

Making the Global Information Society Good: A Social Justice Perspective on the Ethical Dimensions of the Global Information Society¹

Johannes J. Britz

School of Information Studies, University of Wisconsin–Milwaukee, 3210 N. Maryland Avenue, Milwaukee, WI 53211. E-mail: britz@sois.uwm.edu

School of Information Technology, University of Pretoria, Pretoria, South Africa

This article discusses social justice as a moral norm that can be used to address the ethical challenges facing us in the global Information Society. The global Information Society is seen as a continuation of relationships which have been altered by the use of modern information and communication technologies (ICTs). Four interrelated characteristics of the global Information Society also are identified. After a brief overview of the main socioethical issues facing the global Information Society, the article discusses the application of social justice as a moral tool that has universal moral validity and which can be used to address these ethical challenges. It is illustrated that the scope of justice is no longer limited to domestic issues. Three core principles of justice are furthermore distinguished, and based on these three principles, seven categories of justice are introduced. It is illustrated how these categories of justice can be applied to address the main ethical challenges of the Information Society.

Pushing the Moral Agenda for the Global Information Society: The and UNESCO

At both World Summit on the Information Society (WSIS) meetings held in Geneva (December 2003) and Tunis (November 2005), the debate on the ethical dimensions and challenges facing the global Information Society did not go unnoticed. Following the Geneva summit, two documents were published: the *Declaration of Principles* and the *Plan of Action* (WSIS, 2003). After the Tunis summit, two further documents were published: the *Tunis Commitment* (WSIS, 2005a) and the *Tunis agenda for the Information Society* (WSIS, 2005b). In the *Declaration of Principles*, Paragraphs 56–59 specifically deal with the ethical dimensions of the Information Society. The Declaration's statements include:

- The global Information Society must uphold the fundamental values of human freedom.
- Human rights should be respected.
- There should be no abusive use of modern ICT [information and communication technology].

Part C10 of the *Plan of Action* furthermore states that “the Information Society should be subject to universally held values and promote the common good and to prevent abusive uses of ICTs” (Paragraph 25). It sets out a number of actions. I summarize the most important of these:

- All stakeholders should increase awareness of the ethical dimensions of the Information Society.
- All actors in the Information Society should promote the common good.
- Stakeholders, including academia, are invited to continue research on the ethical dimensions of ICTs.

In the *Tunis Agenda for the Information Society*, issued after the Tunis meeting of the WSIS, this commitment to the Geneva *Declaration of Principles* (Paragraphs 55–59) as well as to the Action Plan was confirmed (WSIS, 2005b).

UNESCO is one of the lead facilitating agencies for the implementation of the WSIS Action Lines, and on October 17, 2006, a consultation meeting on the WSIS Action Line C10 “Ethical Dimensions of the information Society” was held in Paris. At this meeting, the importance of the ethical dimensions as a key factor for the development of an “inclusive Information Society” was recognized. In a document entitled *Working Methods of the Multi-Stakeholder Team on Action Line C10 “Ethical Dimensions of the Information Society” Preliminary Proposal* (UNESCO, 2006), the following recommendations are made:

- that the basic values and principles of the Information Society must be acknowledged and promoted, and
- further research and reporting on the ethical dimensions of ICTs should be stimulated by means of regional and inter-regional interaction and exchanges on info-ethics issues.

¹This article is based on a doctoral thesis completed during 2006 by Johannes Britz at the University of Pretoria, Pretoria, South Africa.

It is against the background of the WSIS Action Plan and in particular the invitation to “especially the academia, to continue research on ethical dimensions of ICTs” (C10 Plan of Action) as well as the invitation by UNESCO to participate in a global debate on the ethical dimensions on the Information Society that I write this article. I approach the ethical dimensions of the Information Society from a social perspective and present the moral notion of justice as a “universally held value” that I argue can be used to promote the common good of the global Information Society. This is because justice creates a consciousness with regard to the social injustices facing us in the global Information Society. It is therefore my aim to propose a moral framework, based on social justice, that will hopefully contribute to the global dialogue to work towards a more responsible global Information Society that acknowledges cultural diversity, human dignity, and freedom and that is also socially inclusive and morally acceptable.

With this objective in mind, I have structured the article in the following manner: First, I discuss the so-called global Information Society; based on this description, I identify the main socioethical concerns and challenges associated with the global Information Society. I then introduce social justice as a normative tool that can be used to address the core socioethical issues facing the global Information Society.

Global Information Society

One of the basic assumptions of WSIS as well as UNESCO is that we live in a new information society. Pyati (2005, p. 1) noted that this is “. . . by no means a claim without debate,” and I fully agree. However, the focus of my article is not to participate in this specific debate but merely to provide a working description of the global Information Society that can serve as a basis for the identification of the core ethical concerns associated with the global information-based world in which we are living today.

My basic premise is that we do not live in a “total new information society” but rather in a continuation of previous relationships; however, modern ICTs have changed the very nature of these relationships and impacted our socioeconomic and political activities (Pyati, 2005). I argue therefore that modern ICTs introduced a profound societal transformation, transforming not only the information and knowledge landscapes but also the ethical and socioeconomic landscape. Evans and Wurster (1997), in their classic article on “Strategy and the New Economics of Information,” explained this change in the information and knowledge landscapes as the ability of modern ICTs to unbundle information from its original physical carriers. This implies that information is no longer bound to a linear flow. It can now travel by itself, and documents become interlinked. As Evans and Wurster explained:

When information is carried by things—by a salesperson or by a piece of direct mail, for example—it goes where the things go and no further. It is constrained to follow the linear flow of the physical value chain. But once anyone is connected electronically information can travel by itself . . . what is truly

revolutionary about the explosion in connectivity is the possibility it offers to unbundle information from its physical carrier. (p. 73)

This unbundling of information had a profound effect on nearly all our human activities and allows the following: More people can be reached simultaneously and be exposed to more information in an interactive way, and information itself can be customized and distributed at essentially zero cost (Anderson, 2006).

My description of the Information Society focuses therefore on the fundamental changes that modern ICT did bring about in our information- and knowledge-based activities, and I use the following description to depict these changes:

An Information Society is a society that operates within the paradigm of the economics of information (as explained in the previous paragraph). It values human capital as the prime input to production and innovation. An information society is well connected via modern ICTs to the dematerialized socioeconomic and political activities, and has access to relevant and usable information. A highly sophisticated physical infrastructure underpins the new information-based economic model and allows the delivery of the material objects that are accessed and manipulated in the dematerialized world of modern ICTs (Lor & Britz, 2007).

The Four Interrelated Criteria of a Global Information Society

Taking this definition as my point of departure, it is possible to identify the following four interrelated criteria for a global Information Society (Britz, Lor, Coetzee, & Bester, 2006). The first is a well-developed, well-maintained, and affordable ICT infrastructure. Without such an ICT infrastructure, global socioeconomic activities and political participation are limited, and even in some cases impossible. The second criterion relates to the content of the information. ICT infrastructure is not sufficient unless it can provide access to relevant information needed to participate meaningfully in the different socioeconomic and political activities of the global Information Society. Prerequisites of relevant information include affordability, timeliness, and presentation in languages and contexts users can relate to, understand, and benefit from. Third, there must be a well-developed and maintained physical infrastructure. Searching and downloading medical information on the Internet does not imply the downloading of the medicine self. It still has to be delivered to a physical address in a physical manner. Human capacity is the fourth criterion. The investment in and development of human intellectual capability is one of the most important factors that facilitate further human development and sound economic growth in the era of globalization. The point is that it is of little use to have access to a modern ICT infrastructure as well as to relevant information but not the educational infrastructural support, and this includes appropriate research and development facilities, to enable people to not only benefit from information but also the ability to create new knowledge to the benefit of all.

