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OPEN SPACES, OPEN SOURCES

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OPEN SPACES, OPEN SOURCES
The World Social Forum and international communication rights in a digital world

This article addresses open source software development and the open source movement and critically examines their utility as a metaphor for conceptualizing the new politics of networked organizations. We apply the open source metaphor to the World Social Forum (WSF), which in terms of its Charter of Principles, and its notion of open, horizontal and inclusive space appears, as a new form of civil society, to embody the ethos of the open source movement. We analyse the forums since 2001, up to, and including, the United States Social Forum of 2007, examining them both in terms of the ideal of open, horizontal and inclusive space and in terms of the practices of the forums in advocating for, and using, open source software. The article then argues that both the concept of open source and the WSF are embedded in the realities of global digital divides and the struggle over access to the digital means to communicate, frequently expressed in terms of communication rights. We describe the role of the WSF in advocating for those rights and mobilizing civil society. We show how the WSF and its charter, which challenges corporate power in the name of social justice, must do so using networks within a digitally divided neo-liberal system, which itself must be overcome if networked politics are to be fully democratic and inclusive. The article concludes that issues of power, conflict, hierarchy and exclusion must be taken more seriously by supporters of open source and the WSF. That said, we acknowledge the contribution the open source ideal and the WSF have made to revitalizing discussions of politics and the political.

Keywords open source; digital divide; World Social Forum; networks; communication

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

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Introduction

There are many signs indicating that representative democracy is in trouble, including falling voter turnout and a decline in the vitality of political parties. If 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 central to conceptions of politics what will be the new vocabulary and spaces of politics? Are we entering an era of politics that is less state-centric, less vertical and more horizontal, based on networks and grounded in institutions of civil society?

This article addresses these questions and critically examines the embracing of the metaphor of open source software development and the open source movement for conceptualizing the new politics of networked organizations. The article extends recent scholarly debate on this issue by applying the concept of open source to the World Social Forum (WSF) as a case study.

We argue that while open source is a powerful metaphor, it must be viewed both in terms of an ideal and as practice. We begin by examining the open source software movement and proponents of the new networked politics who have embraced it. Those inspired by open source see it as heralding new forms of political participation and as potentially transformative, claims which we assess. We then apply the open source metaphor to the WSF, which it terms of its Charter of Principles, and its notion of open space appears to embody the ethos of the open source movement. However, we also examine the WSF forums since 2001 and the most recent United States Social Forum (USSF) in terms of practices, including methods of organizing the program, advocacy for, and actual use of, open source software and argue that issues of power, conflict and hierarchy remain. The final section imbeds both the concept of open source and the WSF in the lived realities of global digital divides and the struggle over access to the digital means to communicate, frequently expressed as part of a set of communication rights. We show how the WSF and its charter, which challenges corporate power in the name of social justice, must do so using networks within a digitally divided neo-liberal system, which itself must be overcome if networked politics are to realize their potential and be fully democratic and inclusive. We conclude that issues of power, conflict, hierarchy and exclusion must be taken more seriously by supporters of open source and the WSF. That said, we acknowledge the contribution the open source ideal and the WSF have made to revitalizing discussion of politics and the political.

Open source and networked politics

While 'open source' is used 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 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'. Despite these differences they agree on the centrality of three concepts: (1) freedom (2) open (3) collaborative. Differences arise due to which concept one stresses, freedom or open.

Those stressing freedom identify with Richard Stallman, founder of the Free Software Foundation (FSF) in 1985. Free, in this instance, is not free as in *gratis*. According to the FSF 'free software is a matter of liberty not price' (Free Software Foundation 2007). A program can be said to be free if, in the words of the FSF, users have the freedom(s) to:

> run the program, for any purpose; to study how the program works, and adapt to [their] needs; to redistribute copies; to improve the program, and release . . . improvements to the public, so that the whole community benefits.
>
> (Free Software Foundation 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 in contrast to proprietary software where the code is hidden. The emphasis of open source software is on the production process, not the software itself. According to Eric S. Raymond and the Open Source Initiative open source 'is a development method for software that harnesses the power of distributed peer review and transparency of process' (Open Source Initiative 2007) .Thus open source software development is a collaborative process in which the resulting product will be an improved, higher quality common good that can be used and/or developed by anyone.

