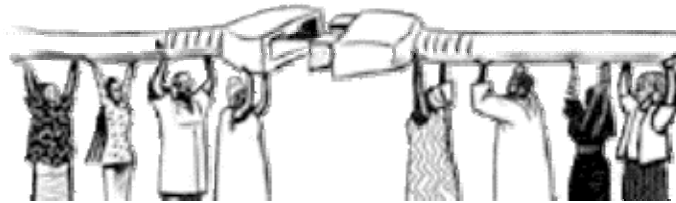


Open Spaces, Open Sources: The World Social Forum and International Communication Rights in a Digital World

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"The master's tools will never dismantle the master's house." Audre Lourde

“All the new media, including the press, are art forms which have the power of imposing, like poetry, their own assumptions. The new media are not ways of relating us to the old ‘real’ world; they are the real world and they reshape what remains of the old world at will”. – Marshall McLuhan

Introduction

Are we entering an era of new politics, one that is less state-centric, less vertical and more horizontal, grounded in institutions of civil society? There are, indeed, many signs that representative democracy is in trouble. Evidence includes voter apathy and falling voter turnout in many representative democracies, a decline in the vitality of political parties, a coarsening of political discourse, a view of politics as merely an extension of public relations and recurring political corruption, all indicative of the increasingly precarious legitimacy of the liberal democratic state. If, indeed, this is true and old political subjectivities are in crisis what are the new political subjectivities that will replace them? If parties, electoral politics, legislatures, states, all part of the traditional vocabulary of politics, are no longer so central to conceptions of politics what will the new vocabulary and spaces of politics consist of? Finally, if traditional politics is reflective of the political economy of the industrial age what in the age of cyberspace, networks, and digital production will this new politics be reflective of?

This paper does not pretend to be a definitive response to these questions. Rather, it draws upon the metaphor of open source software, an integral part of the new political economy of information technology, and the open source software movement and

critically examines their utility as a way of conceptualizing the new politics and new institutions. While recent scholarly debate (Wainwright, et. al. January 2007) has moved in a similar direction, this paper will extend this debate by applying the concept of open source to the World Social Forum (WSF) as a case study. It will compare the concept of open source development of computer software to the principles of the Charter of the World Social Forum, in particular its notion of open space and in its method of organizing the program which was adopted in 2005. The practice of the WSF will also be examined in two other ways, advocacy at the WSF of open source software and the right to communicate, and the increasing use of free and open source software in practice, that is, in the operation and administration of the WSF since 2001 and most recently at the United States Social Forum 2007. This paper will argue that while the concept of open source is a powerful metaphor, not unlike the “invisible hand” in classical economics, it has distinct limitations in term of how it has been applied to the actual politics and the operation of the WSF, limitations that are evident in the criticisms of the World Social Forum itself. The WSF, despite the aspirations of its Charter of Principles, that it “does not constitute a locus of power” has been criticized for ignoring the relations of power and verticality present at most fora since 2001, as well as the persistence of conflict and exclusion, itself a result of social inequality, particularly in terms of gender, class, and representation of peoples from different areas of the world, especially the global south. We argue that conflict, power, hierarchy and exclusion are, in fact, part of any social forum as they are, indeed, inherent in the idea of open source and the open source software movement. That said, it would premature to reject open source as a metaphor for the WSF because of these limitations. Rather, a more nuanced view of open source is

needed not only to view the new politics but also the WSF, a view that recognizes that open source as well as the WSF itself reflect the contradictions of the societies of which they are a part.

This paper discusses first, what open source is and how it has been employed as a metaphor to understand networked politics. Second, it examines the WSF as a case study in terms of the metaphor of open space. As a metaphor it is important to examine the changes that were made in 2004 to alter the process of developing the 2005 WSF program to one that was from the bottom up. The WSF commitment to being an open space and operating horizontally just as open source does presumes a collaborative network structure where interaction is free and voluntary, but also one that provides equal access and the necessary skills to participate. In the third section of the paper we question that assumption and address the issue of digital divides. We then examine the WSF in terms of another key aspect of its charter which challenges corporate power in the name of social justice. Part of that challenge involves the promotion and advocacy of open source as a component of an international right to communicate. We look at the primacy the WSF puts both on advocacy of open source software and the right to communicate, a necessary ingredient of democratizing the new politics and its modeling of alternatives in its actual practice of using open source software and the challenges it has presented. Finally we conclude that issues of power, conflict, hierarchy and exclusion (particularly in terms of class and gender) must be taken more seriously by those who support open source and the WSF. That said, we acknowledge the contribution open source and the WSF have made to revitalizing discussion of politics and the political by for example, promoting an ethos of co-operation and collaboration.

What is Open Source and how can it be used to re-conceptualize politics?

While “open source” is used in this paper to describe the new politics of networked forms of organization, production and cooperation, it is important to note that use of this term is not without controversy. Within the computer world there are debates about which is the more appropriate term, “free software” or “open source software”. Some, wishing to straddle the differences opt for the hybrid term “free and open source software” (FOSS) or “free/libre open source software” (FLOSS). Despite these differences there are common concepts each expression employs. That is, all agree on the centrality of three concepts: 1) freedom 2) open 3) collaborative. Differences in use arise due to which concept one stresses, freedom or open.

Those who stress freedom identify with Richard Stallman, founder of the Free Software Foundation (FSF) in 1985. Free, in this instance, is not free as in *gratis* or free beer. According to the FSF “free software is a matter of liberty not price.” (FSF, 2007) A program can be said to be free if, in the words of the FSF, users have these four freedoms, the freedom to:

- “run the program, for any purpose;
- to study how the program works, and adapt to [their] needs. Access to the source code is a precondition to this;
- to redistribute copies;
- to improve the program, and release ... improvements to the public, so that the whole community benefits. Access to the source code is a precondition for this.” (FSF, 2007)

These freedoms are protected by the General Public Licence, GPL, or what Stallman calls “copyleft.” Under the GPL no software or derivation created under its licence can become proprietary.

Those who prefer “open” to “free” acknowledge their dependence on these freedoms, in particular the insistence that the source code be distributed with the software and be open to modification and redistribution by anyone with the programming skills to do so. This is, of course, distinct from proprietary software where the code is hidden. While these are of central importance, the emphasis of open source software is on the production process, not the software itself. According to the Open Source Initiative (OSI) founded by Eric S. Raymond and others in 1998 open source “is a development method for software that harnesses the power of distributed peer review and transparency of process.” (OSI, 2007) The emphasis on distributed peer review connotes that this is a collaborative process, undertaken with the expectation that the resulting product will be a improved and higher quality collective good that can be used and/or developed by anyone. Implicit as well is the notion of open source software as a gift, one that keeps on giving.