Who Are the Information-Poor in the Global Information Society?

In approaching the ethical dimensions of the global Information Society from a social perspective (see introduction), it is important to ask the following question: Who are the marginalized and socially excluded in this global Information Society—what I prefer to refer to as the “information-poor?” Elsewhere, I (2004) defined information poverty as

. . . that situation in which individuals and communities, within a given context, do not have the requisite skills, abilities or material means to obtain efficient access to information, interpret it and apply it appropriately. It is further characterized by a lack of essential information and a poorly developed information and physical infrastructure. (p. 199)

In this article I use the same description. Based on the description of the Information Society as well as the four identified criteria, I (2004) distinguish the following elements of the information capital of information-poor societies:

- a lack of access to essential information, including access to information which has a bearing on those resources needed to satisfy needs;
- a lack of a well-developed, familiar and well-maintained information and physical infrastructure;
- a lack of financial capital to pay for information;
- a lack of the technical and other abilities to access information and
- a lack of an intellectual capacity to filter, evaluate and benefit from information. (p. 199)

For the sake of the argument, it is important to clarify what I mean by “essential information.” Essential information is that information that people need to survive and develop. This includes information related to the basic minimum needs of people as well as information essential to the development of capital generation and the needed infrastructure to support it. I furthermore argue, based on the fact that there is a societal benefit in using essential information, that it should be regarded as a public good, and therefore nonexclusionary in nature. Access to it should be funded by means of taxes, donations, and/or advertising (Britz, 2004, p. 199).

The Moral “Wrongs” of the Global Information Society

There are many things “wrong” in the global Information Society, and there is a growing concern that something “right” needs to be done to make the global Information Society morally acceptable and socially inclusive (Dunning, 2004; Friedman, 2005; Stiglitz, 2002). Of course, important political and economic conditions need to be met, and many of these issues have been aired at many international forums. My focus is however on the deliberation of the ethical cornerstone that is essential if the demands of moral acceptability as well as social inclusiveness are to be met. In line with Dunning (2004), I argue that the global Information Society can be sustainable

only if it is underpinned by a strong and generally acceptable moral foundation. Such a moral foundation should guide the attitudes, motives, and behavior of people, institutions, and societies that are part of the global Information Society.

What then are the “morally wrong things” in the global Information Society? I list a number of these “wrongs:”

- The brain drain in particular from the poor and developing nations (Human Development Report, 2001; Meyer, Kaplan, & Charum, 2001; World Bank Briefing Papers, 2000).
- High illiteracy levels in the world (African Economic Outlook, 2006; Human Development Report, 2001; World Bank Report, 2002).
- Unfair international intellectual property right regimes—specifically toward the developing countries (Becker, 2003; Deere, 2003; Drahos, 1997, 2003; Lessig, 2004).
- Unfair exploitation and misappropriation of indigenous knowledge and artifacts (Britz & Lipinksi, 2001; Dougherty, 1998; Long, 1998).
- High communication cost in particular in the developing nations (Africa Economic Outlook, 2006; *The Economist*, 2006).
- Strict censorship and suppression of the right to freedom of expression in some countries (e.g., Zimbabwe) (De Beer, 2001; Hamelink, 2003; Norris, 2001).
- Imbalance of the north–south and south–north flow of information (Britz & Lor, 2003; Limb, 2002; Rosenberg, 2002).
- The threat to the privacy of individuals and related information wrongdoings (e.g., identity theft) (Moor, 1997; Van Hoven, 1997).

Justice: The Moral Tool to Assess and Guide the Global Information Society

Social Justice and Universal Moral Consensus

The debate on and search for moral foundations has a long and complex history and is indeed a difficult, but important, challenge. This debate has recently shifted to the quest for an intercultural information ethics that will be able not only to understand but also to address the moral challenges associated with the way in which the digital world (e.g., the Internet) has changed local cultures and values as well as traditional ways of living (Capurro, 2006; Ess, 2001, 2002; Floridi, 1999).

In line with Kant (1981), Rawls (1973), Habermas (1993), and Hamelink (2000), I argue that in dealing with the aforementioned ethical challenges facing the emerging global Information Society specifically in developing nations, there is a need for a moral consensus that is in some sense universally acceptable. There is an important precondition for such a moral consensus: It must be agreed upon by all the bodies and role players involved in addressing the ethical concerns raised by the global Information Society. Both Rawls (1973) and Miller (1999) noted that without a “basic structure” in society—which for the purposes of this article is constituted by the international and national role players involved in the socioeconomic and political dynamics of the emerging global Information Society—it will be impossible to define rights and duties and moral obligations. In other words, without the agreement of all role players and stakeholders and the

establishment of a “basic structure” to address the main ethical challenges facing the global Information Society, it will be impossible to create a common moral foundation that is acceptable to most parties involved. In the process of establishing a common moral foundation, it is furthermore of the utmost importance that the voice of the poor and marginalized should be loud and clear. Moral consensus should not become, in the words of Lyotard (1984), another “grand narrative” with absolute truths that only represent one viewpoint. I agree with Habermas (1993, p. x) that norms are valid only if they are approved by all affected parties. This can be achieved only when there is an open dialogue between equal role players in the global Information Society.

Based on the value statement that addressing ethical challenges in the global Information Society serves a common-good purpose, I am of the opinion that there is one moral principle that meets the requirement of acceptable validity in the global Information Society and that can be used to guide moral decision-making: justice.

I choose justice because of its classic definition: to give a person or a group—in this case, all those who are part of the global Information Society—what they deserve. Young (1990) argued that justice as both a negative and a positive virtue not only prevents harm and conflict but also creates a consciousness towards the recognition and protection of our human dignity and basic rights. I argue, therefore, that justice forms the moral foundation on which the global Information Society can be built—a moral foundation that is inclusive as well as morally acceptable.

Definition, Scope, and Structure of Justice

Justice, in the tradition of Plato and Aristotle, is seen as the leading virtue regulating human behavior and society. It is fundamental to any discussion on how society should be organized because it sets out important principles for the equitable treatment of all people. In addition, as a moral tool, it offers normative guidelines that can be used for the regulation of existing inequalities (e.g., between the information-poor and the information-rich) within the global Information Society.

I already have made the case that for justice to have an impact on the ethical challenges facing the global Information Society, there must be a common voice and a common point of view and agreement on the understanding, interpretation, and implementation of the principles of justice. The ideal situation will be if those common principles can be embedded and expressed in a constitution, laws, rules, and a social structure that recognizes shared moral values and norms (Miller, 1999). In achieving this, societies will be able to claim their rights based on justice as it is expressed in these laws and rules. Rights also imply duties, which mean that societies also have a moral responsibility to one another to treat each other in the same, just manner.

