and library shelves, quite another for the information contained in them to appear on television, in

bestselling books, and on the Internet” (Brown 2003, 35). The Declaration on the Rights of Indigenous Peoples is not unique. Collective rights are recognized in international and national law and other human rights texts including the UDHR and the UN International Covenant on Social, Economic, and Cultural Rights (1967).

There was much debate in early efforts to formulate a right to communicate over the appropriate locus of the right: the individual or the community. This debate was framed by Cold War politics when there was (and remains as in the case of China and others) a legitimate concern that states would appropriate sovereignty over collective rights in the arena of communication to the detriment of the individual rights of their citizens. However, the locus of the right to communicate has always been the individual but with the recognition that “Community depends on communication” (Fisher 1982, 9). Thus, especially in the realm of cultural development, there has been a tendency to recognize collective rights in the sphere of communication, an example being the UNESCO Convention on the Protection and Promotion of the Diversity of Cultural Expression and other statements (Birdsall 2009). Consequently, a right to communicate can be both an individual and a collective right. However, as a recent assessment of the status of the right to communicate indicates: “the root of the Right to Communicate should be remembered to lie in arguments concerning human dignity” (Hamelink and Hoffmann 2008, 91–92).

For Nussbaum “the capabilities sought are sought for *each and every person*, not, in the first instance, for groups or families or states or other corporate bodies (her emphasis, 2000, 74). For her “the person, not the group, is the primary subject of political justice...,” thus, any policy that favors the group “are to be rejected unless they deliver the central capabilities to *each and every person*” (her emphasis, 2006, 216). Indeed, “To subordinate the capabilities of some to the organic purposes of the whole is to violate people with respect to a capability that may lie at the heart of their lives (2000, 188–189). It is Nussbaum’s view such bodies as groups, families, states, or corporate bodies can be important in promoting human capabilities but only to the extent that the political goal is the promotion of the capabilities of each person (2000, 74).

However, as already noted in the discussion above on universality and diversity, Nussbaum asserts “a concern for cultural variety (both within a nation and across nations) has been a prominent part of my version of the [CA] approach.” She sees this concern “internal to the capabilities list itself, with its robust protections for religious freedom, freedom of association, and so forth” (2006, 295–296). She recognizes all nations contain a wide diversity of religious and other views, a diversity even

greater within the international community: “So it is important to be respectful of the many ways citizens choose to live, provided that those do not cause harm to others in areas touched upon by the central capabilities” (2006, 296). While the RTC is perhaps tends to be more open to community rights than CA, the difference is one of emphasis rather than disagreement; both the human right and capability to communicate are rooted in ethical individualism.

Traditional freedoms and human rights

Since the Cold War debates in the 1970s and 80s over communication within UNESCO and elsewhere, opponents of the RTC from the mass media sector continue to charge it threatens to diminish traditional freedoms of expression (Bullen 2002). Non-governmental organizations (NGOs) from the mass media sector, such as the World Press Freedom Committee, warn that advocates are mobilizing to revive what the Committee sees as the discredited concept of the right to communicate (World Press Freedom Committee, n.d.). Another NGO, Article 19: Global Campaign for Free Expression, proposes an interpretation of the RTC that reflects the traditional protection of freedom of expression from the mass media perspective (Article 19 2003). Indeed, while freedom of expression is crucial to all democratic processes, much of the opposition to the RTC again reflects the narrow freedom of expression framework that emphasizes the gate-keeping, one-way flow of information typical of the traditional mass media structures, rather than the individual’s right to communicate in the fullest sense.

In any case, researchers and advocates of the RTC have never seen the RTC as negating freedom of expression; indeed, they believe it is strengthened by being encompassed in a broader human rights framework. Jean d’Arcy and others envisioned a RTC encompassing a multilayer framework of freedoms and rights (d’Arcy 1983; Fisher 1982; Harms 2002). In every formulation of a right to communicate the objective is to strengthen, not diminish, freedom of expression. The key message of a RTC is that continual ICT innovations require the continuing reformulation of the whole range of communication rights, a reformulation that moves beyond the traditional framework of freedom of expression, that is to say, the open perspective advanced by the RTC and capability approaches.