The term open source is more popular than free software and will be used here 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 makes two claims that link these ideas. First, 'open source is an experiment in social organization for production around a distinctive notion of property' (2004, p. 16). Thus with proprietary software, the owner has the legal

right to deny access to, or modification of, the software. Second, he argues 'the essence of open source is not the software. It is the *process* by which software is created' (2004, p. 56). Supported by the GPL open source software code is free, open and accessible to anyone who wants to modify or change it and distribute the resulting software, as long as the user/producer does not restrict access or claim exclusive ownership of the code.

In turn, the differing notions of property embedded in FOSS are predicated on differing logics and cultures of organization and production. It is the logic of organization and production that has particular appeal to those interested in a 'new politics'. The production of proprietary software is premised on organizational hierarchy with command and control systems, a 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. The production process is closed and contained within the organization as a singular unified system.

Open source, on the other hand, has a very different production process and organizational form, and is premised on a different sense of reward, one that is intrinsic, not extrinsic. The political economy of the organization of open source is most vividly portrayed in Eric Raymond's metaphor of the cathedral and the bazaar. Raymond argued that cathedrals and bazaars represented different architectures of organization. The cathedral represents the commercial world and proprietary system designed and constructed hierarchically according to a central plan, the bazaar that of open source (1999). Open source is a 'great babbling bazaar or different agendas and approaches' which produces software packages of high quality at great speed (Raymond 1999, p. 30). In essence, the many small, sharing producers of FOSS working in non-hierarchical organizational forms produced a higher quality code, in this case Linux. Production no longer takes place within a single firm but rather via the Internet, which facilitates innovation and collaboration. Open source software production is dispersed and coordinated horizontally by means of a networked organization form increasingly outside the capacity of a single person or organization. The motivation to produce open source software is intrinsic, in creativity and the satisfaction of producing something useful. In contrast to traditional capitalistic organizations, no distinction is made between users and developers since users can become developers 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 resulting software package is a common good, one that is abundant, increased and not reduced, through use and consumption. According to Di Corinto (2007):

> 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.
>
> (p. 46)

Not only do open source software development and production have a particular logic of organization they also have their own supportive culture. The hacker culture and community have been instrumental in technological innovations that have expanded the Internet and FOSS development. The hacker culture emphasizes technological excellence, open source peer review, freedom as articulated by the FSF, cooperation and the primacy of intrinsic reward. According to Castells (2001):

> 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. (p. 50)

The foregoing represents the ideal of open source software development and its attendant organizational logic and culture, one that has considerable resonance with the proponents of a new networked politics and the WSF. Those who seek a less state-centric form of politics draw inspiration from the open source ideal. In contrast, the bureaucratic state concentrates power in the hands of a few and assumes a monopoly of rational and technical knowledge predicated on expertise. Citizens are not seen as useful sources of knowledge, as policy creation and implementation become technical matters.

Santos (2004, p. 238) and Wainwright (2003, p. 23), on the other hand, argue that there are alternative ways of knowing that must be recognized. Wainwright, 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 expert knowledge. Respecting users as potential sources of knowledge, she argues, can lead in healthy new directions in terms of civil society engagement with government. According to Wainwright (2007):

> 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.

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

As Wainwright argues this requires a model of organization in which power is 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 this process of knowledge production requires an emphasis on horizontal, networked forms of organization linking those outside of the state with those inside permitting greater coordination of policy within the state itself.

All of this implies that democratic participation can be direct, not taking place exclusively through representative institutions. 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. Examples of transnational networked politics abound. The Zapatista movement (Olesen 2004) and the emergence of the Global Justice Movement (GJM) are seen as examples of transnational networked politics reliant on new communications technologies (Della Porta & Tarrow 2006).