Justice, in terms of its scope, is not only a matter that addresses collectively public and social matters which can be changed or altered, such as poverty and the sociopolitical marginalization of people. It also takes into consideration the

well-being of individuals whether they are poor, marginalized, assaulted, or socially excluded. Justice therefore requires that individual and private matters (e.g., privacy issues) become public matters (Lötter, 2000; van Hoven, 1997; Young, 1990).

Lötter (2000, p. 191) also argued that although justice covers most aspects of human life, not all norms and rules apply to all circumstances. People differ and so do circumstances. Treating people according to merit will, for example, only apply to certain sectors of society whereas respect for human dignity will apply to all spheres of life. This important principle allows, for example, intellectual property right protection to authors according to which their moral and economic interests are protected.

Lötter (2000, p. 188) and Hampshire (1989) also warned against the blindness of injustice when there is an assumption that a particular social arrangement in a society cannot be altered or changed due to its perceived nature, social setting, customs, or religion. These preset conditions make it difficult to change or alter society according to the moral imperatives set by justice. This explains why sometimes little is done to alleviate poverty in societies where the poor are voiceless or where women are perceived as inferior and therefore barred from pursuing any education. Lötter (2000) correctly argued that these hidden forms of injustice need an in-depth and sophisticated analysis. This articulates the complex nature of justice and its application in the global Information Society.

It is important to make a few pertinent remarks on globalization and justice. In the era of globalization, it would be wrong and inappropriate to distinguish domestic justice from international justice. The downloading of child pornography from a Web site by someone living in Holland from a server illegally hosted in South Africa becomes an international case for justice. The introduction of the Internet and in particular the World Wide Web, in the words of Friedman (2005, p. 48), has flattened the world where the “walls came down and the windows went up.” Time and space are no longer constraints for human communication and other activities. Virtual communities are formed, and it has become nearly impossible to distinguish between the local and the global. The boundaries between local and global justice have become blurred, and they have indeed become interrelated concepts.

I argue, therefore, that justice has become a global normative tool that can successfully be applied to ensure fairness when it comes to the equitable treatment of those who are marginalized and excluded in the global Information Society. As a normative tool, it is based on the core values of concerns and fairness toward others (Hamelink, 2000; Kant, 1997). Justice operates on the premises that we as humans share the same basic needs and have the same self-interests, but also share the same concern for others. These concerns must be expressed by the idea that “the other” is a person, irrespective of who he or she is or where he or she is.

Basic Principles of Justice

What then makes the global Information Society good? What are the moral obligations and responsibilities toward

one another? In other words, what are the ingredients of justice? I identify three core principles as well as seven categories of justice that can be used to address the issues raised in this article (Britz, 2004). These principles are derived from Rawls' (1973) theory of social justice.

Principle 1

The most important claim of justice is that all people, irrespective of who they are or where they live in this global Information Society, must be treated equitably and be judged according to the same norms. Justice should allow the recognition that we are all human beings with equal values, and similar cases must be handled similarly. Justice therefore claims respect for the humanity of people and has the well-being of humans as its priority. This principle of justice reflects Rawls' (1973) first principle of justice: "Each person is to have an equal right to the most extensive basic liberty compatible with a similar liberty for others" (p. 60).

Principle 2

Second, justice implies that a person ought to get that which is due to her or him (Rawls, 1973, p. 10). According to this principle of justice, everyone should get what they deserve—be it good or bad. The problem is, of course, that this principle of justice is empty if one does not determine what exactly a person in a particular situation ought to get that is due to her or him. It therefore "presupposes detailed arguments to convince others of what people ought to have a right to" (Lötter, 2000, p. 196). This principle of justice illustrates the complexity of the fair application thereof. People differ, societies are unequal, and contexts and situations differ from one another. It is therefore important to determine, based on an in-depth analysis, not only what specifically information-poor and marginalized people require within a particular context but also to determine the opportunities available and the human capabilities to enable those choices, as well as means (i.e., products and services) available to allow human well-being (Sen, 1993, 1999).

Principle 3

Although justice recognizes the fact that all people are of equal value, it also recognizes the inequality between people in certain cases [e.g., income, set of personal traits (i.e., merit), and different categories of work]. For one person to have more than another is not necessarily unfair nor intrinsically unjust. Rossouw (1995), as cited by Lötter (2000, p. 195), stated that unequal treatment is justifiable in those cases where differentiation between people is based on publicly accepted criteria representing all. Inequality must, however, be based on certain norms and may not be at the expense of the equal value of all people. A common set of norms and rules to address the different situations and issues in question therefore needs to be in place to correctly accommodate differences based on merit and outcomes. According to this

principle, justice recognizes the fact that information-poor and information-rich people living in the global Information Society differ and that there are certain inequalities in the distribution of and access to information as well as the ability to benefit from the use of information. These inequalities must, however, not be to the disadvantage of the information-poor and the marginalized. If this is due to the violations of their basic human rights, these inequalities are viewed as unjust. This principle of justice reflects Rawls' (1973) second principle of justice: "Social and economic inequalities are to be arranged so that they are both a) reasonably expected to be to everyone's advantage, and b) attached to positions and offices open to all" (p. 61).

If properly applied, and mutually recognized and respected by all, these three principles of justice will contribute to the establishment of a fair, stable, and well-ordered Information Society and will meet the criteria of social inclusion as well as moral acceptability. The fundamental rights of people will be recognized and protected, and the differences between individuals and groups also will be recognized and dealt with according to the degree of differences and contexts. According to Rawls (1973), inclinations to act unjustly will be overridden by a strong sense of justice shared by society as a whole. Behavior motivated by self-interest also will be limited.

Categories of Justice Applied to the Global Information Society

Based on these three principles of justice, a number of different categories of justice can be distinguished that are relevant to the discussion of the ethical challenges facing the global Information Society. These are justice as recognition, justice as reciprocity, justice as participation, justice as enablement, justice as distribution, justice as contribution, and justice as retribution.

The global Information Society and justice as recognition. Justice as recognition can broadly be defined as the finding of ways to appropriately recognize and respect the humanity and autonomy of fellow beings (Lötter, 2000, p. 193). It insists on a pursuit of equitable treatment of all people because they are of equal moral dignity, and reflects the first and second principles of justice. According to this category of justice, it can be argued that essential resources are due to those who are marginalized in the global Information Society because they are human beings. This form of justice confirms, in other words, that the information-poor and the marginalized can claim a right to all human rights. I argue that those (government, private sector, and individuals) who are in a position to do so have a duty and responsibility to provide or support the providing of an accessible information and physical infrastructure that will ensure that these people can exercise the rights they claim.

Equal recognition therefore implies respect for every human being. This in turn implies that those things that people

need to live a meaningful life and to fulfill their humanity are due to them irrespective of their color, income, merit, gender, religion, or lifestyle. Acknowledging the equal moral worth of each individual implies, as a standard practice in all societies, the recognition of equal human rights. All must have a similar right of access to the information needed to satisfy basic needs (i.e., essential information), to have freedom of expression and access to the ideas of others, to be respected in terms of their privacy, and the right to be knowledgeable to enable responsible decision making regarding opportunities available to allow human well-being (Sen, 1999).