Today, the term open source has become more popular than free software and is used in this paper in preference to the more awkward FOSS or FLOSS. Moreover, open source is used because many of its key ideas and assumptions are central to the creation of a new politics and alternative political economy. Here we refer to notions of property, production, process, organization, and product around which are clustered a host of other ideas such as the common good, complexity, networking, and voluntary cooperation. Together, these ideas are central to an alternative way of viewing politics.

Steven Weber, author of one of the more definitive books on open source written from the perspective of a social scientist, makes two key claims that provide a means of linking these ideas together. First, he claims, “open source is an experiment in social

organization for production around a distinctive notion of property.” (2004:16) Second, he argues “the essence of open source is not the software. It is the *process* by which software is created.” (2004:56) Starting with a distinctive notion of property open source serves as a means of better understanding the implications of these sentences.

Customarily, notions of property are premised on the right to exclude. In terms of intellectual property rights proprietary software is protected by means of copyright which entitles the owner to certain legal rights guaranteeing control of the product to the exclusion of others. This permits economic rents to be made and appropriated by the owner. Proprietary software is software in which the owner does not permit access or modification of the software. Unlike a car which one can change and modify as one pleases proprietary software does not permit any changes or modifications by anyone other than the owner and producer of the software.

On the other hand, the GPL upholds a very different sense of property when it comes to open source software. As noted previously open source software code is free, open and accessible to anyone who may want to modify or change the code and distribute the resulting software as long as the user/producer does not restrict access or claim exclusive ownership of the code. Distribute is the operative word here. Unlike proprietary software where one has the right to exclude, open source software is premised on the right to distribute.

In turn, the differing notions of property embedded in free software and open source software are predicated on differing logics and cultures of organization and production. It is the logic of organization and production of open source software that has particular appeal to those interested in a “new politics.” Organizationally speaking, the

production of proprietary software is premised on hierarchy with its command and control systems, clear and self-contained division of labour, and subsystems dedicated to particular tasks. The reward system is pecuniary, that is, one is motivated by money as a reward. The production process is closed and contained within the organization as a singular unified system.

Open source, on the other hand, relies on a very different production process, has a very different organizational form, and is premised on a very different sense of reward or motivation, one that is intrinsic, not extrinsic. The political economy of the organization of open source is most vividly portrayed in a famous metaphor by Eric Raymond. Raymond argued that cathedrals and bazaars represented different architectures of organization, the cathedral of the commercial world and proprietary system, the bazaar that of open source. (1999) Cathedrals, wrote Raymond, are designed and constructed in a hierarchical, top down manner according to a central plan. Organizationally, open source is like a bazaar where a “great babbling bazaar or different agendas and approaches” produces software packages of high quality at great speed. (1999:30) While Raymond’s analogy to the bazaar implies chaos his essential argument is that the many small sharing producers of free and open source software working in non-hierarchical organizational forms produced a higher quality code, in this case Linux and open source software. Organizationally, production does not take place within a single firm, rather the Internet is the foundation of this production system. That is, it is the Internet that facilitates innovation and collaboration. Unlike the hierarchical and centralized organizational production of proprietary software open source software production is dispersed and coordinated horizontally by means of a networked

organization form and not through any deliberately organized process. The coordination of expertise is necessary because development of good software is extremely complex and ongoing and outside the capacity of a single person or organization. The motivation to produce open source software is not extrinsic, to make money, but intrinsic, for example, for artistic creative reasons or the satisfaction and enjoyment of producing something useful. An additional contrast with traditional capitalistic organization is that no distinction is made between users and developers. Users can become the developers of open source software by contributing to the refinement of the software package although it must be said the actual number of developers is comparatively small. (Weber, 2004)

The fact that users can take control of information technology to create better and alternative informational products is a key characteristic of the network society. (Castells, 2000)

The resulting software package which is organic and evolving is a common resource, a common good, one that is abundant and not reduced, but increased, through use and consumption. According to Di Corinto, free and open source software has the characteristics of a common good. He writes:

Its use and consumption enhances its quality and the opportunity to create new products. This is exactly what occurs with the *Commons*. A common good is, in fact, a good that increases through consumption.” (June 2007:46)

Some, such as Di Corinto and Raymond, claim that open source software development is an excellent example of a gift economy, an economy premised on abundance and created through diffuse reciprocity.

Not only does open source software development and its production process have a particular logic of organization they also have, as noted previously, their own

supportive culture, the hacker culture. The hacker culture and the hacker community have been instrumental in the technological innovations that have expanded the Internet and free and open source software development. The hacker culture has a number of characteristics that have been alluded to in this paper, that is, an emphasis on technological excellence, open source peer review, freedom as articulated by the FSF, cooperation, and primacy of intrinsic reward. Castells provides a succinct description of this culture:

What is common to the hacker culture, in all social contexts, is the urge to re-invent ways to communicate with and by computers, building a symbiotic system of people and computers interacting over the Internet. The hacker culture is, in its essence, a culture of convergence between humans and their machines in a process of unfettered interaction. It is a culture of technological creativity based on freedom, cooperation, reciprocity and informality. 2001:50

What has been sketched above represents the ideal type of open source software development and its attendant organizational logic and culture, one that has considerable attraction to the proponents of a new networked politics and the WSF. The use of this ideal as a metaphor (and reality) of a new politics will be discussed shortly. However, we argue that those who are attracted to this metaphor tend to selectively gloss over elements of open source software development that reveal it has many of the characteristics of politics as usual, in particular, conflict, exclusion, and hierarchy. By downplaying these characteristics there has been a tendency within new alternative institutions such as the WSF to reproduce these same characteristics leading in some instances to significant exclusions, particularly in terms of access to the WSF.