This 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 open source posing to capitalism. The customary argument is that capitalism will tame, domesticate and control all aspects of the digital world. Lessig (2000) believes that 'open source and free software are fundamental in a free society' (p. 350) but fears this digital commons is being threatened by (USA) copyright legislation and corporate action that is 'slowly turning the Net into ... [a] space of control' (p. 356). This dystopian view, however, has been met with a reversal of its argument. Critiquing Lessig and the normalization thesis that online activity and content will eventually become a 'mirror of the corporate mode of production', Strangelove (2005, p. 20, 73) asserts 'that the attempt to control digital property within the Internet has utterly failed'.

Alfredo López agrees arguing that 'free software is used in virtually every major activity on the Internet' (p. 30) particularly in web servers, email programs and web browsers. The proprietary enclosure movement is not winning and there is considerable evidence of open source software's spreading use throughout governments, corporations, and universities. While Microsoft software still dominates desktop use the fact that many governments are now moving their desktop software to open source must still worry Microsoft (Best 2004; Kingstone 2005; Thurston 2007). That the open source software movement is all over the map politically, however, is not a concern to López who maintains 'movements aren't defined by the politics of their participants, but by the actions that unite them in this movement' (p. 21). All this writes López (2007):

> 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?
>
> (p. 31)

'A victory', he asserts, for 'with free software, ... we have won this struggle' (p. 31) something many progressive people do not yet realize. Elsewhere Strangelove argues that 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.
>
> (p. 21)

Open source software development – politics as usual?

One might conclude then that open source software development heralds new configurations of political participation and social transformation. Yet, there are aspects of open source software development that complicate the above analysis. While volunteerism, horizontality and collaboration form a kernel of open source software development, in fact, open source is premised on a hybrid system, one that Fuster I Morel claims 'results from a combination of formal organizational mechanisms and spontaneous mechanisms' (Morel 2007, p. 59). In effect, we are speaking of formal organizational hierarchy which points in the direction of customary discussions about politics including conflict, and exclusion all present, as we shall later argue, at the WSF.

Not only is hierarchy present in open source software development but so are traditional corporate players. Indeed, rather than a multitude of developers working horizontally, some claim open source software development is remarkably elitist. According to Healy and Schussman (2003, p. 1) open source software development 'is spectacularly skewed', with few 'projects showing evidence of the strong collaborative activity which is supposed to characterize OSS'. Most open software projects are dominated by megaprojects such as Linux, Apache Web server, the Firefox web browser, and OpenOffice (Hindman 2007, p. 195). In addition argues Hindman, 'much recent growth in the open-source software movement has come from massive investments by giant firms' including IBM, Intel, Oracle and Apple (p. 194).

In addition to the presence of hierarchy and large corporate players Weber stresses the prevalence of conflict in open source software development. He notes 'anyone who has dabbled in software engineering recognizes that disagreement is the rule' (p. 84) in large part because collaboration is difficult and those involved in development tend to be bright, strong-willed and willing to express their opinions. Conflict is mediated by a variety of mechanisms one of which is

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 exist in open source software development. While hierarchies differ in dominant open source megaprojects, such as Linux, in that they lack the formality of bureaucratic organizations they often coalesce around a leader who initiated the development of the process. Linux software development possesses a hierarchy with Linus Torvalds as the acknowledged leader who individually, or through his lieutenants, decides what the official code modifications will be. Thus power and hierarchy are a part of open source software development.

Moreover, the social relations particular to open source software development are biased towards interaction among primarily white, middle class males. López (2007) sees this as problematic:

> 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.
>
> (p. 27)

The largely white, male hacker community and hacker culture's online exchanges are often sharp, pointed and conflictual. These online communities, as a consequence, are not particularly inviting to women who comprise a small number of software developers, proprietary or open source. On the web site DevChix, dedicated to supporting and developing a community of women software developers, one author points to the significant differences between men's and women's online development communities. 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.
>
> (Gloria 2007)

Women in open source software development tend to avoid these spaces preferring to interact in their own communities which, while imperfect, are more mutually supportive.