The increased censorship in many parts of the world (most recently in China), together with high levels of illiteracy, the high cost of specifically scholarly publications, and limited access to the Internet in most developing countries, has severely limited the creation of equal opportunities for participation in the global Information Society. This puts a serious constraint on finding ways to appropriately recognize the humanity and dignity of fellow human beings. The marginalized as well as the information-poor are in most cases also poor in terms of material means. This not only means that they are price-sensitive regarding available information products and services in the marketplace but also that they are treated with less respect. Not having the means to access essential information in the marketplace puts them at risk of being unable to make choices or to participate in different socioeconomic activities. This can leave the marginalized and information-poor powerless and exposed to the mercy of those who are informed and knowledgeable. Having to rely on the knowledge of other people creates asymmetric power relationships and puts them at risk of exploitation or exclusion.

Allowing equal access to essential information as well as education opportunities will empower the marginalized and the information-poor in the global Information Society, and put them in a position to make informed choices. Allowing freedom of expression on an equal basis as well as access to the ideas of others will mean that the marginalized and the information-poor will have a platform where their voices can be heard, thereby recognizing their equal status as human beings.

This category of justice reflects the first principle of justice.

The global Information Society and justice as enablement. According to Young (1990) and Lötter (2000), justice as enablement is mainly concerned with the extent to which society enables or constrains the self-determination and the self-development of individuals. The modes of injustice as disablement include oppression and domination, the prevention of people from becoming fully who they are, and preventing them access to the necessary material and other means needed to achieve their human well-being. Justice as enablement is therefore closely related to Sen's (1993) capabilities approach. These conditions of disablement are mainly due to identifiable social factors such as actions of government and business that limit people's efforts and

actions to achieve what they want to be. Certain conditions in the global Information Society, such as poverty and cultural and economic exploitation, further contribute to the conditions that can disable people "... into lives far below their capacity" (Lötter, 2000, p. 227). The problem is that poor and marginalized societies do not have the material means to develop themselves and to achieve human well-being, and may therefore experience different kinds of social, economic, and political isolation in the global Information Society.

Human interaction and social isolation are two important notions in the discussion of justice as enablement, specifically in a global Information Society. Lötter (2000) argued that part of human self-development and self-determination is the fact that all humans are mutually interdependent. In the global Information Society, we are more than ever before dependent on others to achieve our well-being and to satisfy our basic human needs. However, one crucial element of our self-development and self-determination is our ability to make our own choices, alone or in collaboration and consultation with others. This ability to make choices is not only an expression of our freedom but also brings our human responsibility, in terms of the choices we make, to the forefront. To make it relevant to ethical challenges facing the global Information Society, I argue that the lack of emotional or intellectual ability to make important choices makes people suffer. This is due to their dependency on others to make basic decisions regarding their development and self-sustainability in the global Information Society.

Based on the importance and value of human interdependency, Lötter (2000, p. 230) argued that caring for the disabled and those who are dependent on others to satisfy basic needs should not focus on doing as much as possible for them but rather on encouraging their independence. This will assist in achieving their human well-being. In applying justice as enablement to the ethical challenges facing the global Information Society, I argue that information-poor individuals and marginalized societies frequently experience conditions of economic, social, and political marginalization that constrain their development. A variety of reasons exists. The most important is probably a lack of access to essential information needed for development as well as the inability, due to a lack of proper education, to benefit from information accessed. Added to this is of course the fact that important resources needed for development are not always accessible even though the information related to development itself might be available. I dealt with this relationship when describing the four categories of the global Information Society. Illiteracy and information illiteracy also strengthen a feeling of powerlessness that can lead to the constraining of the lives of the information-poor and lead to a condition of "intellectual disability." This form of justice must therefore focus on reducing the "information dependence" and powerlessness of marginalized and information-poor communities. It must propagate the implementation of positive education initiatives that can contribute to the actualization of their self-determination and self-development.

This category of justice reflects the second principle of justice.

The global Information Society and justice as reciprocity. The global Information Society, just as all societies before this, is characterized in terms of contractual agreements that define relationships, outline benefits and burdens, and specify duties, obligations, and responsibilities toward one another. Ensuring fairness in all these matters is an important issue of justice and explains why moral philosophy studies social contracts. Philosophers such as Hobbes, Locke, Rousseau, and Rawls, in different ways, used the notion of a social contract to address these issues.

Justice as reciprocity deals with these contractual relationships and can be defined as the form of justice dealing with the “nature and scope and content of fair terms of cooperation in the personal, social and institutional levels” (Lötter, 2000, p. 223). It is closely related to Aristotle’s notion of commutative justice, and it requires “fundamental fairness in all agreements and exchanges between individuals or social groups” (National Conference of Catholic Bishops, 1997, p. 42).

According to this category of justice, the same rules and norms must apply in all similar situations, and the main purpose is to eliminate arbitrariness in exchange relations—be it social, political, or economical. The most challenging part of this category of justice in the global Information Society is to determine what qualifies as fair contracts and mutual agreements concerning trade relations with regard to information products and services. The marginalized and information-poor societies operating in the global Information Society are more vulnerable to different forms of injustices when procedures that are perceived as unfair are implemented and used to determine these agreements—for example, the TRIPS agreement (Drahos, 2003). Being exposed to unfair information-trade agreements will mean the exclusion of these societies from meaningful participation in the different information-based socioeconomic and political activities and opportunities that are available in the global Information Society.

Lötter (2000) correctly noted that the procedure for determining fair terms of contracts and cooperation must be evaluated in itself, because “. . . an unfair procedure cannot lead to a just outcome” (p. 224). For example, the procedure followed to formulate and implement intellectual-property legislation needs to be evaluated to determine whether these regimes are fair to the creators of the knowledge as well as to the users thereof. Justice as reciprocity will investigate whether the creators and users of knowledge have enough power and influence to make any meaningful contribution to the process of formalizing intellectual-property regimes. Similarly, the decision of governments on the level of resources allocated for education, and who can benefit from them, must be judged in terms of whether the allocation is fair in terms of the available resources and also whether it is just to all who have the ability to be educated. The problem is that the uneducated (i.e., information-poor) and poor in many cases do not have the authority or power to ensure fairness in allocation of resources to enable access to education for all.

Terms of cooperation are based on trust and promises and create expectations. If a government promises to allocate resources that will allow affordable access to education for all and to create an information infrastructure as well as a physical infrastructure that will allow each individual to have access to a public library or to the Internet, expectations are created among those who are poor and marginalized in society. Based on this category of justice, I believe that those who are marginalized and information-poor can demand that the government fulfill these promises. Such information-based promises (in this case, public libraries and Internet access) make the government, based on the social contract, accountable and imply that the government has a moral responsibility together with a legal obligation to fulfill its duties toward society.