While the proponents of the process of open source software development do accentuate its virtues others, such as Weber, stress the prevalence of conflict in the

collaboration process. As Weber notes “anyone who has dabbled in software engineering recognizes that disagreement is the rule.” (84) Conflict is very much the norm because collaboration is difficult and those involved in the development process tend to be bright, strong-willed, and willing to express their opinions. Conflict is mediated by a variety of mechanisms. One of these is through forking a process by which those not satisfied with the path of code development can use the existing open source code to take software development in a different direction. Forking, however, is not common. (Weber)

Another means of mediating conflict is through using hierarchies that do exist in open source software development. While hierarchies differ in open source software development in the sense they lack the formality of traditional bureaucratic organizations they often coalesce around a leader who initiated the development of the process. Linux software development, for example, does possess a hierarchy with Linus Torvalds as the acknowledged leader who individually, or through his lieutenants, can decide what the official code modifications will be. Thus power and hierarchy are a part of open source software development underscoring Chantal Mouffe’s claim that power is constitutive of all social relations. (1999)

Moreover, the social relations particular to open source software development have a particular bias, that is, they are much predicated on interaction among primarily white middle class males. López considers this to be a major problem. According to López:

For the most part, techies are white males, and since Internet technology is developed collaboratively by groups of technologists, the grouping follows social norms. In a society where racism and sexism are expressed in a kind of social segregation, non-whites, women and poor people are effectively often excluded from these groups. That the exclusion is mainly unconscious doesn’t erase it. (2007:27)

Particularly problematic, in a sense, is the largely white, male hacker community and hacker culture. Online exchanges, as noted above, are often sharp, pointed and conflictual, with disagreement the norm. These online communities as a consequence are not particularly inviting to women who compose a small number of software developers, proprietary or open source. A recent article on the web site DevChix, a site dedicated to supporting and developing a community of women software developers, pointed to the significant differences between men's and women's online development communities. In particular the point is made that too many online exchanges on public online tech spaces are too harsh, critical, destructive, and egotistical. Rude and obnoxious behaviour is so common on many online tech development communities that as one critic pointedly stated:

it is the primary reason why many women do not participate. The poor communication and behavior of even one boorish, ego-driven, elitist, socially inept geek is just simply intolerable for most women. (Gloriajw, June 9, 2007)

Women in open source software development tend to avoid these spaces preferring to interact in their own communities which, while hardly perfect, are more mutually supportive, intolerant of offensive behaviour, and possess a strong overall sense of community.

With the above as a caveat we now turn to discussing those elements of open source software development which have proven to be an attractive metaphor for those searching for alternative ways of conceiving and constructing an alternative political economy, politics and political organizations. Here we will concern ourselves with a new politics of networks and social movements as alternatives to existing forms of the state, parties, representative institutions, and capitalist relations. For example, those who seek

a less state-centric form of politics draw inspiration from the open source ideal. The state is the most vertical, bureaucratic set of institutions in society. It concentrates power in the hands of a few and assumes a monopoly of knowledge which is predicated on experts, is Western-based, rational, technical, and scientific. This knowledge paradigm suffuses much of modern social and economic organization separating the producer (here the state as the proprietor of knowledge) from the user. Thus citizens are not seen as useful sources of knowledge, as policy creation and implementation become technical matters.

Boaventura de Sousa Santos and Hilary Wainwright, on the other hand, argue that there are alternative ways of knowing that must be recognized. According to Santos “the concepts of rationality and efficiency presiding over hegemonic techno-scientific knowledge are too restrictive. They cannot capture the richness and diversity of the social experience of the world.” (2004: 238) This theme is echoed by Wainwright who argues that at the heart of the rise of new social movements in the 1960s and 1970s was a questioning of what was claimed to be rational, expert, objective knowledge. According to Wainwright:

These movements questioned the definition of which counts as knowledge, the narrowness of the sources of knowledge considered relevant to public policy, the restricted categories of people whose knowledge was valued and the processes by which knowledge was arrived at. (2003: 23)

On the other hand respecting users as potential sources of knowledge can lead in healthy new directions. Thus asserts Wainwright:

The idea of development through use is especially suggestive. To apply this to public services like education, health and so on highlights the way that the effectiveness and innovative capacity of these knowledge based services depends on a collaboration between users and producers/providers, thereby treating users and public sector workers (not just the managers or experts) as knowledgeable collaborators in a developmental process. (July 16, 2007)

Knowledge here becomes a common product and common good that all contribute and draw from.

As Wainwright argues this requires a model of organization in which power is not concentrated but dispersed and those outside the organization can contribute and participate directly. This assumes, as well, more autonomous spaces for civil society actors and social movements. Coordination of the process of knowledge production would require an emphasis on horizontal, networked forms of organization to link those on the outside of the state with those on the inside and would permit as well greater coordination of policy within the state itself.

All this points to a recognition that democratic participation can be direct and not take place only through representative institutions which are seen as only one space of politics. Moreover, by means of networked forms of organizing politics is dispersing beyond the state and into society taking place on multiple levels. Here social movements become key actors in political struggle. The idea of power changes from power over, to power with, whereby politics becomes a means of acting together in concert through networked organizations for desired ends.

This, in turn, implies that politics and power can be transformative and that co-operative action can be emancipatory. Here, we speak specifically of the challenge that many see that open source poses to capitalism. This, to many analysts, is a reversal of the customary argument that capitalism will tame, domesticate and control all aspects of the digital world. Indeed, this line of reasoning is articulated by those, such as Lawrence Lessig, who fears the worst. (2000) While he believes that “open source and free software are fundamental in a free society” (350) this digital commons is being threatened by

(United States) copyright legislation and corporate action that is “slowly turning the Net into ... [a] space of control.” (356) This dystopian view, however, has been met with strong counterarguments that assert much the opposite. Critiquing Lessig’s argument Strangelove asserts “that the attempt to control digital property within the Internet has utterly failed.” (2005:73)

Strangelove’s conclusion is shared by many others. Alfredo López, for example, argues that “free software is used in virtually every major activity on the Internet” (30) particularly in terms of web servers, email programs, and web browsers. Moreover, the use of open source software is growing rapidly, the proprietary enclosure movement is not winning. Rather, the opposite is true. Indeed, there is considerable evidence of open source software’s spreading use throughout governments, corporations, and universities. In 2004, the city of Munich switched to Linux based open source software use on 14,000 of its desktops. (Best, 2004) In 2005 the government of Brazil also began converting its desktop software from Microsoft to open source software. (Kingstone, 2005) In January 2007 the European Commission endorsed the use of open source software. In all three instances governments were driven primarily by significant cost savings. (Thurston, 2007) While Microsoft software still dominates desktop use that this last bastion of proprietary software is eroding must still worry Microsoft. In the United States the Open Source Software Institute “serves as a collective resource and venue for the promotion, development and implementation of open-source software solutions between corporate, government and academic entities” including the U.S. military. (OSSI:2007) That the open source software movement is all over the map politically is not a concern claims

López. Rather, he argues “movements aren’t defined by the politics of their participants, but by the actions that unite them in this movement.” (21) All this writes López:

Raises an interesting question for the progressive movement: what if an alternative production system, developed collaboratively and nurtured democratically and freely, were to actually become the predominant system in an industry or section of the society or culture? How would the progressive movement call that? (2007:31)

Answering his own question he says “we would call it a victory.” (31) “With free software, ... we have won this struggle.” (31) Yet, he acknowledges many progressive people do not realize it.