As already noted, Nussbaum does stress the importance of the inclusion within the capabilities of such traditional communication liberties as freedom of speech, association, and conscience, indeed, they are given a “central and nonnegotiable place” among the capabilities (2006, 80). However, this is an area where there is a lack of

recognition by CA of the current innovations in ICT requiring re-examination of such traditional rights and capabilities as freedom of expression (as well as intellectual property, access to information, and privacy).

Participation

The RTC embodies the right of individuals and groups not only to participate in the use of global communication networks but also in their development and governance. As Rainer Kuhlen (2003) observes, a RTC anticipates changes in the ways people seek, generate, and exchange knowledge:

- Knowledge production and exchange is no longer primarily an individual process, but is more and more a participative and collaborative process. To be able to take part in these collaborative processes can be considered a right of everyone, regardless whether this is already guaranteed by laws or official government bodies. It is a right that has developed in open communicative networks.
- Knowledge production and exchange is no longer dependent on primarily hierarchically structured and controlled institutions but is open for everyone. Everyone has the opportunity to participate actively and unrestrictedly in processes of producing and exchanging knowledge. What counts in open communicative networks is not status or position in hierarchies but competence and the willingness to share knowledge (2003, 15).

Web 2.0, the open source movement, user generated content (UGC), and user centered design (UCD) are evidence of a general trend towards user participatory collaboration and development. The challenge of such developments to the traditional mass media structures can be seen as major media outlets respond by encouraging users to send in their opinions online to daily questions, to submit comments electronically, to become “citizen journalists” by sending in iReports, digital pictures, and so forth.

Nussbaum’s primary focus in the capability approach is on providing a philosophical foundation for political principles; however, she does stress the importance of the rights of freedom of choice and of political participation. While she gives little attention to the issue, the introductory textbook recently published by the HDCA gives considerable attention to the importance of participation and empowerment whereby “people need to be involved at every stage, not merely as beneficiaries but as agents who are able to pursue and realize goals that they value and have reason to value” (Deneulin 2009). As well, Sen devotes great attention to the importance of open public

reasoning and democracy including the role of the mass media and the necessity of a free and independent press (Sen 2009, 335–337). The idea of participation, it is a well established concept in CA.

Positive right in global context

Over the years discussion about human rights has included much debate about the supposed distinction between first-generation negative rights (civil and political rights protected from constraints imposed by government) and second generation positive rights (social, economic, and cultural rights which embody entitlements guaranteed by government such as the right to education or health care). However, since the adoption of the United Nations Universal Declaration of Human Rights in 1948, which includes both types of rights, and the subsequent ratification of the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR), the distinction between first and second generation rights is seen by many rights scholars and activist as an outmoded oversimplification of the nature of human rights (Raboy and Shtern 2010, 256).

Indeed, it has been argued by RTC scholars and advocates that the right to communicate embodies characteristics of both positive and negative rights, that is, the individual should be protected from unwarranted intrusion of the state on freedom of expression while, in the context of the dominance of the mass media and unequal access to modes of communication (the two-tiered freedom of expression), the state has the responsibility to promote the communication opportunities of the individual and society (Raboy and Shtern 2010, 36–39). Harms points out that the traditional conception of freedom of expression means an individual is free to mobilize whatever resources possible to communicate without interference. However, as few people have the resources to fully exercise their RTC there is an obligation of the state to insure individuals have the resources to exercise their communication rights, such resources would include intellectual and technical skills and access to technological resources (Harms 2002).

Because of the global nature of contemporary electronic communication individual states cannot always achieve this goal alone, action at the international level is also necessary between nations and international bodies with regard to such issues as telecommunications regulation, access to information, Internet governance, cultural policy, censorship, and addressing the digital divide among nations. Thus, such concerns are addressed in international bodies and documents, examples being the UNESCO *Convention on the Protection and Promotion of the Diversity of Cultural Expression* (2007) and the UNESCO

Recommendations Concerning the Promotion and Use of Multilingualism and Universal Access to Cyberspace (2003).