“Free riders” of information products and services also are a serious matter associated with justice as reciprocity. People who are poor and marginalized in society can, depending on the specific context and their particular circumstances, decide to become free riders if they perceive the agreements and contracts regulating the distribution of information as unfair or too expensive to obtain legally (Becker, 2003; Britz, 2004, p. 202). Contributing to this problem is of course the fact that modern ICTs allow the practice of free rides at the press of a button, and this has led many owners of information products and services operating in the global Information Society to not trust their fellow human beings to have sufficient legal integrity to keep to the agreed contracts as they are spelled out in intellectual-property legislation. This has led inevitably to the development and application of stricter international intellectual-property regimes—in many cases at the expense of the developing nations (Drahos, 2003).

In the context of the global Information Society, justice as reciprocity is therefore concerned with fair procedures and outcomes in terms of social contracts and cooperation regulating the creation, gathering, adding value to, distribution, and use of information products and services. If these procedures and outcomes are viewed by all involved as fair and open and to the benefit of all, the emerging global Information Society will benefit enormously.

This category of justice reflects the second and third principles of justice.

The global Information Society and justice as participation. Participative justice can be defined as the creation of equal opportunities in society (Bedford-Ströhm, 1991). As such, it implies the elimination of inequality as well as the termination of the marginalization of poor and marginalized communities in the global Information Society. This position is in line with Sen’s (1999) idea that the fair distribution of opportunities is more important than only the fair distribution of products and services. It is not only about what you have but also what you are able to do with what you have.

From an economic perspective, participative justice is defined as the way in which an individual makes a contribution

(input) to the different economic processes to make a living. This can be by means of labor (as a worker) or by means of a person's productive capital (i.e., as an owner). This category of justice therefore rejects the following (Center for Economic and Social Justice, 2006):

- Monopolies in the marketplace.
- Special privileges to a few.
- Social barriers that exclude people from participating in the economic process.

Economic systems in the global Information Society that marginalize the poor and benefit the rich are, according to this form of justice, challenged as unjust. This form of justice “. . . demands the establishment of a minimum level of participation in the life of the human community for all” and the overcoming of marginalization is the most “basic demand of justice” (Center for Economic and Social Justice, 2006, p. 1). In other words, the purpose of participatory justice is to ensure that each person in a particular community has an equal opportunity not only to gain access to essential information but also to receive education to benefit from information. In Sen's (1993) terms, this will allow individuals the opportunity to develop their own dignity and to achieve their human well-being.

Examples of the violation of this form of justice in the global Information Society include:

- Restriction of the freedom of expression.
- Violation of a person's right to privacy.
- Unfair intellectual property regimes.
- Creation of information monopolies.
- Economic policies that do not allow affordable access to essential information.

The application of participative justice therefore implies that there must be a basic level of access to essential resources for all, including essential information. Such participation is “. . . an essential expression of the social nature of human beings and their communitarian vocation” (Economic Justice for All, 1995, p. 439).

This category of justice reflects the first and second principles of justice.

The global Information Society and justice as distribution.

Distributive justice is linked with the equitable distribution of goods, and a major part of the discussion on economic justice refers to the fair distribution of goods. This form of justice can be best described as the fair distribution of income, wealth, and power in society, with specific reference to the satisfaction of basic needs (National Conference of Catholic Bishops, 1997). In other words, it has to do with the way in which benefits or burdens are allotted in society (Frankena, 1962; Rawls, 1973). Benefits in the global Information Society can include, among others, wealth (i.e., high income), opportunity for education, access to information that enables participation in various socioeconomic and political

activities, and access to resources that provide opportunities in society for achieving well-being. Burdens in the global Information Society, on the other hand, include low income and poverty, high telecommunication costs, and lack of access to essential resources, including access to essential information together with hard work accompanied by low wages. Distributive justice is therefore concerned with the formulation of principles that must lead to a fair division of benefits and burdens in the global Information Society. This form of justice must prohibit not only the unfair distribution of benefits and burdens but also must ensure that distributive decisions are not made on arbitrary grounds.

A good indicator of whether distributive justice prevails in the global Information Society is to note what different people and societies have not only in terms of access to and accessibility of essential information but also in terms of the ability of those individuals and groups of people to benefit from the access gained. Distributive justice will, for example, ask the following questions:

- Who are the information-rich in a particular society?
- What are the benefits they gain from being information-rich?
- How did they acquire their information wealth?
- What is the burden on the marginalized and information-poor, and what are the main causes thereof?
- Why is there an unequal distribution of education opportunities within one country, but also between countries in the global Information Society?

In the global Information Society, the marginalized and information-poor societies suffer many forms of distributive injustices. The growing gap between the information-rich and the information-poor in many societies is staggering. The information-rich are in most cases well educated and have the material means to pay for access to valuable information that allows the materialization of opportunities. Conversely, most of the information-poor in the developing countries are illiterate, do not have the material or infrastructural means to access the information needed, and by implication are marginalized in terms of the materialization of their opportunities in life. Affordable broadband access to the Internet is a near-given in most information-rich countries and societies. Poor people living in Africa, for example, can hardly afford access to the Internet, and in most cases, access to the Internet is not even available (African Economic Outlook, 2006).

Distributive justice, in my opinion, should allow for the affordable or even free distribution of essential information to those who do not have the material means to afford it. Such an economic application of distributive justice will further promote the creation of equal opportunities to participate in the different political and socioeconomic activities. It also will contribute to allowing more people in the world to achieve their human well-being. I argue therefore that the main role players in the global Information Society, this includes governments as well as big business, have a moral obligation towards the marginalized and poor to fulfill their

basic information needs. The only exception would be when resources are so limited that it is, strictly speaking, impossible to do so.

Based on the third principle of justice, I argue that the unequal distribution of benefits and burdens in the global Information Society is not necessarily unjust or evil. There are, for example, good economic reasons why the CEO of Intel makes more money than a professor or why people living in the United States might have more affordable and easy access to the Internet than might someone who lives in a rural town in Zimbabwe. However, what should be investigated is whether there are patterns in the divisions of burdens and benefits (Lötter, 2000, p. 221). For example, does gender or race play a role in the division of burdens and benefits in society? If so, it should then be investigated whether some form of injustice is responsible for the fact that some people, based on their race or gender, are less well off than are others. Why, for example, are fewer girls than boys on the African continent attending school (African Economic Outlook, 2006; Britz et al., 2006)? If the difference is based on a gender prejudice, it represents a kind of distributive injustice that needs to be investigated.

Rawls' (1973) second principle allows certain forms of inequality in society as long as they are to the benefit of the poor. If not, these inequalities are viewed as unjust. In other words, paying researchers a high income can be justified only if their research findings also benefit the poor and marginalized. The payment of copyright fees by universities to gain access to and use essential educational information is allowable if it benefits the students and the society as a whole. I believe that the current trend in intellectual-property legislation favoring the financial protection of the distributors of information products and services at the expense of access is unjust. One can indeed ask how can the distributors of information products and services increase their profit margins—in some cases by more than 200%—while the actual production and marginal costs have decreased dramatically due to modern ICT? (Lor & Britz, 2005). There does seem to be a pattern in current international intellectual-property regimes that could be suspected of being unjust (Drahoš, 2003; Hamelink, 2003; Lessig, 2004). Related to this is the unequal distribution in the global Information Society of wealth between the actual creators of knowledge versus those that package and distribute it. Currently, authors of scholarly publications, mostly journal articles, are scarcely compensated or not compensated at all for their work while the publishing houses make a profit (Lor & Britz, 2005).