Recognizing that open source software development is complex and contradictory, part horizontal and collaborative, part vertical and conflictual, we turn now to applying the open source metaphor to the WSF both in terms of ideal and practice.

Open sources, open spaces and the WSF

In this section, we examine the WSF as both 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. This set of practices includes examining how open source has shaped the development and content of the event's program over time and how the WSF models the alternative world of communication it seeks to create by its use and development of free and open access software.

We begin with a brief description of the WSF and its origins as a global space of convergence among civil society organizations and movements opposed to neo-liberal globalization. In recent years, the WSF and various regional and local social forums have become an important manifestation of what has become know as the GJM. The WSF began in 2001 in Porto Alegre, Brazil where 15,000 activists participated united under the slogan 'Another World is Possible' and grew to 150,000 participants in 2005. Two concepts are important in understanding the WSF: first, analogous to the open source metaphor, it is an open space and second, organizationally, it is based on networks.

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

> 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/)

According to Francisco (Chico) Whitaker (2004), one of the founders of the Forum, the WSF:

> 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.
>
> (p. 113)

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

Another critical aspect of the WSF is that, like all social movements, it is increasingly characterized by a cultural logic of networking strikingly similar to the open source metaphor which includes:

- forging horizontal ties and connects among diverse, autonomous elements;
- the free and open circulation of information;
- collaboration through decentralized coordination and consensus decision-making; and
- self-directed networking (Smith *et al.* 2008, p. 29).

This cultural logic and network symbolism is also important in understanding key tensions within the Forum process, for example, between the 'horizontals', those who adopt the network as a new metaphor of social and political relationships, and the 'verticals', who articulate the need for more traditional, hierarchical forms of organization, politics and power.

As noted above the WSF, despite its pretensions to the contrary, is recognized as being marked by hierarchy, power and conflict. These antagonisms, differences and tensions have become self-evident in recent years (Andreotti & Dowling 2004). Many of these struggles revolve around the organization of the Forum 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 power struggles within the forum process generally, is a fault line between the 'verticals' and the 'horizontals'. The horizontals prefer a more decentralized 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 WSF. That said, horizontalism is an ideal, not a fact, and it is necessary to remember that power is constitutive of all social relations including those embodied in horizontal associations and networks.

As an ideal horizontalism has made headway within the WSF, particularly in terms of how the program was organized. Those more disposed to horizontalism insisted that from 2001 through 2004 the IC 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 the IC in 2004 adopted another methodology for organizing the 2005 WSF program, one that was more bottom up, consultative and self-organized, both online and offline. Based on the consultation process, 11 Themes were developed which served as a basis for organizing more than 2,500 Forum activities – workshops, seminars and panels. The intent was to have most of the activities dedicated to self-run initiatives significantly downplaying the bigger conferences run by the Organizing Committee. Despite technical problems it worked well enough to create a break from the more top down planned program (Wainwright 2005).

Modelling the world you wish to create: the WSF and open source software

In addition to the commitment to create an open space and use more horizontal forms of organization, the WSF also embraced adoption of open source software as part of its opposition to neo-liberalism and its commitment to social justice and inclusion. However, it is only since 2004 that WSF efforts to embrace open source software have been realized in part due to the examples set by regional forums such as the ESF (Juris *et al.* 2008). In 2004, the WSF acted on its commitment that 'all information management was to be done without Microsoft' using GNU/Linux in all computers (Caruso 2005, p. 173). As Caruso points out, the decision to implement open source software was political, contentious and:

> 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.
>
> (p. 174)

Built and designed by the FSF 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 of the Indian organizing committee by November 2003, after being plagued with problems 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 open source software (Caruso 2005).