For Nussbaum capabilities are “extremely important fundamental entitlements that can be used as a basis both for constitutional thought within a nation and for thinking about international justice” (2006, 284). She also rejects the first and second generation rights distinction and argues against the idea of “negative liberty” and for positive rights (as does Sen) (2006, 290; Sen 2009, 379–383). For Nussbaum an important accompaniment of her list of capabilities is the idea of threshold levels “of each of the capabilities, which is taken to be a minimum beneath which a decently dignified life for citizen is not available” (Nussbaum 2006, 179). Furthermore, such thresholds are more than just social goals “but urgent entitlements grounded in justice” (Nussbaum 2006, 290). She does not provide specific levels of what a minimum threshold might be as they could shift over time due to changing conditions or be a set of different levels in different societies. For her, setting the specific levels is an incremental process through political, judicial, and administrative processes (Nussbaum 2006, 179–180). Capabilities as entitlements whose minimum thresholds are assured by the state can be seen as analogous to the state’s obligation to insure citizens have the resources to exercise their RTC. As well, the participative ethos of the RTC fits with Nussbaum’s incremental and political process of finding the appropriate minimal provision of resources provided.

As for the international dimension, Nussbaum observes that the capabilities approach not only provide for constitutional entitlements at the national level, but also, “as do human rights documents, goals for the international community as a whole, and for humanity as a whole” (2006, 291). Nussbaum asserts that “In the long run, it is highly desirable that the community of nations should reach a transnational overlapping consensus on the capabilities list, as a set of goals for cooperative international action and a set of commitments that each nation hold itself to for its own people” (2000, 104–105).

Conclusion: the CA/ICT dialogue

In comparing RTC and CA values there may be nuanced differences between the values held, however, there is sufficient complementarity between the two to reinforce a communicative connection of shared values and objectives within which to advance a dialogue between CA and ICT. The RTC values, like those found in CA, preserve freedoms of expression while calling for their re-examination in light of contemporary ICT innovations, call for democratic participation, recognize communication as a universal

capability; recognize the relevance of differences in cultures and nations but in a global context, have the expectation a minimal threshold of resources will be provided by the state so everyone can exercise fully their capability to communicate. The human right and capability to communicate are distinct but their presence within each other means the operationalization of one through the use of ICT will reinforce the other. It is this reinforcing relationship that defines the objectives of the communicative connection, a connection that it is hoped will advance the operationalization of not only the capability to communicate but the full range of capabilities that allow the individual the freedom to exercise fully their being and doing.

Having outlined a conceptual framework for a communicative connection between CA and ICT consisting of a dialogic space raises the question of what forms, at least initially, such dialogues might take? It would be contrary to the participatory ethos of RTC and CA values to prescribe specific forms, indeed, they could take many forms, although it is envisioned such a dialogic space of shared values would neither be just an informal chat room nor a formal association of some type. Examples are briefly noted here simply to illustrate how it might be possible to move from the conceptual framework of the communicative connection to a real world conversation between the two communities.

A possibility is for the CA and ICT communities to undertake an audit delineating the possible operational linkages between communication, capabilities, and ICT. A potential model, to be found in the RTC community, is an assessment of the status of the RTC in Canada by a research team led by Marc Raboy and Jeremy Shtern using a Communications Rights Assessment Framework and Toolkit (CRAFT) developed by the NGO Communication Rights in the Information Society (CRIS) (Raboy and Shtern 2009, 270–284). CRAFT consists of an extensive list of questions to be used in assessing the state of communication rights in a specific nation or other jurisdiction. It is not the questions but the form of CRAFT and the process undertaken by the research team that are suggestive for a form of CA/ICT dialogue. Such an initiative could use Nussbaum’s list of capabilities but if agreement is not possible on that point then an alternative dialogue could examine how ICT could be used in developing tool kits to be used for real world deliberative processes to arrive at sets of capabilities appropriated to diverse cultural and national contexts. Another example would be to adapt the consensus conference process developed by the Danish Board of Technology as a means to include citizen participation in the formulation of public policy relating to complex technology issues (Coleman and Blumler 2009, 30–31; Simon and Durant 1995) with the objective of formulating a CA/ICT research agenda. An example is a project undertaken by the Canadian Association of

Research Libraries whose objective was to propose a national research strategy on scholarly communication using a consensus panel process (Birdsall, et al. 2005; Shearer and Birdsall 2006). A panel of Canadian researchers went through an expeditious process of identifying a concise list with rationale of research priorities on scholarly communication.

These are only examples of relatively expeditious processes dealing with large issues through multidisciplinary collaborative methodologies in accord with the public reasoning ethos valued by the CA community. Indeed, such initiatives might be undertaken under the auspices of the HDCA whose membership includes potential participants in Thematic Groups on Human Rights, Development and Capabilities, Technology and Design, and Participatory Methods, among others. In any case, it is hoped these examples stimulate consideration of how the CA and ICT communities might initiate a productive dialogue through the communicative connection.