Others do not go so far as López recognizing that open source software and the Internet are still very much contested spaces, “inside as well outside of capitalism.” (Merten, 2001: 5) Yet, here there are grounds for optimism. With the disappearance of the boundary between users/consumers and producers distinct possibilities arise. Today, Strangelove argues, the ability to create new online public spaces and cultural symbols poses a challenge to capitalism’s cultural “empire of mind.” According to Strangelove:

Unless there is substantial evidence to the contrary, models of Internet behaviour must take into account the possibility that significant anti-capitalist cultural forces have been unleashed. These cultural forces enable resistance, evasion, and subversion, as well as the production of vast volumes of anti-capitalist cultural material that collectively present a serious threat to the reproduction of capitalism. (21)

In essence, what Strangelove and others argue is that a real struggle is occurring over labour/social creativity in the immaterial world of digital production. From a Marxist perspective open source software development is producing use value, not exchange value, which essentially is zero. So capitalism is not only threatened by the loss of exchange value it is threatened by the alternative cultural production facilitated by open source software.

Thus open source software development can be seen as heralding a utopian transformation of society. The search for an alternative critical utopia (or utopias) is very much the *raison d'être* of the World Social Forum and it is to the case of the WSF that we now turn.

Open Sources, Open Spaces and the WSF

We examine the World Social Forum both as a set of principles and ideas about creating an open space to critique and articulate alternatives to corporate globalization and neo-liberalism and as a set of actual practices reflected in the operation and implementation of these principles in the WSF events which have been held since 2001. This latter set of practices includes first examining how the concept of open source has come over time to shape the development and content of the program at the annual event. Second we examine how the WSF events have become spaces of advocacy and networking for an alternative vision through global campaigns, a vision which both critiques the increasing global corporate media concentration and control over the means of communication and articulates a concept of an international communication right for an information society (CRIS). Third we examine how in its own operations the WSF models the alternative world of communication it seeks to create by its use and development of free and open access software.

As we indicate below however all of these aspects of the WSF are heavily reliant on an internet-based platform for communication as is the notion of open source development. This raises questions about the challenges and implications of this dependence on the technology. We indicate that access to, and facility with, the technology is shaped by a so-called “digital divide” of asymmetrical access which, while

it may be shrinking over time, (ITU) is nonetheless real. This leads to exclusion, both across groups within a society, based on gender, age, income (social class), education (lack of skills) and also geographically, most especially in the Global South where many of these barriers are compounded by an absence of telecommunications infrastructure.

The WSF as Open Space

We begin, however, with a brief description of the WSF and its origins as a recent political invention, a global venue and space of convergence which civil society organizations and movements opposed to neo-liberal globalization can call their own. In recent years the WSF and various regional and local social forums have become an important manifestation of what has become known as the Global Justice Movement (GJM). The WSF began with a first meeting in Porto Alegre, Brazil in which 15,000 activists participated united under the slogan “Another World is Possible” and today can attract up to 150,000 participants. Two concepts are important in understanding the WSF. First, very much analogous to the open source metaphor, it is an open space and second, organizationally, it is based on networks.

The notion of the WSF as open space is underscored by the first principle of the WSF Charter of Principles:

The WSF is an open meeting place for reflective thinking, democratic debate of ideas, formulation of proposals, free exchange of experiences and interlinking for effective action, by groups and movements of civil society that are opposed to neoliberalism and domination of the world by capital and any form of imperialism.... (<http://www.forumsocialmundial.org.br/>)

Probably the foremost proponent of the WSF is Francisco (Chico) Whitaker one of the prime movers of the Forum from its inception. Whitaker explains his view of the WSF as

open space as a new organizational political construct, one that eschews verticality, in the following manner:

It is a space created to serve a common objective of all those who converge to the Forum, functioning horizontally as public space, without leaders or pyramids of power. The Forum is intended to serve as an incubator of ideas, a space in which movements to contest neoliberal globalization are created. (2004:113)

Much of the debate about the Forum focuses on these claims, that it is flat, horizontal, and devoid of power relations points that we shall return to later.

The other critical aspect of the WSF is that it is a networked space. As Waterman notes the WSF as the “‘movement of movements’ is marked by its networked form and communication activity; a matter recognized by enemies and friends alike.” (2004a, 56)

Like all social movements the WSF and the hundreds of other social forums are increasingly characterized by a “cultural logic of networking.” The principles of this cultural logic have a striking similarity with the open source metaphor. These principles include:

- 1) Forging horizontal ties and connects among diverse, autonomous elements; 2) the free and open circulation of information; 3) collaboration through decentralized coordination and consensus decision-making; and 4) self-directed networking. (Smith, *et. al.*, 2008)

This cultural logic and network symbolism is also important in portraying some key tensions within the Forum process generally, for example, between the “horizontal”, those who adopt the network as a new metaphor of social and political relationships, and the “vertical”, who articulate the need for more traditional, hierarchical forms of organizations, politics and power.

As noted above the WSF, despite its pretensions to the contrary, is now recognized as being marked by hierarchy, power and conflict. These antagonisms,

differences, and tensions have become self-evident in recent years. Particularly contentious is the claim by Whitaker that the Forum is simply a space, one without a pyramidal politics or power relations.) In fact, however, the WSF does have hierarchy and pyramids of power, power in the sense of power over. Immanuel Wallerstein, for example, has argued that the WSF could not function without an organization, one that is hierarchical, has power and makes decisions. Teivo Teivainen, maintains that the pretence that “there are no relations of power that should be made visible within the WSF” de-politicizes the WSF. (2004:2) Andreotti and Dowling concur arguing “to conceive of this context as a decentralized space where power relations are non-existent or neutralized is a dangerous mistake, as it turns a blind eye to power struggles that do take place within the Forum.” (2004:606) Many of these struggles revolve around the organization of the Forum in general and the role of the International Council (IC), the association of 150 non-elected organizations and intellectuals that decide where the Forums are held and, until 2005, how they were to be organized.