Caruso's account of the difficulties encountered in this effort highlights a number of challenges encountered by the WSF. One was that the new system was unfamiliar to staff or poorly documented. While proprietary software thrives, critics claim, on the ignorance of the users and their separation from developers, the new system, in the absence of extensive staff training, led to frustration, especially on the part of the non-technical staff who were more dependent than ever on technical staff. 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 the open source translation software Nomad and the development of a network of grassroots translators to manage a live translation system. The free software package was written in C for Linux and licensed under the GPL. Again, as in later forums, the translation was marred by technical problems in terms of both hard and software and the need for 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 open source software were not without problems reflecting, again, the ubiquitous presence of MS proprietary software. At one star-studded session a 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 2005)

In 2007, the WSF in Nairobi also ran 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. This version of the Ubuntu Linux platform was developed by Mark Shuttleworth, a South African entrepreneur and free software advocate. This version is user friendly and growing in popularity (You Can Ubuntu too: Coming to a screen near you 2007, p. 31). Software activists in Nairobi, however, faced more basic challenges. Although the WSF 2007 website ran on open source software and created an online work space based on a prototype developed at the ESF there were problems with efforts to register activities on line, due in part to a lack of familiarity by groups and organizations with the Internet technology, leading to time consuming efforts to merge on and offline registrations. Again the media centre was equipped with 150 desktop computers loaded with open source software, however, as the organizers acknowledged 'continuous power fluctuations interfered with the smooth functioning of the media centre' (WSF Secretariat 2007, p. 50). The stadium venue 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 ASDL connections, for example, made the plans to broadcast Live Web TV problematic (gnuBand.org, Paolo's posting). At the same time over 3,000 participants were able to register by mobile phone. 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 USSF social forum and open source

The USSF held in Atlanta in July 2007 provides another case of a social forum that reflected embedded tensions and power relationships despite following the principles of the WSF and, in this case, being set in the context of a technologically advanced and well-connected society.[1] Open source advocacy was evident in the program which featured 13 workshops on the use of open source software for activists. Yet activists had to admit that, despite their desire to employ open source 'software and the Internet in pursuit of social change' (Internet, Communications: 2), there were few examples of open source software developed for social justice and mobilization purposes (Murrain 2007a; Actions Options Tool 2007).

The gender and racial divide that characterizes the hacker, open source, culture was also evident in workshops, as Michelle Murrain, one of a handful of Afro-American women open source software developers, indicated. New software developments, she noted, are based on 'what 'itches' predominantly white, privileged (and, I might add, mostly young) men' (Murrain 2007b). Her workshop audience of 35 people, including eight women, was one of 'the most diverse crowd I've ever talked with, or been in, for an open source conversation' (29 June 2007).

As at the WSF the organizers of the USSF worked to ensure that open source software played an instrumental role in all aspects of organization and administration including registration of many of the 12,000 participants. The ICT group held online organizing meetings using open source software and all transactions were posted online. The website was used not only to promote the forum, but also as a means for participants to post sessions and interact with one another and, after the event, as a living memory through blogs, pictures and digital videos. Open source software worked with few problems.

The adoption of open source software, however, as was the case of the WSF in Mumbai was very much a political process, one not without power implications. Those 'techies' promoting the use of open source software at the USSF saw it as strongly reflective of the ideals and values of the WSF (Libkuman 2007). However, organizers of the Forum had to be educated (just as in India) and convinced about the advantages of using open source software. Once again, as in Mumbai, the decision to adopt open source software had power implications in that the relationship between the non-technical organizing committee and the 'techies' was reversed. The organizing committee found themselves 'at the mercy of the techies'.

The WSF in context of digital divides

'Techies' or non-techies aside, social forums, for the most part, are exclusionary in nature, not by design, but by who attends and participates. Most participants

are middle class and have at least one university degree (Smith *et al.* 2008). Activists are aware that not only is the WSF itself a space of exclusion but so are the digital technologies which facilitate the networked politics they embrace.