Appendix

Central human capabilities

1. *Life*. Being able to live to the end of a human life of normal length; not dying prematurely, or before one's life is so reduced as to be not worth living.
2. *Bodily Health*. Being able to have good health, including reproductive health; to be adequately nourished; to have adequate shelter.
3. *Bodily Integrity*. Being able to move freely from place to place; to be secure against violent assault, including sexual assault and domestic violence; having opportunities for sexual satisfaction and for choice in matters of reproduction.
4. *Senses, Imagination, and Thought*. Being able to use the senses, to imagine, think, and to reason—and to do these things in a “truly human” way, a way informed and cultivated by an adequate education, including, but by no means limited to, literacy and basic mathematical and scientific training. Being able to use imagination and thought in connection with experiencing and producing works and events of one's own choice, religious, literary, musical, and so forth. Being able to use one's mind in ways protected by guarantees of freedom of expression with respect to both political and artistic speech, and freedom of religious exercise. Being able to have pleasurable experiences and to avoid non-beneficial pain.
5. *Emotions*. Being able to have attachments to things and people outside ourselves; to love those who love and care for us, to grieve at their absence; in general, to love, to grieve, to experience longing, gratitude, and justified anger. Not having one's emotional development blighted by fear and anxiety. (Supporting this capability means supporting forms of human association that can be shown to be crucial in their development.)
6. *Practical Reason*. Being able to form a conception of the good and to engage in critical reflection about the planning of one's life. (This entails protection for the liberty of conscience and religious observance.)
7. *Affiliation*.
 - A. Being able to live with and toward others, to recognize and show concern for other human beings, to engage in various forms of social interaction; to be able to imagine the situation of another. (Protecting this capability means protecting institutions that constitute and nourish such forms of affiliation, and also protecting the freedom of assembly and political speech.)
 - B. Having the social bases of self-respect and non-humiliation; being able to be treated as a dignified being whose worth is equal to that of others. This entails provisions of non-discrimination on the basis of race, sex, sexual orientation, ethnicity, caste, religion, national origin.
8. *Other Species*. Being able to live with concern for and in relation to animals, plants, and the world of nature.
9. *Play*. Being able to laugh, to play, to enjoy recreational activities.
10. *Control over One's Environment*.
 - A. *Political*. Being able to participate effectively in political choices that govern one's life; having the right of political participation and protections of free speech and association.
 - B. *Material*. Being able to hold property (both land and movable goods), and having property rights on an equal basis with others; having the right to seek employment on an equal basis with others; having the freedom from unwarranted search and seizure. In work, being able to work as a human being, exercising practical reason and entering into meaningful relationships of mutual recognition with other workers.

References

- Alampay, E. (2006). Beyond Access to ICTs: Measuring capabilities in the information society. *International Journal of Education and Development Using Information and Communication Technology*, 2(3), 4–22.