Implicit in the conflict and struggles for power within the Forum process generally (not solely the WSF) is, as noted above, a fault line between the “verticals” and the “horizontals.” The horizontals represent more decentralized, loosely knit social movement networks and organizations (Smith, *et. al.*, 2008) that prefer a flatter, open, non-hierarchical democratic Social Forum process, one that prefigures the type of the society they want to create. The verticals, on the other hand, accept the need for hierarchy, institutionalism, professionalism, and representative structures characteristic of larger NGOs, trade unions, and affiliated parties. The tension between the verticals and the horizontals became a rupture at the European Social Forum in October 2004 (Reyes,

et. al., 2005) and is evident at the World Social Forum. That said, horizontalism is an ideal, not a fact, and it is necessary to reiterate Mouffe's claim that power is constitutive of all social relations including those embodied in horizontal associations and networks.

Yet, as an ideal horizontalism has made headway within the WSF, particularly in terms of how the program of the WSF is organized. In particular those more disposed to horizontalism insisted that from 2001 through 2004 the International Council played too prominent a role in the organization of the WSF program particularly its mass conferences, plenary sessions and seminars headed by prominent intellectuals. In part to resolve this and other tensions within the WSF the IC adopted another methodology for organizing the WSF program in 2005, one that was more bottom up and self-organized. In July 2005 the IC launched a consultation process in which more than 1800 organizations around the world participated online and offline. These consultations were intended to provide a means by which participating organizations could interact and convey their opinion on what debates, issues, and themes they wanted included in WSF 2005. Based on the consultation process 11 Themes were developed which served as a basis for organizing the more than 2500 Forum activities – workshops, seminars, panels, etc. The intent was to have most of the activities dedicated to self-run initiatives and significantly downplay the bigger conferences run by the Organizing Committee. In fact, the promise of the new technology in this process was only partially realized as the electronic tools were not yet available to facilitate the desired online linkages and connections. However, the system worked well enough to create a break from the more top down planned program.¹

The WSF had changed its own practice way of organizing to allow for more collaborative horizontal interaction embracing, one could argue, of a more open source model. Open source was also an idea that the WSF sought to champion as a central issue in the struggle over communication rights and efforts to challenge corporate power. It has to do however, within the context of existing power relations. It is to this aspect of the WSF that we now turn.

The WSF in context of Digital Divides

In addition to the commitment to create an open space and embrace more horizontal forms of organization the WSF has also embraced open source and FOSS as part of its principles of opposition to neo-liberalism and the “domination of the world by capital” (Charter) and its commitment to social justice and inclusion. In terms of ICTs this has mean critiquing and countering the trend to ever increasing and concentrated corporate control of the means of communication. In terms of actual practice at the WSF this has taken the form of providing a space for civil society to develop networks and advocate a set of international communication rights as well as modeling an alternative vision and practice of communication. Both efforts have involved promoting open source and FOSS and supporting alternative media, much of which is Internet based.

As in the case of open source software development and the open source model of politics which is more open collaborative, horizontal and network-based the question of power cannot be ignored. We argue here that the WSF efforts sought to counter, but at the same time, have been influenced by, patterns of exclusion and inequality that give rise, ultimately to power relations. On the one hand the goal of activists in the WSF has been one of seeking the ideal of an information society which is

free and has open information-sharing “from the most high tech locality to the smallest village” in a world where “privatization of the Internet, the airwaves, and the fruits of human creativity” are signs that “the dream might become a nightmare” (Fleming). At the same time these networks and very “forms of media and networking tools are being used to build global communities from the local level, to share knowledge, amplify marginalized voices, organize political action, empower participation, and sustain and celebrate cultural and intellectual diversity” (a CRIS report as quoted in Fleming). In other words in seeking to create this ideal information society activists at the WSF and elsewhere have had to work within, and are heavily reliant on, existing ICT systems that are deeply imbedded in, and reflect a global political economy of profound, and in some cases, increasing inequality. (Youngs, 17) In terms of the information society this inequality is often referred to as the “digital divide.”

The digital divide is part of the reality of the global political economy and a reflection of neo-liberal globalization, a system that has deepened inequalities globally between societies, as well as within them, even as it has, through new forms of electronic connectivity, deepened global integration. Thus the development of ICTs has occurred within a context of inequality which is complex, multi-layered and dynamic. As a recent report on the World Information Society measuring the digital divide argues “there is not a single divide, but multiple divides: for instance, within countries, between men and women, between the young and the elderly, across different regions” (International Telecommunication Union (ITU), 21)

As the World Information Society report points out over time older communication technologies, such as radio and television, have become more evenly

diffused even as newer technologies, such as mobile 3G phones and internet, are more unevenly diffused. The key factor driving the digital divide globally is wealth or income differences, both between countries and also individuals. Within the group of 50 Least Developed Countries (as defined by the United Nations) which account for 11.9 per cent of the world's population internet users numbered one in every hundred in 2005, while over half of all citizens in OECD member countries (ie. one in two) were Internet users. As the report points out, however, the North-South gap has diminished in recent years in certain sectors such as access to mobile phones where prices have come down and prepaid services are available. However, broadband penetration "is far from common in LDCs. There were a mere thirty thousand broadband subscribers in the 24 LDCs that had broadband service in 2005 (out of a total of fifty LDCs)." (ITU, 22) Access is further limited largely by high costs. The report provides an example:

LDC users are asked to pay extortionate rates for relatively low-speed broadband access – over US\$2000 per 100 kbit/s per month in Cape Verde, for instance, and over US\$100 per 100 kbit/s per month in at least 12 other LDCs where broadband is available, compared with below 10 US cents in Japan and the Republic of Korea.

Furthermore, in terms of affordability (or price relative to monthly income), the gap between high- and low-income economies is a staggering ratio of 432. Consumers in a high income economy spend only 2 per cent of their average monthly income on broadband connectivity, whereas in a low-income economy, even the cheapest broadband offering costs more than 900 times average income.

Lack of infrastructure, such as fibre optic cables, are part of the problem of access but so too are many other barriers including those related to gender, literacy, education, language and skills. Overcoming the barriers of access still leaves the question of content

and the extent to which internet content respects and preserves or even provides the space for linguistic and cultural diversity.

The issue of the North-South digital divide itself, one can argue, is a product of neo-liberalism. But it has also been embraced, some would argue, as a stalking horse for the further imbedding of neo-liberalism in the global south (Wade). The linking of ICTs to the achievement of development goals has been enthusiastically embraced by large corporations, agencies like the World Bank and business organization like the World Economic Forum. The solutions they offer to close the digital divide, including privatization of telecommunications systems and corporate charity have had a mixed impact. As the World Information Access Report notes telecommunications reforms in Africa in the past decade have been extensive and problematic.