Although distributive justice based on merit therefore allows the treatment of certain categories of information as a commodity that can be owned, distributed, and used unequally in society, it can never override the principle of affordable or free distribution of essential information to poor and marginalized people living and participating in the global Information Society.

This category of justice reflects the second and third principles of justice.

The global Information Society and justice as contribution. Contributive justice is closely linked to distributive justice, and according to Ebener (2005), distributive justice without “. . . the fine points of contributive justice are moot” (p. 5). Justice cannot really be served if one fails to understand how contributions are made and by whom to ensure fairness in distribution.

Contributive justice plays a central role in the social teaching of the Catholic Church and is defined in the U.S. Bishops' Pastoral Letter as the principle according to which people in a society are enabled to make a productive contribution to the general well-being of society (National Conference of Catholic Bishops, 1997, p. 43). According to the social teaching of the Catholic Church, contributive justice emphasizes three notions of social justice that are of importance specifically to the economic activities in the global Information Society:

- **Duty:** All who are able to create the goods and services necessary for the welfare of the whole community have a duty to contribute to the well-being of society. In the words of Pope Pius IX, “It is of the very essence of social justice to demand from each individual all that is necessary for the common good” (National Conference of Catholic Bishops, 1997, p. 43).
- **Productivity:** Productivity is a prerequisite if a society wants to have the necessary resources to serve the well-being of all. Individuals in society therefore have a responsibility to be productive to ensure that the means of serving the well-being of the community is found. However, productivity should not only be about economic efficiency. Patterns in productivity, such as discrimination in the workplace and the well-being of workers, also should be considered.
- **Contribution of society:** Economic and social institutions have a duty to organize their activities in such a manner that individuals can have the opportunity to contribute towards the well-being of the community without sacrificing their freedom and human dignity. “Work should enable the working person to ‘become more a human being,’ more capable of acting intelligently, freely, and in ways that lead to self-realization” (National Conference of Catholic Bishops, 1997, p. 43).

Contributive justice is therefore primarily concerned with the responsibilities and duties of members to not only their particular society but also to the global Information Society. It requires a person who receives certain benefits from a society to maintain and support that particular society (Ebener, 2005). Failure of contribution normally ends with enjoying fewer or even no benefits from society. As a form of justice, it is not in the first place about a concern for the “self” or self-interest; it is about our relationships in a given community and about our moral responsibility and legal duties to be contributing members of society toward what Aristotle and Aquinas called the “common good.” As Ebener (2005, p. 6) stated: “It is about my time, resources and talents that I contribute toward the common good.” This is the reason why we pay taxes and are willing to pay for the use of certain information that is protected under intellectual property legislation. However, paying taxes is not only about what I can get back, but is more of “. . . an unconditional contribution

towards the common good” (Ebener, 2005, p. 4). Contributive justice ensures that moral “damage” and destruction are avoided and has as its aim that all should benefit from the same advantages that are offered. In the era of globalization, “society” has been redefined in a much broader sense. This implies, I believe, that a person’s duties and obligations toward “society” are no longer limited to a specific group of people located in a particular geographical area.

Contributive justice also calls upon governments and other organized structures in society, private or public, to make a contribution to the common good. Governments, for example, have the responsibility to ensure that the rights of individuals in a community are protected, their human dignity respected, and the least in society taken care of. This implies, among other things, the fair distribution of essential information and other goods and services that are regarded as common goods. The social and economic structures in the global Information Society therefore need to be organized in such a manner that everyone has an equal opportunity not only to contribute towards the creation of wealth in the global Information Society but also to be able to participate in the various socioeconomic and political activities.

Violation of the principles of contributive justice can include illegal free riders in the information marketplace. Free riders are here defined as those who benefit from advantages offered by the market system without wanting to contribute to the production of those products and services or the cost of distributing them. A case in point would be those who can financially afford it, but make use of local government services such as libraries, running water, and electricity without paying (directly or indirectly) for these services. Contributive justice also is violated in those cases where individuals purposely deny others the use of a common good. There are several powerful illustrations. Creating viruses and spam and distributing them on the Internet serves as one such an example. By spreading viruses and spam on the Internet, the perpetrators impose limitations on people who use this common tool (O’Boyle, 2003). Governments and other institutions that shape the economic life in the global Information Society will violate the principles of social justice when they fail to create a system where all have the equal opportunity to participate in socioeconomic and political activities. Failure by governments and other related institutions to fairly distribute basic services and products in the global Information Society to those who need them to satisfy their basic needs also can be considered a violation of the principle of contributive justice.

Applied to the global Information Society, contributive justice would, among other things, be concerned with the production and dissemination processes of information, particularly essential information. Contributive justice requires us to ask the following questions regarding essential information:

- Who is involved in the production processes (i.e., creation) of essential information, and is enough produced to meet the basic needs of people?

- Is the distribution of essential information in the marketplace fair, and do government and other agencies involved in the socioeconomic and political processes adhere to their moral obligation to ensure affordable and accessible essential information for all? This question is based on the premise that essential information, which is nonexclusionary in nature, could be funded by means of taxes, donations, and/or advertising.

This form of justice also emphasizes the duty and moral obligation of knowledge creators and disseminators to make a positive contribution to the global Information Society. An example is the obligation on researchers and other knowledge creators in the world to share their knowledge that will contribute to the sustainability and further development of the global Information Society. By the same token, the main role players in the global Information Society have a responsibility to put in place an infrastructure and create an environment that is conducive for individuals to do research and produce knowledge products that can be to the advantage of the global Information Society. This can include the creation of a legal and moral framework that will not only stimulate creativity and productivity but also protect, in a fair and balanced manner, the economic interest of the creators and disseminators of knowledge products (Britz, 2004, p. 203).

This category of justice reflects the second and third principles of justice.

The global Information Society and justice as retribution.

This category of justice also is known as punishable or transformation justice and deals with the logic of punishment. It is based on the principle that any normative mechanisms that are responsible for the application of justice would be hollow without an enforcement/punishment component. It refers not only to the fair and just punishment of the guilty but also to the question of how to transform and change existing practices and institutions as well as human behavior (Lötter 2000, p. 232). As a form of justice, at least in the form of its contemporary debate, it aims to restore the position of both the offender and the victim to their appropriate positions in society.

The interpretation and application of this form of justice do not always imply criminal sanctions only but also must ensure some form of retribution for harm inflicted in the past. This is different from a concept of just compensation in transactions (commutative justice), which is prescriptive. Retributive justice is postscriptive, as it is used to punish, correct, or reward past behavior. Retributive justice comes into play, for example, on the debate whether to consider indigenous knowledge as property that belongs to indigenous people and whether use by First World developers is then seen as a “taking” (i.e., owning) of that collective property (Britz & Lipinski, 2001).

