

Subsuming the ground: how local realities of the Fergana Valley, the Narmada Dams and the BTC pipeline are put to use on the Web

Noortje Marres and Richard Rogers

Abstract

Studies of the use of information and communication technologies (ICTs) by non-governmental organizations (NGOs) seek to come to terms with a particular problem of political globalization. While global forums are widely attributed the capacity to put in place the conditions for the resolution of local issues, at the same time these sites are seen to place unacceptable restrictions on the articulation of the issues from localist perspectives. ICTs occupy a special position with respect to this dilemma, as they are both seen to be part of the problem, a factor in the enrolment of NGOs in global governance networks, and part of the solution, as instruments of alternative, translocal forms of political organization. This piece shows how a particular style of Web analysis, informed by actor-network theory, demonstrates the need to complicate certain assumptions that inform both these critical and these constructive perspectives. In a series of exercises of network analysis on the Web, we open up for questioning the assumption of the 'primacy of the local' on which these perspectives tend to rely. We suggest that the role of ICTs in the globalization of NGO practices should rather be understood in terms of the reformatting of issues for transnational networks. In our interpretations of issue networks on the Web, we argue for the importance of taking more seriously the ways in which the Web highlights the practical constraints on issue articulation faced by NGOs. By way of

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conclusion, this paper draws attention to the fact that Web studies present a notable extension to the sites studied by actor-network theory and related approaches in assemblages studies, as it compels consideration of the media circulations characteristic of *publicity*.

Keywords: assemblage studies; globalization; issue networks; information and communication technologies (ICTs); non-governmental organizations (NGOs); publicity.

Introduction

Political globalization has been generally understood in terms of the transformation of political practices by the worldwide circulation of policies, models and actors, propagated by transnational institutions (Guilhot, 2005). An especially tenacious criticism associated with it, in the social sciences and elsewhere, concerns the exclusionary effects that result from the framing of social problems as global issues, which is encouraged by such circulations. These effects are considered particularly problematic to the extent that locally situated actors are increasingly affected by the issues that are at stake in transnational forums, such as sustainable development, intellectual property and biotechnology. While such forums are thus seen to become ever more important as sites for political engagement, the framing of issues as global problems, as affecting world populations and therefore demanding an integrated response, substantially complicates or precludes effective participation by local actors in political process (Appadurai, 2000; Jasanoff, 2005). Information and communication technologies (ICTs) occupy a special place in this force field. On the one hand, ICTs are understood to have contributed to the rise to prominence of transnational forums and networks in recent decades. But, on the other hand, ICTs are widely believed to provide a forum for attempts to break the exclusionary logic of transnational policy processes. The Internet is historically associated with an alternative to glocalization (as in the 'global village'), and generally speaking is still credited with the potential for displacing the top-down models of global decision-making with more distributed forms of communications, providing opportunities for self-presentation and mobilization by locally situated actors (Ong, 2006). In this context, recent studies have highlighted the connections between the rise of new ICTs and the emergence of non-governmental organizations (NGOs) as notable participants in controversies surrounding the policies of international institutions (Sassen, 2006). The democratic potential of the Internet then is said to be realized concretely, in at least two senses: first, it is said to provide a forum for civil society involvement in controversies over transnational issues and, second, it is meant to enable differently situated actors to challenge the exclusionary effects associated with political globalization. Other studies, however, interpret the ICT-based practices of NGOs critically. They suggest that these technologies are implicated in the emergence of the problematics of

political globalization, insofar as they are complicit in the enrolment of NGOs in global governance networks, leading them to adopt global issue framings (Dean *et al.*, 2006).