By 2006, 36 of 53 African countries had separated the regulatory authority from their executive branches of government, 29 privatized their public telecommunications provider, 26 liberalized their telephony markets, and 18 depoliticized their regulatory authority.

While these changes may have helped increase mobile phone access and lowered call rates the

the relative portion of Internet hosts residing in Africa has actually declined. In 1995, only 1.6 percent of the world's internet hosts were stationed in African countries, and by 2005 this portion had declined to 0.7 percent. In terms of national information infrastructure, the internet capacity of many African countries has declined over time.

Others have noted the development of a Microsoft addiction:

This is a phenomenon faced by countries that have been given large quantities of free MS software that are now compelled to purchase updates at high cost because they have already invested in the platforms required to run the software. (Quareshi)

A strengthened international intellectual property regime emanating from trade agreements and including copyright and patent protection of software have added to the costs for many developing countries.

These developments, in the context of the rapid emergence in the 1990s of new technologies have led to growing concerns about citizen access to the means of communication in a corporate, globalized world and efforts to identify and articulate a set of citizen rights in reference to ICTs developed. The Association for Progressive Communication (APC), one of the new alternative media organizations to emerge out of the struggles against corporate globalization in the 1990s, has articulated these rights in terms of the Internet reflected fairly well the central demands of most civil society groups.

APC argues that

1. Access must be affordable and universal
The right to access and create content that is culturally and linguistically diverse.
- 2 The right to access to infrastructure irrespective of where you live. The internet serves as a global public infrastructure. This infrastructure must be widely distributed and support sufficient bandwidth, which will enable people everywhere to utilise its potential for raising their voices, improving their lives and expressing their creativity. People have the right to well-distributed national internet backbone that is connected to the international network.
- 3 The right to the skills and knowledge. Skills enable people to use and shape the internet to meet their needs. Local and national governments, international and community organisations and private sector entities must support and promote free or low-cost training opportunities, methodologies and materials related to using internet for social development.
- 4.The right to free and open source software (FOSS) We support the use of FOSS. Working with FOSS is empowering, it builds skills, is more sustainable and it encourages local innovation. We encourage governments to make policies that encourage the use of FOSS, particularly in the public sector. (APC Charter)

What role has the WSF played in this process of advocating for communication rights in the context of a digitally divided world? As the following section indicates the WSF has increasingly turned its attention to these questions.

The WSF and advocacy for International Communication Rights

The WSF with its goal of providing a democratic and open space in which to challenge the domination of the world by corporate capital provided a space in which to develop networks and advocate to pursue communication rights. The following provides some examples of how the organizations actively involved in the WSF recognized the need to advocate for communication rights. The growing importance given to the issues is reflected in the program and events at the WSF since 2002. Initially communication was not even identified as a main theme. The second WSF held in Port Alegre in 2002, identified four main themes of the program :

- The production of wealth and social reproduction
- Access to Wealth and Sustainability
- Civil Society and the Public Arena
- Political Power and Ethics in the New Society

Communication rights were addressed under the second theme of “access to wealth and sustainability” via a session on “Knowledge, Copyrights and Patents” featuring Richard Stallman of the Free Software Foundation and under the third theme of “civil society and the public arena”. Here a panel was organized on Democratizing Communications and the Media, featuring Ignacio Ramonet of *Le Monde Diplomatique* where a new organization, Media Watch Global was founded to “promote the right of citizens around the world to be properly informed.” (www.mwgglobal.org). It was at that forum too, according to Fleming, that the Communication Rights of an Information Society (CRIS),

an advocacy network which had been initiated in November 2001 by the Platform for Communication Rights, was highlighted through the presentation of a paper for the WSF which has since be amended and redesigned as “Whose Information Society?” (Fleming).

Part of the reason for raising the issue of communication rights at the WSF, aside from its intrinsic importance given the WSF principles and commitment to open space, horizontalism and democracy, was also a practical desire of activists in 2002 and 2003 to mobilize civil society in light of the impending World Summit on the Information Society (WSIS) the first of which was to be held in December 10-12, 2003, in Geneva, Switzerland. This two phased summit process (the second held in Tunis in November 2005) was the result of a resolution of the International Telecommunications Union which had decided in 2001 to hold a process of tripartite deliberation on a set of principles and plan of action on the information society. Along with governments, the private sector, UN accredited NGOs would be involved in the process. The WSF provided one venue where civil society groups could be mobilized, local and national advocacy networks created, and coordination of civil society input could be facilitated. A second was to be held from November 16-18, 2005, in Tunis, Tunisia. Among the issues which would be addressed were Internet governance and the digital divide.

Both the third and the fourth WSF, the latter in Mumbai in 2004, reflected a growing emphasis in the program on these issues. In Mumbai Media, Information and Knowledge was one of the major themes. It was the January 2005 WSF in Porto Alegre, with the second WSIS looming however, that the issue developed a very high profile. First a group of alternative media organizations (including the Inter-Press Service, and the World Association of Community Radio Broadcasters(AMARC) held a one day

event, the first Information and Communication World Forum, on the eve of the WSF. At the WSF itself, “Communication: counter-hegemonic practices, rights and alternatives” was one of the 11 themes identified in the open consultation process previously described. The theme was accorded its own physical space at the venue (called terrains) where a large number of star-studded events that featured well know intellectuals and performing artists advocating were held, many of them extolling the virtues of FOSS. John Barlow, for example, Grateful Dead songwriter and founder of the Electronic Frontier Foundation spoke about the high costs of proprietary software “Already” he claimed, “Brazil spends more in licensing fees on proprietary software than it spends on hunger.” (Barlow as quoted in Clendenning). Gil Gilberto, Brazilian singer and now Minister of Culture, Laurence Lessig of Creative Commons and Manuel Castells were all part of the deliberations. The large youth camp of over 35,000 was also a scene of free software rallies and creative cultural events designed to showcase and “build free culture using free software”.(Lessig, 2005) The free lab offered "workshops about video editing, audio editing, collaboration tools, [and] online collaboration," all "on top of free software." (Lessig)

In the 2007 WSF in Nairobi the issue was also addressed. identified in term so the theme of “Freeing and democratizing knowledge and information”. About 70 workshop, panels and other events were organized. However, they represented only about 5 per cent of the self-organized activities and were dwarfed by the number dealing with issues such as HIV/Aids, Poverty, Debt and other issues (WSF, 2007 Secretariat). A reflection of the preoccupations facing Africans. There were a number of sessions on

free software and information and communication rights. The role of community radio and issues of gender justice were also addressed.