- Article 19. (2003). Global campaign for free of expression. *Statement on the right to communicate*. London: Article 19.
- BBC. (2010). Internet access is a 'fundamental right.' March 8, 2010. <http://.news.bbc.co.uk/2/hi/technology/8548190.stm>.
- Birdsall, W. (2006). A right to communicate as an open work. *Media Development*, 53(1). <http://www.waccglobal.org/en/20061-celebrating-cultural-diversity/558-A-right-to-communicate-as-an-open-work.html>.
- Birdsall, W. (2008). Constructing a right to communicate: the UN declaration on the rights of indigenous peoples. *Global Media Journal*, 7(Fall): <http://lass.calumet.purdue.edu/cca/gmj/fa08/gmj-fa08-birdsall.htm>.
- Birdsall, W. (2009). Putting practice into theory: A right to communicate research strategy. In A. Dakroury, M. Eid, & Y. Kamalipour (Eds.), *The right to communicate: Historical hopes, global debates, and future premises* (pp. 285–304). Dubuque, IA: Kendall Hunt.
- Birdsall, W. et al. (2005). *Toward an integrated knowledge ecosystem*. Ottawa: Canadian Association of Research Libraries. http://www.carl-abrc.ca/projects/kdstudy/public_html/results.html.
- Birdsall, S., & Birdsall, W. (2005). Geography matters: Mapping human development and digital access. *First Monday*, 10(10). <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1281/1201>.
- Brown, M. (2003). *Who owns native culture?*. Cambridge, MA: Harvard University Press.
- Bullen, D. (2002). Advocating a 'right to communicate'. In M. Greene (Ed.), *New code words for censorship: Modern labels for curbs on the press*, (pp. 93–97). Reston, VA: World Press Freedom Committee.
- Burch, S. (2007). The right to communicate: new challenges for the women's movement. *Women in Action* (2). http://www.isiswomen.org/index.php?option=com_content&task=view&id=688&Itemid=200.
- Canada Department of Communications. (1971). *Instant world: A report on telecommunications in Canada*. Ottawa: Information Canada.
- Clinton, H. (2010). Remarks on Internet freedom. Washington, DC: U.S. Department of State, January 21. http://www.nytimes.com/2009/04/13/technology/internet/13iht-piracy13.html?_r=1.
- Cmiel, K. (2004). The recent history of human rights. *American Historical Review*, 109(1). <http://www.historycooperative.org/journals/ahr/109.1/cmiel.html>.
- Coeckelbergh, M. (2010). Human development or human enhancement? A methodological reflection on capabilities and the evaluation of information technologies. *Ethics and Information Technology*. doi: 10.1007/s10676-010-9231-9.
- Coleman, S., & Blumler, J. (2009). *The internet and democratic citizenship: Theory, practice and policy*. Cambridge, UK: Cambridge University Press.
- d'Arcy, J. (1969). Direct broadcast satellites and the right to communicate. *EBU Review*, 118, 14–18.
- d'Arcy, J. (1983). An ascending progression. In D. Fisher & L. S. Harms (Eds.), *The right to communicate: New human rights* (pp. xxi–xxvi). Dublin: Boole Press.
- Dakroury, A. (2009a). *Communication and human rights*. Dubuque, IA: Kendall Hunt.
- Dakroury, A. (2009b). The baron of the right to communicate: Jean d'Arcy (1913–1983). In A. Dakroury, M. Eid, & Y. Kamalipour (Eds.), *The right to communicate: Historical hopes, global debates, and future premises* (pp. 21–41). Dubuque, IA: Kendall Hunt.
- Dakroury, A., Eid, M., & Kamalipour, Y. (Eds.). (2009). *The right to communicate: Historical hopes, global debates, and future premises*. Dubuque, IA: Kendall Hunt.