This piece seeks to address the question of the role of ICTs in the alleged globalization of NGO practices by empirical means. It discusses how Web analysis can assist in the evaluation of the exclusionary effects of political globalization, and it enquires into how these effects play themselves out in certain controversies surrounding transnational affairs, and the role of ICTs therein. In doing so, we will present a particular style of Web-based research. We use software tools of network analysis to locate and visualize networks that have configured on the World Wide Web around particular issues. Such research on 'issue networks' on the Web, discussed in some detail below, presents a means for bringing into focus the extent of globalization of given issue areas. The Web analysis, which is informed by actor-network theory, also provides an occasion to reconsider certain assumptions that inform the above-mentioned critical and constructive views of the merits of ICTs as instruments of globalization or, conversely, translocalization. Thus, in a series of analytical exercises on the Web, we open up for questioning the primacy of the local that is often implied in studies of ICTs and NGOs. In a study of on-line publicity surrounding local issues in the Ferghana Valley, the medium highlights the practical necessity of relying on transnational NGOs for the articulation of local issues. And in an examination of the Narmada Dams controversy on the Web, we observe not NGO complicity in global governance but rather NGOs being implicated in the displacement of issues to forums hospitable to their politicization. Finally, in an analysis of on-line publicity concerning the Baku–Tbilisi–Ceyhan oil pipeline, we conclude that, even if localist issue definitions predominated in the controversy, dilemmas of globalization remained in place. Web analysis suggests that the embrace of local issue definitions by regional NGOs in this case can be understood as an effect of the particular accountability formats put into place by international financial institutions.

Approaching networks on the Web as forums for the publicizing of issues, our analysis directs special attention to the practical and institutional constraints on issue articulation faced by non-governmental organizations as an important dimension of their involvement in global networks. In doing so, the analysis emphasizes the relevance of certain insights from actor-network theory. In particular, we stand with the proposal of ANT (actor-network theory) to approach the global neither as a level nor as an institutional arrangement. Rather, the global is an effect of network practices that circulate information, people and things, in order to articulate objects of knowledge, and of politics. But Web analysis also opens avenues for broadening the spectrum of actor-network theory's preoccupations, as the study of this medium invites publicity practices within the range of empirical commitments to the study of expertise.

The globalizing tendencies of the Web and of Web analysis

In recent years, social researchers have directed attention to the close connections between the rise to prominence of the Internet and that of NGOs operating transnationally (Bach & Stark, 2004; Glasius *et al.*, 2002; Marres, 2006; Sassen, 2006; Warkentin, 2001). Most of these studies grant special significance to the integration of ICTs into non-governmental practices as compared to other organizational practices, highlighting the practical affinities between the medium of the Internet and the networked form of organization that NGOs increasingly favour. However, views diverge as to the precise forms of transnational organization that ICTs enable and highlight. Constructive accounts often emphasize the opportunities that ICTs open up for new forms of communication beyond the nation-state, enabling translocal and cross-institutional forms of organization. More critical perspectives, however, direct attention to the contribution of ICTs to the globalization of NGO practices, suggesting that they have facilitated the enrolment of NGOs in the networks of global governance.

Where the constructive accounts are concerned, the Internet has been ascribed special affordances as a forum where locally situated organizations address and communicate with distant audiences, providing a medium for self-presentation in a post-colonial context (Forte, 2005; Miller & Slater, 2000). More specifically, ICTs are seen to aid in the intensification of lateral relations of exchange, collaboration and coordination among NGOs located in different countries (Bach & Stark, 2005; Ong, 2006). As such ICTs have been said to provide opportunities for self-assertion by non-governmental actors in the specific realm of transnational politics. They have been described as a contributing factor in the tendency of NGOs to bypass the administrative and representative institutions of the nation-state and to engage with intergovernmental organizations directly (Latham & Sassen, 2005). However, on this point of the rapprochement between NGOs and intergovernmental organizations and the role of ICTs, a more critical diagnosis has been provided. Jodi Dean, Geert Lovink and Jon Anderson suggest that the enthusiasm with which social movements and NGOs have embraced ICTs has contributed to the enrolment of these organizations in transnational forms of stakeholder politics (Dean *et al.*, 2006). These authors argue that, partly due to the 'connectedness' enabled by ICTs, NGOs are increasingly drawn into the global circuit of conferences, workshops, summits and consultations, resulting in a departure from constituency-oriented politics. The Internet here appears as a medium that enables and renders visible the rise of networked forms of governmentality and the complicity of NGOs in this process.