Clearly these activities at the WSF have had several goals, including raising basic awareness and mobilizing and organizing for participation in other forums such as WSIS, or in some cases even providing basic training. What impact have these efforts had? In the case of advocacy of communication rights we can question how effective efforts have been either in terms of raising awareness, developing stronger advocacy networks on FOSS or influencing policy, for example, in forums such as WSIS. The 2002-2005 WSF meetings certainly helped to organize and mobilize groups and coordinate their participation in the WSIS. Despite the strong civil society presence in Geneva and Tunis however, the final results there fell far short of civil society demands, both in terms of Internet governance (which has remained largely in US hands) and bridging the digital divide. While a global solidarity fund discussed at WSIS to bridge the digital divide was initiated in Geneva in 2005, it was voluntary and has so far produced a fairly small pool of funds which will not go very far in addressing major access problems. Some have argued, as well, that the international communication rights activists have had less resonance among those in the global south than they might have if they had been able to link this to more basic grassroots struggles (Thomas). In terms of the global adoption and use of FOSS there has been progress. Much of it however, we would argue, has been driven by government initiatives for reasons of costs, balance of payments concerns related to outflows for licensing fees, or the desire to build up domestic software expertise and industries. This is very much the case amongst the larger developing countries and major economies, such as Brazil and India, which have led lead in the

advocacy for and adoption and use of FOSS. For example, Open Office software is used in 91% of Brazilian government offices, 73% in India, and 58% in Malaysia.(South Centre). Nevertheless, the use of FOSS in desktop applications still remains low. A bigger question remains in terms of whether open source software can on its own either bridge the digital divides or really challenge the corporate capitalist model.

Modelling the World You Wish to Create: The WSF and FOSS

The World Social Forum has sought to be more than just a space for critiquing neo-liberalism and advocating alternatives. It has seen itself as a space in which those desired alternatives should be modelled and practiced, whether it be in terms of democracy, a commitment to a sustainable environment, or a world of free and open software committed to communication rights for all. In terms of modelling alternatives the WSF “walk” has been well behind the “talk” in terms of FOSS and communication rights, despite its reliance on ICTs to network and its relationship with, and support for alternative media. The latter is not surprising given the involvement of media activists, both in the creation of the WSF (Cassens and Ramonet of *Le Monde Diplomatique*) and on the International Council (IC) Savio of the Inter-Press press service (Milan). Organizations such as the Association for Progressive Communication (APC) and Indymedia have participated in the WSF and provided extensive support and coverage of WSF activities. Even here there have at times been tensions and many complaints about media facilities. However the WSF has been slower to actually move into the world of FOSS and adopt open source and free software in its own operations. Nor has that experience proven to be an easy one. Many of the challenges faced are a reflection

themselves of the digital divides and the extent to which ICT tools have embedded within them patterns of power that reinforce these divisions even as they provide tools to challenge them.

It is really since 2004 that WSF efforts to embrace FOSS have been realized perhaps as a result of examples set by regional forums such as the European ones. In 2004 the WSF acted on its commitment that “all information management of the WSF was to be done without Microsoft” using GNU/Linux in all computers” (Caruso, 173). As Caruso, a volunteer involved in the implementation points out, the decision :

was not just a technical or economic decision that referred merely to the highest quality of the GNU/Linux software and to it’s being practically free of cost as well. The WSF chose free software (FS) as one more way to support people’s struggle against marginalization and uneven and unfair distribution of resources (in this case information) – struggles that all the groups involved in the WSF process are conducting in their aspiration of building another, more just, world. (Caruso, 174)

Built and designed by the Free Software Foundation of India the system was to run the office of the organizing committee, the website, the media centre and the translation system. Despite the political commitment on the part of the Indian organizing committee by November 2003, after being plagued with problems (partly due to the incompetence of a local software firm) on the official website for the impending Mumbai forum in January, the head of the FSF India had to be called in to politically educate office staff about the reasons for and the value of using FOSS. (Caruso).

Caruso’s account of the difficulties encountered in this effort highlights a number of challenges that the WSF has encountered. One of which was that the new system was not one that was familiar to staff or well documented. While proprietary software thrives,

as some critics claim, on the ignorance of the users and their separation from developers, the new system, in the absence of extensive staff training, also led to frustration, especially of part of the non-technical staff who were more dependent than ever on technical staff and in some cases made to feel “dumb” because of it. As frustration mounted so did pressure, particularly from those in the finance section, to revert to Windows in the name of efficiency.

Mumbai was also notable in the development and use of open source translation software Nomad and the development of a network of grassroots translators to manage a live translation system with archiving and streaming capability. The free software package was written in C for linux and licensed under the GPL. Again as was to be found in later forums the translation was not without its technical problems in terms of both hard and soft ware and the need for and lack of trained and technically proficient volunteers. Nonetheless a group of 50 volunteers from the FSF were able to keep the media centre in Mumbai up and running on free software 24 hours a day throughout the event.

The commitment to open source software practice was maintained. The 2005 WSF in Porto Alegre was able to develop the website for the first time in 'php,' an open source language. (Milan, 2005). Yet the high profile events in Porto Alegre highlighting FOSS were not without problems reflecting again the MS addiction and the ubiquitous presence of its proprietary software. At the star-studded session in described above one journalist noted:

All the social forum's 800 computers are running on open-source software, but the loosely organized event ran into an embarrassing glitch Saturday when two big screens betrayed the fact that the computer was running on Windows, with the operating system's toolbar visible at the bottom of the screens. Lessig noticed and the

computer was quickly disconnected and replaced with a laptop running on open-source software. (Clendenning)

In 2007 WSF in Nairobi also managed to run its operation using open source and activists, as they had at other forums, in this case from the International South Group Network, handed out free copies of Kubuntu Linux, a version of the Ubuntu Linux platform which had been developed by Mark Shuttleworth, a South African entrepreneur and free software advocate. This version, which can be operated from the CD is known as one of the most user friendly and is growing in popularity. (You Can Ubuntu, 31). Software activists in Nairobi, however, faced other more basic challenges. Although the WSF2007 website ran on open source software and created an on-line work space based on a prototype developed at the European Social Forum. There were problems however with efforts to register activities on line due in part to a lack of familiarity on the part of groups and organizations with the Internet technology, leading to time consuming efforts to merge on and offline registrations. Again the media center was equipped with 150 desktop computers loaded with open source software, however, as the organizers acknowledge “continuous power fluctuations interfered with the smooth functioning of the media centre (WSF 2007 Secretariat, 50). The stadium where the event was held was specially equipped with dedicated wireless internet and some media organizations were also able to lease bandwidth. Challenges remained, however in terms of the limited infrastructure and unreliable power source. Limits in terms of ADSL connections, for example, made the plans to broadcast Live Web TV problematic (gnuBand.org, Paolo’s posting). At the same time over 3000 participants were able to register using short messages on their mobile phones. Clearly there were major challenges within the WSF itself posed by the digital divide, but as the following section

indicates, even in the heart of one of the most communication privileged societies, digital divides exist and continue to shape the efforts to practice open source communication.