Retributive justice therefore deals with the question of how the global Information Society deals with the victims of injustice as well as with those who are responsible for inflicting harm on the victims. There are different ways of

dealing with past injustices. One way would be to put the focus primarily on retribution and to look at ways to blame and punish the guilty. It is more or less in line with the idea that justice must prevail even if it means the end of the world—reflecting the Latin proverbs: *fiat iustitia, pereat mundus*. This can be seen as the negative side of retributive justice because the focus is on revenge and retaliation that in many cases involve emotions such as hate, bitterness, and anger. Another way would be to focus on the transformation of society and its institutions in such a way that it becomes nearly impossible to repeat the injustices of the past (Lötter, 2000). The process of transformation in Germany after World War II is a good example. The third option would focus both on retribution and transformation. The focus would be on investigation of past injustices and assigning of responsibility, but also on how to reconcile people, transform society and institutions, and to develop new and shared values to ensure that past injustices will not happen again (Lötter, 2000). The work of the Truth and Reconciliation Commission in post-apartheid South Africa serves as a good example.

The last option is the preferred one in dealing with past injustices. Not only does it take past injustices seriously and work towards reconciliation but it also allows the victims of those injustices to raise their voices and be heard on their experiences of society's injustice against them. However, society must be open not only to listen to the victims of injustice but also to create new structures and policies and to mutually develop a set of core values. Such openness presupposes a system in which victims can mobilize and let their voices be heard against injustice and against the violation of their humanity (Waltzer, 1983). Here, I follow the line of argument of Lötter (2000) concerning the marginalized and poor living in the global Information Society. They should have a platform and opportunity within a system to mobilize themselves and rightfully protest against economic, social, and political oppression that violates their basic information rights. These marginalized societies must be allowed to take responsibility for initiating social changes that will not only ensure the protection of their rights but also will restore their human dignity. Part of the process will be to determine who caused the violation of their rights, the effect thereof, and how to appropriately compensate the information-poor and marginalized. Such actions will help to restore their human dignity and prevent future information-based injustices.

It is important, in the process of restoring justice and of transformation, to have a very clear vision of what kind of harm has been inflicted on victims and how to correctly assign responsibility to the guilty. The word *responsibility* originates from the Latin "respondeo," which relates to accountability, blame, and punishment—in other words, to be accountable or answerable in terms of a relationship or an obligation. It is a second-level normative concept, by which I mean it is always associated with a set of values and norms on which responsibility is based, but also by which it is judged. A person is being held responsible for something (Lipinski, Buchanan, & Britz, 2004, p. 235). Different kinds

of responsibility can be distinguished. Shklar (1990) differentiated between active and passive injustice. Active injustice occurs when perpetrators of injustice purposefully inflict harm on others. Passive injustice occurs when people "turn a blind eye" when injustices happen. Injustice is tolerated, and those who are the victims of injustice are ignored. In other words, passive injustice occurs "when people just stand around and do nothing, calm in the belief it could not be helped" (Shklar, 1990, p. 3).

There are numerous examples of injustice that require retribution in the global Information Society. Governments allowing unjust policies such as strict censorship and the intellectual oppression of their people also are under the judgment of retributive justice. Lötter (2000, p. 237) argued that passive injustice is highly relevant when discussing the link between poverty and justice as retribution. For example, when rich people do not care for the poor and in some cases even allow them to die from ill health, Lötter's (2000) comment is significant: "Standing by while some people suffer from so much difficulties [sic] inflicted by a social disease like poverty, makes non-poor people guilty of acting unjustly through violation of the positive intent of principles and norms of justice" (p. 238). Applied to the moral dimension of the global Information Society, one also can ask the question to what extent the rich and powerful role players in the global Information Society care about the illiterate and uneducated who are trying to make a living in this society and for whom it is not a given to access and benefit from information in the same manner as the literate and educated.

This form of justice reflects the first and third principles of justice.

Conclusion

This article is an attempt to engage in the current debate on the ethical dimensions of the global Information Society. In reaction to both the WSIS as well as UNESCO, I have approached the ethical challenges facing the global Information Society from a social perspective, and I made an argument that justice, if interpreted and applied in the correct manner, can be used as a universal norm to guide ethical decision making in the global Information Society.

In this discussion, I focused on the application of social justice to the ethical issues raised by the global Information Society. In defining the scope of justice, I emphasized the fact that one cannot distinguish between domestic and global justice. I further proposed three core principles of justice that can be used as the moral cornerstone for the global Information Society. Based on these three basic principles, I identified seven categories of justice and illustrated how these categories can be applied to the ethical challenges facing us in the global Information Society.

Acknowledgment

I thank Dr. Peter Lor for his critical engagement and review on earlier drafts of this article.