We argue here that the WSF efforts to counter exclusion have, at the same time, been influenced by patterns of exclusion and inequality, themselves reflective of power relations. On the one hand, the goal is an information society which is free and has open information-sharing 'from the most high tech locality to the smallest village'. Yet it is 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 2003). But these networks and the 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 Communication Rights of an Information Society (CRIS) report as quoted in Fleming). Thus 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 embedded in, and reflect, a global political economy of profound, and in some cases, increasing inequality (Youngs 2007, p. 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 both within and between societies 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, multilayered and dynamic. As a recent report of the World Information Society (WIS) 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 Telecommunications Union and the United Nations Conference on Trade and Development 2007, p. 21).

As the WIS report notes, 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 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 1 per cent in 2005, while over 50 per cent of all citizens in OECD member countries were Internet users. As the report points out, however, in recent years the North–South gap has diminished in certain sectors, such as mobile phone access 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

50 LDCs)' (International Telecommunications Union and the United Nations Conference on Trade and Development 2007, p. 22). Access is further limited 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.

Lack of infrastructure, such as fibre optic cables, are part of the problem of access but so too are barriers related to gender, literacy, education, language and skills. Overcoming the barriers of access still leaves the question of content and the extent to which it 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, critics suggest, as a stalking horse for the further imbedding of neo-liberalism in the global south (Wade 2005). Linking ICTs to the achievement of development goals has been enthusiastically embraced by large corporations, agencies like the World Bank, and business organizations like the World Economic Forum. The solutions offered 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.
>
> (World Information Access Report 2007, p. 2)

While these changes may have helped increase mobile phone access and lowered call rates the report notes that the 'relative portion of Internet hosts residing in Africa has actually declined' from 1.6 per cent of the world's Internet hosts in 1995, 0.7 per cent in 2005.

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 2006, p. 3)

A strengthened international intellectual property regime including copyright and patent protection of software emanating from trade agreements have added to the costs for many developing countries. These developments have led to a growing concern 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.[2] As the advocacy coalition on Communication Rights in the Information Society argues these rights:

> Go beyond mere freedom of opinion and expression, to include areas such as democratic media governance, participation in one's own culture, linguistic rights, rights to enjoy the fruits of human creativity, to education, privacy, peaceful assembly, and self-determination. These are questions of inclusion and exclusion, of quality and accessibility. In short, they are questions of human dignity.
> (Communication Rights for an Information Society Campaign 2005, p. 13)

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, and a key player in the CRIS advocacy coalition, argues not only that Internet 'access must be affordable and universal' but that content must be culturally and linguistically diverse. In addition the APC insists on three other rights:

> 1.2. The right to access to infrastructure irrespective of where you live.
>
> 1.3. The right to the skills and knowledge [to] enable people to use and shape the internet to meet their needs.
>
> 4.2. The right to free and open source software (FOSS).
> (Association for Progressive Communication 2006, pp. 2–3)

As the following section indicates, the WSF has increasingly turned its attention to advocating for communication rights in the context of a digitally divided world.

The WSF and advocacy for international communication rights

With its goal of providing a democratic and open space in which to challenge the domination of the world by corporate capital the WSF has provided a space in which to develop networks and advocate communication rights. The following provides some examples of how organizations actively involved in the WSF recognized the need to advocate for communication rights. The growing importance given to these issues is reflected in the program and events at the WSF since 2002. Initially, however, communication was not identified as a main

theme as the second WSF in Port Alegre in 2002, indicates. Four main themes of the program were:

1. The production of wealth and social reproduction.
2. Access to wealth and sustainability.
3. Civil society and the public arena.
4. Political power and ethics in the new society.

Communication rights were addressed under the second theme via a session on 'Knowledge, Copyrights and Patents' featuring Richard Stallman of the FSF. Under the third theme, 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.mwglobal.org). It was at that forum too that the CRIS, an advocacy network initiated in November 2001 by the Platform for Communication Rights, was highlighted through the presentation of a paper for the WSF subsequently amended and published as the document 'Whose Information Society?' (Fleming 2003).