The United States Social Forum and Open Source

At the United States Social Forum (USSF) in Atlanta in July 2007 open source software advocacy was clearly evident in the program. Most of the workshops on technology and internet communications were grouped together and disseminated in a flyer, “Technology for Another World.” (Internet, Communications Subcommittee of the USSF 2007) which promoted thirteen workshops on the use of open source software for activists and movement builders. While most promoted the need to break away from proprietary software and employ open source “software and the Internet in pursuit of social change” (Internet, Communications:2) there were few examples of open source software that had actually been developed for social justice and mobilization purposes. Much of what had been developed was clearly designed for non-profit organizations which focussed on donors and donor history instead. (Murrain, June 28, 2007, USSF) One prominent exception to this was the Actions Options Tool (AOT) developed by the Illinois Coalition of Peace and Justice to promote horizontal mobilizing. AOT is basically “a publishing tool where actions/events are posted online so that all members may learn about future plans, support them, and even participate in them.” (AOT: 2007)

As Michelle Murrain, one of a handful of Afro-American women open source software developers, indicated barriers still have to be addressed before open source software can serve the needs of grassroots communities. This is because as Murrain, argued the open source software that is developed is based on “what ‘itches’ predominantly white, privileged (and, I might add, mostly young) men” (Murrain,

<http://www.zenofnptech.org/2007/06>, “Gender, Race and Open Source,” June 29, 2007)

Second, she points out, one important problem with “free and open source software” was that “it wasn’t all that egalitarian, really.” Murrain noted that her audience of thirty five people who attended her session including eight women was “the most diverse crowd I’ve ever talked with or been in for an open source conversation.” (June 29, 2007) This reflected once again the gender and racial divide that characterizes the hacker, open source, culture.

That said, open source software did play an instrumental role in the organization and administration of the USSF itself, from the website to the computers used in registration and in the media centre. Moreover, open source software was not only used at the event itself but prior to the event as a means of organizing. Members of the ICT group held online meetings through open source software, the complete transactions of which were posted online. The website itself was used to promote the forum and as a tool not only for administrators but also as a means for participants to post sessions and to interact with one another. Subsequent to the event the USSF website has been used to create a living memory of the event through blogs, pictures, and digital videos. By all accounts open source software worked with few problems. Registration was a fast and easy process for the 12,000 participants, most of whom pre-registered online.

Yet, the adoption of open source software at the USSF was very much a political process. Those “techies” promoting the use of open source software at the USSF believed that the ideals and values of the WSF were compatible with free and open source software. (Libkuman, June 30, 2007). However, organizers of the Forum had to be educated (just as they did in India) and convinced about the advantages of using open

source software. As was the case in India the software users who thought the “techies” were there merely to implement their decisions found, after the decision was made to adopt open source software that the relationship between the non-technical organizing committee and the “techies” was reversed with the non-techies being “at the mercy of the techies.”²

Conclusion:

We asked at the outset of this paper what the new era of networked politics might look like. Some have claimed that the development of software using open source is both a model of this new politics and a fundamental challenge to capitalist production. We have used the case of the WSF to shed some light on these claims. The WSF has sought to create a network based horizontal democratic space where civil society can come together to both critique and offer alternatives to neo-liberalism and corporate capital. It has sought to demonstrate that another world, an alternative, based on social justice, sustainability and social inclusion is possible. In the development of the WSF and the global justice movement the use of the tools of ICT have been part and parcel of this process.

As our examination of the WSF indicates however, the picture is a mixed one. Clearly horizontalism has made headway in the extent to which the WSF has struggled to operate but power relations have not been absent. This is partly because, as in the case of open source the reality is that in a social context of inequality free, open, collaborative networks are spaces where participation is free and thus voluntary and those with the skills and resources are the most likely to be involved. But access, the capacity to engage, to be heard, to have voice is uneven, a reflection itself of neo-liberalism.

Conflict, moreover, is not absent and ultimately the way in which decisions are made may reveal vertical structures.

The open source model some claim also poses a challenge to corporate capital in the way in which software development processes challenge property relations. But what does that mean in real terms? Free software and open source have also been embraced by sectors of the IT corporate world, including Sun, IBM, and many small businesses which seek to challenge the MS monopoly, lower costs and allow for flexible configuration. In a world of inequality dependence on skilled gatekeepers or techies may remain, and business models based on building the hardware or creating lucrative software service and support industries can still emerge.

At the global level, and even within affluent societies, access to technology is very uneven- a reflection of the profound inequalities neo-liberalism has produced. This creates dilemmas for the global social justice movement which has used the tools of ITCs as have many social movements to mobilize bridge great distances share information and collaborate.

WSF has struggled with issues of power and has been faulted for being too top down, not being diverse enough, and being too dominated by well-heeled and well-financed Northern NGOs. But it has made strides to enhance diversity, become more horizontal and reach out to marginalized regions as reflected in moving the forum first to Mumbai and then Nairobi. It has also been a strong advocate of the right to communicate and used open source in its efforts. Yet it still must work within a context of digital divides even as it seeks to overcome them. An activist at the Nairobi WSF articulates the challenge well:

In Punwami (a Nairobi slum with 60,000 people) there are 35 toilets in total, and four computers. No internet is available, and the computers are mostly used for playing CDs with preventive HIV information. According to the youth activists I speak to, there is a wish to have more computers, and internet access, and they plan to use their latest donation for one extra computer. They have no idea when internet will be an option. (slum activism at the WSF apc.org)

Endnotes:

¹ For a more detailed analysis on the new methodology of organizing the WSF program see Hilary Wainwright, "Report on the Methodology of the WSF and its Possible Relevance for the 2006 ESF", 23 February 2005 (Amsterdam: Transnational Institute) www.tni.org

² This section of the material relies upon notes of one of the authors, P.J. Smith, and a digital recording of members of the USSF ICT team participating in a debriefing at the workshop, "Radical Reference and the Interactivist Network – Using Free Software to enable community based activism." June 30, 2007, USSF 2007.

³ For example a national, Brazilian branch of CRIS was created as a result of the 2002 WSF.

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