These diverging accounts of the 'reconfiguration of political spaces' in the context of the integration of ICTs in non-governmental practices can be said to rely on different normative understandings, not only of the global, but also of nongovernmental politics and ICTs (Sassen, 2006). The differences partly have to do with the type of non-governmental practices analysed, whether the focus

lies with those oriented towards locally situated actors or those seeking to engage international institutions. But the analyses also involve different valuations of non-governmental politics, informed by commitments to either stakeholder politics or a politics of representation. Regarding ICTs, they emphasize either the disciplinary effects of the technologies or their potential as instruments of self-assertion. Obviously, the adjudication of such more or less entrenched normative understandings cannot possibly be considered to be a straightforward matter. Nevertheless, we would like to suggest here that the question of the alleged globalization, transnationalization or translocalization of NGO practices, and the role of ICTs in this respect, may be approached productively as an empirical one. More specifically, we would like to show that a particular style of Web analysis, the on-line study of issue networks, can be used to test, evaluate and further elaborate upon these divergent views. As a set of methods and tools for documenting and analysing the types of organizations, relations and communication formats that are sustained by the Web, our analysis provides a way of evaluating the types of political spaces emerging in this medium. However, we would like to emphasize at the outset that such analysis certainly cannot play the role of a neutral arbiter in the debate over the complicities of NGOs with the rise to prominence of different forms of spatial organization, as they are conditioned by the Internet. Indeed, we would like to begin by discussing how Web-based network research may itself imply, or even actively contribute to, a particular mode of 'globalizing' non-governmental politics.

An important element in our approach to Web analysis is the location and visualization of issue networks on the Web. With the aid of a Web crawler, we perform hyperlink analysis to demarcate networks that have configured on the Web around specific affairs (Marres, 2004, 2006; Marres & Rogers, 2000; Rogers & Marres, 2000; Rogers, 2002, 2004, 2005). To delineate issue spaces, we rely, first, on well-chosen starting points or Web pages that disclose the activity around a particular controversial issue on the Web by way of hyperlinks and, second, on the 'intelligence' of aggregated hyperlinking behaviour. We call the hyperlink networks demarcated on this basis 'issue networks' when a majority of the pages assembled in the network do indeed deal with a controversial affair. Now the analysis of issue networks on the Web can in itself be understood as implying a certain complicity with the globalization of non-governmental politics, at least in three ways. To begin with, it can be argued that the organizational form of the issue network in itself implies a certain bias towards global relations. As Annelise Riles (2001) has proposed, it is characteristic of issue networks that connections among actors here are mediated, not primarily by a shared culture or shared values, but by affairs in which actors share an interest. This valorization of thematic affinities over social and cultural ones, which is implicit in the concept of the issue network, Riles points out, also means that this organizational form is particularly well-suited for transnational and translocal exchange, as such content-based relations presuppose little in the ways of shared normative and experiential frameworks (Riles, 2001; see also Keck & Sikkink, 1998).

Furthermore, our reliance on hyperlinks for the location of issue networks on the Web can be said to aggravate the 'globalist' bias that is already inherent in the organizational form of the issue network. Thus, our particular approach of locating and demarcating issue networks on the basis of hyperlinks must be distinguished from other methods of network analysis on the Web, such as Web sphere analysis (Foot & Schneider, 2002). The study of Web spheres relies on hyperlinks, as well as on surveys and interviews, to delineate more or less sustainable social configurations, involving 'communicative relations' among actors and a common 'thematic orientation' and shared 'temporal framework.' By comparison, issue network analysis on the Web supposes fewer elements of interconnection among actors. By relying *only* on issue-specific starting points and hyperlinks that are generally accessible on the Web, these networks rather present *formal* configurations, being held together by nothing more than ties established in a rather public medium and a professed or alleged involvement with a common object of controversy, at least in principle. Issue network analysis on the Web thus involves a commitment to formal ties and content-based affinities. What is distinctive about both these types of connections is that they can be established with relative ease among agents who have little in common in terms of their social, geographic and institutional location.