- De Santis, M. (2010). *Is broadband basic service?* Ottawa: Public Interest Advocacy Centre. http://www.piac.ca/telecom/is_broadband_basic_service/.
- Deneulin, S. (2009). Democracy and political participation. In Deneulin, S., & Shahani, L. (Eds.), *An introduction to the human development and capability approach*. Ottawa: Earthscan/IDRC. http://www.idrc.ca/en/ev-146723-201-1-DO_TOPIC.html.
- Deneulin, S., & Shahani, L. (Eds.). (2009). *An introduction to the human development and capability approach*. Ottawa: Earthscan/IDRC. http://www.idrc.ca/en/ev-143029-201-1-DO_TOPIC.html.
- Dershowitz, A. (2004). *Rights from wrongs: A secular theory of the origins of rights*. New York: Basic Books.
- Fisher, D. (1982). *The right to communicate: A status report*. Paris: UNESCO.
- Fisher, D. (2002). Right to communicate: A new beginning. <http://www.righttocommunicate.org>.
- Hamelink, C. (2004). The 2003 Graham spry memorial lecture: Toward a human right to communicate. *Canadian Journal of Communication*, 29(2). <http://www.cjc-online.ca/index.php/journal/article/view/1436/1548>.
- Hamelink, C., & Hoffmann, J. (2008). The state of the right to communicate. *Global Media Journal: American Edition*, 7(13). <http://lass.calumet.purdue.edu/cca/gmj/fa08/gmj-fa08-hamelink-hoffman.htm>.
- Harms, L. (2002). Some essentials of the right to communicate. <http://www.righttocommunicate.org/viewReference.atm?id=35>.
- Hicks, D. (2007). The right to communicate: Past mistakes and future possibilities. *Dalhousie Journal of Information and Management*, 3(1). http://djim.management.dal.ca/issues/issue3_1/hicks/index.htm.
- Hindman, M. (2009). *The myth of digital democracy*. Princeton, NJ: Princeton University Press.
- Howard, R. (1995). *Human rights and the search for community*. Boulder, CO: Westview Press.
- Human Rights and Capability Association. (2010). *Call for papers: 2010 Conference of the HDCA*. <http://www.capabilityapproach.com/Conference.php?grpcode=conference0&groupid=conference&sid=1128dd4ac0f7f07a8fb575643994eae>.
- International Telecommunications Union (2010a). *Measuring the information society*. Geneva: International Telecommunications Union. <http://www.itu.int/ITU-D/ict/publications/idi/2010/index.html>.
- International Telecommunications Union. (2010b). ITU Sees 5 Billion mobile subscriptions globally in 2010. *ITU Press Release*. February 15, 2010. http://www.itu.int/net/pressoffice/press_releases/2010/06.aspx.
- Johnstone, J. (2007). Technology as empowerment: A capability approach to computer ethics. *Ethics and Information Technology*, 9(1), 73–87.
- Kuhlen, R. (2003). Change of paradigm in knowledge management: framework for the collaborative production and exchange of knowledge. World Library and Information Congress: 69th IFLA General Conference and Council, Berlin. http://www.inf-wiss.uni-konstanz.de/People/RK/Vortraege03-web/rk_ifla03_for_publ300803.pdf.
- Lee, P. (2008). *Toward a theology of communication rights*. Paper presented at the Social Communications and Theology Project Conference, September 16–18, 2008, St. John's University, New York. http://spics.net/index2.php?option=com_docman&task=doc_view&gid=5&Itemid=99.
- Lukes, S. (2008). *Moral relativism*. New York: Picador.
- McIver, W. Jr., & Birdsall, W. (2004). Technological evolution and the right to communicate. *EJC/REC: The Electronic Journal of Communication*, 14(3–4). <http://www.cios.org/EJCPUBLIC/014/3/01433.html>.