References

- African Economic Outlook. (2006). OECD Publication. Paris: African Development Bank.
- Anderson, C. (2006). *The long tail: Why the future of business is selling less of more*. New York: Hyperion.
- Becker, K. (2003). Why intellectual property issues matter? [Special IP ed.]. *World Information*, 1.
- Bedford-Ströhm, H. (1991). *Vorrang für die Armen. Auf dem Wege zu einer theologischen Theorie der Gerechtigkeit*. Inauguraldissertation zur Erlangung der Würde eines Doktors der evangelisch—theologischen Fakultät der Rupert-Karls-Universität zu Heidelberg: Heidelberg, Germany (Preference to the poor. On the way to a theological theory of justice, Doctoral thesis presented to the evangelical-theological faculty of Rupert-Kavls University, Heidelberg Germany.)
- Britz, J.J. (2004). To know or not to know: A moral reflection on information poverty. *Journal of Information Science*, 30(1), 192–204.
- Britz, J.J., & Lipinski, T.A. (2001). A moral reflection on current legal concepts of intellectual property. *Libri*, 51(4), 234–247.
- Britz J.J., & Lor, P.J. (2003). A moral reflection on the flow from south to north with specific reference to the African continent. *Libri*, 53(3), 160–173.
- Britz, J.J., Lor, P.J., Coetzee, E.M.I., & Bester, B.C. (2006). Africa as a knowledge society: A reality check. *International Information and Library Review*, 38, 25–40.
- Capurro, R. (2006). Intercultural information ethics. In R. Capurro, J. Frühbauer, & T. Hausmanning (Eds.), *Localizing the Internet: Ethical issues in intercultural perspective*. ICIE Series Vol. 4. (pp. 21–38) Munich: Fink.
- Center for Economic and Social Justice. (2006). Retrieved November 23, 2006, from <http://www.cesj.org/>
- De Beer, A.S. (2001). The internet in Africa: A new road to developmental opportunities or a digital highway leading to nowhere? *Media Freedom and Human Rights*, 15(1–2), 135–153.
- Deere, C. (2003). Developing countries and IP policy [Special IP ed.]. *World Information*, 11.
- Dougherty, T. (1998). Groups' rights to cultural survival: Intellectual property rights in Native American cultural symbols. *Columbia Human Rights Law Review*, 29(Spring), 355.
- Drahos, P. (1997). Thinking strategically about intellectual property rights. *Telecommunication Policy*, 21(3), 201–211.
- Drahos, P. (2003). The injustice of intellectual property [Special IP ed.]. *World Information*, 1.
- Dunning, J.H. (2004). The moral imperatives of global capitalism: An overview. In J. Dunning (Ed.), *Making globalization good: Moral challenges of global capitalism* (pp. 11–40). Oxford, England: Oxford University Press.
- Ebener, D.E. (2005). *Contributive justice*. Retrieved December 13, 2005 from http://www.networklobby.org/issues/contributive_justice.pdf
- Economic Justice for All. (1995). *Economic justice for all: Catholic social teaching and the US economy*. National Conference of Catholic Bishops. In M.L. Stackhouse, D.P. McCann, & S.J. Roels (Eds.) (with P.N. Williams), *On moral business: Classic and contemporary resources for ethics in economic life* (pp. 435–452). Grand Rapids, MI: Eerdmans.
- The Economist. (2006). Better late than never: Telecoms in South Africa. *The Economist*, September, 56–57.
- Ess, C. (Ed.). (2001). *Culture, technology, communication: Towards an intercultural global village*. Albany: State University of New York Press.
- Ess, C. (2002). Electronic global village or McWorld? The paradoxes of computer-mediated cosmopolitanism and the quest for universal values. In R. Elberfeld & G. Wohlfart (Eds.), *Komparative Ethik. Das gute Leben zwischen den Kulturen* (pp. 319–342). Köln: Edition Chöra.
- Evans, P.B., & Wurster, T.S. (1997). Strategies and the new economics of information. *Harvard Business Review*, (September), 71–82.
- Floridi, L. (1999). Information ethics: On the philosophical foundation of computer ethics. *Ethics and Information Technology*, 1(1), 37–56. Retrieved November 23, 2006, from <http://www.wolfson.ox.ac.uk/floridi/papers.htm>
- Frankena, W.K. (1962). The concept of social justice. In R.B. Brandt (Ed.), *Social justice* (pp. 00–00). Englewood Cliffs, NJ: Prentice Hall.
- Friedman, T.S. (2005). *The world is flat: A brief history of the twenty first century*. New York: Farrar, Straus Giroux.
- Habermas, J. (1993). *Moral consciousness and communicative action*. Cambridge, MA: MIT Press.
- Hamelink, C.J. (2000). *Ethics in cyberspace*. London: Sage.
- Hamelink, C.J. (2003). Moral challenges in the information society. *Media Development*, XLX(4), 40–43.
- Hampshire, S. (1989). *Innocence and experience*. London: Penguin Books.
- Human Development Report. (2001). NY: Oxford University Press.
- Kant, I. (1981). *Grounding for the metaphysics of morals*. Indianapolis, IN: Hackett.
- Kant, I. (1997). *Groundwork of the metaphysics of morals* (M. Gregor, Ed.). Cambridge, England: Cambridge University Press.
- Lessig, L. (2004, May). Copyright and the law: Ted Samore Lecture. Milwaukee: University of Wisconsin–Milwaukee.
- Limb, P. (2002). Ethical issues in southern African archives and libraries. *Innovation: Appropriate Librarianship and Information Work in Southern Africa*, 24, 51–57.
- Lipinski, T., Buchanan, E., & Britz, J.J. (2004). Agents of harm or agents of grace: The legal and ethical aspects of identifying harm and assigning responsibility in a networked world. In R. Spinello & H. Tavani (Eds.), *Readings in cybernetics* (pp. 214–252). Sudbury, MA: Jones and Bartlett.
- Long, D.E. (1998). The impact of foreign investment on indigenous culture: An intellectual property perspective. *North Carolina Journal of International Law & Commercial Regulation*, 23(2), 229–240.
- Lor, P.J., & Britz, J.J. (2005). Knowledge production from an African perspective: International information flows and intellectual property. *International Information and Library Review*, 37(2), 61–76.
- Lor, P.J., & Britz, J.J. (2007). Is a knowledge society possible without freedom of access to information? *Journal of Information Science*, 33(2): 387–397.
- Lötter, H.P.P. (2000). *Christians and poverty*. Unpublished doctoral dissertation, University of Pretoria, Pretoria, South Africa.
- Lyotard, J. (1984). *The postmodern condition: A report on knowledge*. Minneapolis: University of Minnesota Press.
- Meyer, J.B., Kaplan, D., & Charum, J. (2001). Scientific nomadism and the new geopolitics of knowledge. *International Social Science Journal*, 168, 309–321.
- Miller, D. (1999). *Principles of social justice*. London: Harvard University Press.
- Moor, J.M. (1997). Towards a theory of privacy in the information age. *Computers & Society*, 27(3), 27–32.
- National Conference of Catholic Bishops. (1997). *Economic justice for all: Pastoral letter on Catholic social teaching and the U.S. economy*. Washington, DC: United States Catholic Conference.
- Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. Cambridge, England: Cambridge University Press.
- O'Boyle, E.J. (2003). Comments on the Foundations of Economic Personalism Series. *Journal of Markets and Morality*, 6(2). Retrieved November 12, 2006, from http://www.acton.org/publicat/m_and_m/2003_fall/oboye.html
- Pyati, A.K. (2005). WSIS: Whose vision of an information society? *First Monday*, 10(5). Retrieved November 15, 2006, from http://www.firstmonday.org/issues/issue10_5/pyati/index.html
- Rawls, J. (1973). *A theory of justice* (2nd ed.). Oxford, England: Oxford University Press.
- Rosenberg, D. (2002). African journals online: Improving, awareness and access. *Learned Publishing*, 15(1), 51–57.
- Sen, A. (1993). Capability and well-being. In M. Nussbaum & A. Sen (Eds.), *The quality of life* (pp. 30–53). Oxford, England: Clarendon Press.
- Sen, A. (1999). Global justice: Beyond international equity. In I. Kaul, I. Grunberg, & P. Stern (Eds.), *Global public goods: International cooperation in the 21st century* (pp. 116–125). Oxford, England: Oxford University Press.
- Shklar, J.N. (1990). *The faces of injustice*. New Haven, CT: Yale University Press.

- Stiglitz, J. (2002). *Globalisation and its discontent*. London: Norton.
- UNESCO. (2006). Retrieved November 12, 2006, from http://portal.unesco.org/ci/en/files/22977/11607297371WSIS_C10_Working_methods-en.doc/WSIS%2BC10%2BWorking%2Bmethods-en.doc
- Van Hoven, M.J. (1997). Towards a theory of privacy in the information age. *Computers & Society*, 27(3), 33–37.
- Waltzer, M. (1983). *Spheres of justice: A defense of pluralism and equality*. Oxford, England: Basil Blackwell.
- World Bank Briefing Papers. (2000). What is globalisation? Retrieved November 24, 2006, from <http://www1.worldbank.org/economicpolicy/globalization/documents/AssessingGlobalizationP1.pdf>
- World Bank Report. (2002). *Globalisation, growth, and poverty: Building an inclusive world economy*. A co-publication of the World Bank and Oxford University Press. New York: Oxford University Press.
- World Summit on the Information Society (WSIS). (2003). *The Geneva Declaration of Principles and Plan of Action*. Geneva: WSIS Executive Secretariat.
- World Summit on the Information Society (WSIS). (2005a). *Tunis Commitment*. Retrieved November 24, 2006, from <http://www.itu.int/wsis/docs2/tunis/off/7.doc>
- World Summit on the Information Society (WSIS). (2005b). *Tunis Agenda for the Information Society*. Retrieved November 24, 2006, from <http://www.itu.int/wsis/docs2/tunis/off/6rev1.doc>
- Young, I.M. (1990). *Justice and the politics of difference*. Princeton, NJ: Princeton University Press.