One reason for raising the issue of communication rights at the WSF, aside from its intrinsic importance given the WSF commitment to open space, horizontalism and democracy, was the desire of activists in 2002 and 2003 to mobilize civil society in light of the first World Summit on the Information Society (WSIS), which was to be held in 10–12 December 2003, in Geneva, Switzerland. This two-phased summit process resulted from a resolution of the International Telecommunications Union 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 and 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 facilitated. The second summit was to be held from 16–18 November 2005, in Tunis, Tunisia to address Internet governance and the digital divide.

The third and fourth WSF, the latter in Mumbai in 2004, reflected a growing emphasis on these issues. In Mumbai 'Media, Information and Knowledge' was a major theme. However, it was at the January 2005 WSF in Porto Alegre, with the second WSIS looming, 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 where a large number of

star-studded events featuring well-known intellectuals and performing artists were held, many advocating and 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 2005). 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, p. 52).

In the WSF in Nairobi 2007, the issue was also addressed in terms of the theme of 'Freeing and democratizing knowledge and information'. About 70 workshops, panels and other events were organized including sessions on FOSS, information and communication rights, the role of community radio and issues of gender justice. 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), a reflection of the preoccupations facing Africans.

These social forum activities had several goals, including raising awareness, mobilizing and organizing participation in other forums such as WSIS, or in some cases, even providing basic software 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 in forums such as WSIS. The 2002–2005 WSF meetings certainly helped to organize and mobilize groups and coordinate their participation in the WSIS (Mueller *et al.* 2007). Despite the strong civil society presence in Geneva and Tunis, the final results there fell far short of civil society demands, both in terms of Internet governance (still largely in US hands) and bridging the digital divide. While a global solidarity fund 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. Critics have argued that framing the debate in terms of international communication rights has had less resonance in the global south than if they had linked it to more basic grassroots struggles around issues of justice (Thomas 2005).

In terms of the global adoption and use of open source software there has been progress. Much of it however, we would argue, has been driven by governments, spearheaded by Brazil and India, 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. For example, Open Office software is used in 91 per cent of Brazilian government offices and 73 per cent in India (South Centre 2007). In other cases, such as the Microsoft decision to release software

code (Cox News Service 2008), change has been a response to competition policy regulation. Nevertheless, the use of open source software in desktop applications 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.

Conclusion

We asked at the outset 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 networkbased, horizontal, democratic space where civil society can come together to critique and offer alternatives to corporate capital. It has tried to demonstrate that another world based on social justice, sustainability and social inclusion is possible. In the development of the WSF and the GJM, the use of the tools of ICT have been part and parcel of this process.

Our examination of the WSF indicates, however, that the picture is mixed. Clearly horizontalism has made headway in the extent to which the WSF has struggled to operate but power relations have not been absent. As with open source, the reality is that in a context of inequality free, open, collaborative networks are spaces where participation voluntary and those with the skills and resources are the most likely to be involved. But access, the capacity to engage, to have voice, to be heard, 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, as noted previously, also been embraced by sectors of the IT corporate world, including Sun, IBM and many small businesses seeking to challenge the MS monopoly, lower costs and allow for flexible configuration. In a world of inequality dependence on skilled gatekeepers 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, 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.

The WSF has struggled with issues of power and been faulted as too top down, not diverse enough, and 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 4 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 [the] internet will be an option.
>
> (slum activism at the WSF apc.org)

Notes

1 This section relies upon notes of co-author, P.J. Smith, and 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' 30 June 2007, Internet, Technology and Communications Subcommittee USSF (ICT) 2007.

2 The term communication rights has a lengthy genesis linked to article of the UN Universal Declaration on Human Rights (article 19 for example) and other UN instruments. It has come to embody a number of issues related to justice and equality. The term rights is used because it has become the main frame within which these issues are discussed. As Mueller *et al.* indicate the term reflects the tension between collective and individual rights and is vague. Perhaps because of its vagueness it was able to effectively mobilize a broad range of civil society organizations.

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