- McIver, W. Jr., Birdsall, W., & Rasmussen, M. (2003). The internet and the right to communicate. *First Monday*, 8(12). <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/1102/1022>.
- Nussbaum, M. (2000). *Women and human development: The capability approach*. Cambridge, UK: Cambridge University Press.
- Nussbaum, M. (2006). *Frontiers of justice: Disability, nationality, species membership*. Cambridge, MA: Harvard University Press.
- Nussbaum, M. (2007). Human rights and human capabilities. *Harvard Human Rights Journal*, 20:21–24. <http://www.law.harvard.edu/students/orgs/hrj/iss20/nussbaum.pdf>.
- Nussbaum, M. (2009). Capabilities and constitutional law: ‘Perception’ against lofty formalism. *Journal of Human Development and Capabilities*, 10(3), 341–357.
- Oosterlaken, I. (2009). Design for development: A capability approach. *Design Issues*, 25(4), 91–102.
- Oosterlaken, I., van den Hoven, J., Kandachar, P., & Mani, M. (2009). Technology and human development: A capability approach. Delft University of Technology/Indian Institute of Science. http://www.ethicsandtechnology.eu/images/uploads/Research_proposal_TechnologyHumanDevelopment_CapabilityApproach.pdf.
- O’Siochru, S. (2010). Implementing communication rights. In M. Raboy, & J. Shtern (Eds.), *Media divides: Communication rights and the right to communicate in Canada* (pp. 41–59). Vancouver, BC: UBC Press, 2010.
- Ponelis, S. & Britz, J. (2008). To talk or not to talk? From Telkom to Hellkom: A critical reflection on the current telecommunications policy in South Africa from a social justice perspective. *International Information and Library Review*, 40(4), 219–225. [http://www.up.ac.za/dspace/bitstream/2263/8904/1/Ponelis_To\(2008\).pdf](http://www.up.ac.za/dspace/bitstream/2263/8904/1/Ponelis_To(2008).pdf).
- Raboy, M., & Shtern, J. (2010). *Media divides: Communication rights and the right to communicate in Canada*. Vancouver, BC: UBC Press.
- Rasmussen, M. (2003) Information Rights and the Law: The Right to Communicate in the Canadian Charter. In K. Adams & W. Birdsall (Eds.), *Access to information in a digital world* (pp.135–148). Ottawa: Canadian Library Association.
- Renfrew, C. (2008). *Prehistory: The making of the human mind*. New York: Modern Library.
- Richstad, J. (2003). Right to communicate in the Internet age. In C. Bertrand (Ed.), *An arsenal for democracy: Media accountability systems* (pp. 35–48). Cresskill, NJ: Hampton Press.
- Richstad, J., & Anderson, M. (1981). Policy context for news and a ‘new order’. In J. Richstad & M. Anderson (Eds.), *Crisis in international news: Policies and prospects* (pp. 26–27). New York: Columbia University Press.
- Rideout, V. (2008). Public interest in communications: Beyond access to needs. *Global Media Journal: American Edition*, 7(13). <http://lass.calumet.purdue.edu/ccca/gmj/fa08/gmj-fa08-rideout.htm>.
- Ritzer, G. (2010). *Globalization: A basic text*. Oxford, UK: Wiley.
- Sen, A. (2005). Human rights and capabilities. *Journal of Human Development*, 6(2), 151–166. http://origin-www.unicef.org/socialpolicy/files/Human_Rights_and_Capabilities.pdf.
- Sen, A. (2009). *The idea of justice*. Cambridge, MA: Harvard University Press.
- Shannon, C. (1948). A mathematical theory of communication. *Bell System Technical Journal*, 27, 379–423, 623–656. (Reprinted with corrections) <http://cm.belllabs.com/cm/ms/what/shannonday/shannon1948.pdf>
- Shannon, C., & Weaver, W. (1949). *The mathematical theory of communication*. Urbana, IL: University of Illinois Press.
- Shearer, K., & Birdsall, W. (2006). A researcher’s research agenda for scholarly communication in Canada. *New Review of Information Networking*, 11(1), 99–108.
- Shue, H. (1980). *Basic rights: Subsistence, affluence, and U.S. foreign policy*. Princeton, NJ: Princeton University Press.
- Simon, J., & Durant, J. (Eds.). (1995). *Public participation in science: The role of consensus conferences in Europe*. London: Science Museum.
- Socolovsky, J. (2009). In Sweden, ‘Pirates’ make the web a political cause. *National Public Radio*. September 14. <http://www.npr.org/templates/story/story.php?storyId=112767746>.
- Stewart, F. (2010). Power and progress: The swing of the pendulum. *Journal of Human Development and Capabilities*, 11(3), 371–395.
- United Nations (1948). *Universal Declaration of Human Rights*. <http://www.un.org/en/documents/udhr/>.
- United Nations Development Program. (2001). *Human development report 2001: Making new technologies work for human development*. New York: United Nations.
- United Nations Development Programme. (1999). *Human development report 1999: Globalization with a human face*. New York: Oxford University Press.
- United Nations Development Programme. (2000). *Human development report 2000: Human rights and human development*. New York: Oxford University Press.
- United Nations Development Programme. (2002). *Human development report 2002: Deepening democracy in a fragmented world*. New York: Oxford University Press.
- United Nations Development Programme. (2003). *Human development report 2003: Millennium development goals: A compact among nations to end human poverty*. New York: Oxford University Press.
- United Nations Development Programme. (2004). *Human development report 2004: Cultural liberty in today’s diverse world*. New York: New York University Press.
- United Nations Development Programme. (2009). *Human development report 2009: Overcoming barriers: Human mobility and development*. New York: Palgrave Macmillan.
- Vigorito, A. (2010). Bibliography on the capability approach 2009–2010. *Journal of Human Development and Capabilities*, 11(3), 475–477.
- Vizard, P. (2006). HDCA approach and human rights. *Human Development and Capability Association Briefing Note 1*. Boston, MA: Human Development and Capability Association. <http://www.capabilityapproach.com/thematic/Vizard%20Briefing%20Note.pdf>.
- WorldPublicOpinion.Org. (2008). *World public opinion and the Universal Declaration of Human Rights*. Washington, DC: Program on International Policy Attitudes. http://www.worldpublicopinion.org/pipa/pdf/dec08/WPO_UDHR_Dec08_rpt.pdf.
- Wresch, W. (2009). Progress on the global digital divide: an ethical perspective based on Amartya Sen’s capabilities model. *Ethics and Information Technology*, 11(4), 255–263.
- World Press Freedom Committee. *Challenges*. <http://www.wpfc.org/Challenges.html>.
- Zheng, Y. (2007). Exploring the value of the capability approach for E-development. In *Proceedings, 9th international conference on social implications of computers in developing countries*. Sao Paulo, Brazil, May, 2007. <http://www.ifipwg94.org.br/fullpapers/R0078-1.pdf>.