Finally, the linking behaviours of the organizations active in the issue areas studied by us, and our particular method of analysing them, can be attributed a globalizing effect. Issue network analysis considers hyperlinks in the aggregate, and as such they often move us in a global direction in terms of the type of organizations they single out as relevant players. Websites in the issue areas researched by us tend to link most often to a limited set of large international organizations. (Un.org is the single most often referenced site in our archive of issue networks; worldbank.org is second in the ranks).¹ This predominance of large intergovernmental organizations established by aggregated hyperlinks is also frequently visible in the individual issue networks we locate, and these networks thus exhibit 'globalizing tendencies' in this respect. And we must admit that our particular technique of network analysis puts particular emphasis on this centralizing effect of aggregated hyperlinks. Our network location tool, the Issue Crawler, works by co-link analysis, which means that Web pages must receive at least two links from Web pages dealing with the issue to 'earn' a place in the issue network. Furthermore, nodes gaining more links from the network receive a more central positioning in our network visualizations. Accordingly, our crawler accentuates rather than attenuates the centralizing or indeed globalizing tendencies of hyperlink networks. As it privileges those sites which receive most links from other sites dealing with the issue, it often ends up granting global players a first-row position in the issue network. We have tended to think of this effect of issue network analysis in critical terms. By interpreting hyperlink patterns in terms of distributions of relevance, our method of network location directs attention to the centralizing tendencies of networks of non-governmental politics. Thus, where other treatments of the relationship between civil society and the Web would tend to

highlight horizontal interconnections of social affinity and collaboration, issue network analysis seeks to render visible asymmetries of attention and authority among organizations' Web pages that are (re-)produced by hyperlinks. As the pages of large transnational organizations frequently appear in the most visible, central places in issue networks on the Web, it could be said that, in the networks we study, the Web and non-governmental organizations can be seen to co-produce the globalization of progressive politics, as Andrew Barry has aptly put it.² However, in spite of all this, we have never felt compelled to accept the qualification of the Web, and of our particular practice of Web analysis, as limited to the disclosure of 'merely global' dimensions of nongovernmental practices. Nor do we think that our mode of analysis necessarily provides support for the critique that associates ICTs with the enrolment of NGOs in the disciplinary networks of global governance. Rather, we feel that issue network analysis on the Web compels a *problematization* of the opposition between the scenarios of globalization and translocalization that some studies of the use of ICTs by NGOs evoke. Issue network analysis on the Web then complicates the distinction between the Internet as, on the one hand, a forum that facilitates the assimilation of NGOs into global circuits and, on the other hand, as a site for self-presentation by local actors.

Reaching 'the ground' in the Ferghana Valley issue space on the Web

While our method of Web analysis directs attention to the globalizing tendencies of issue networks on the Web, it can also be used to evaluate particular relations between 'the global' and 'the local' that become apparent in ICT-based practices of NGOs. Thus, a small Web analysis of the issues of the Ferghana Valley, in Central Asia, led us to question understandings of the Web that suggest an opposition between global networks and the articulation of local concerns. During a workshop on 'Mapping Central Asian Issues', which took place in Budapest, we explored the extent to which the global medium of the Web could disclose for us a distant locality in Central Asia – the Ferghana Valley, a region on the borders between Uzbekistan, Kyrgyzstan and Tajikistan, with low Internet access.³ In performing such an exercise, it is clear that its challenge does not stem only from the intricacies of our particular style of network analysis, but also from a host of other media-related constraints, such as our linguistic abilities (only English, Dutch, German and French are available to us) as well as content- and infrastructure-related biases of the Web, described, for example, in studies and critiques of the large search engines (Gulli & Signorini, 2005; Jeanneney, 2006). In collaboration with two workshop participants who were familiar with the region, Dilshod Sadykov and David Stubbs, we were able to use Web analysis to disclose local issues in the Fergana Valley. As Dilshod Sadykov not only spoke Uzbek and Russian, but also knows his way around the Uzbek news media and Web spaces, and David Stubbs knew the Central Asian NGO scene, we were able to demarcate a series of more or less

'localized' clusters and networks on the Web that dealt with the Ferghana Valley: an Uzbek governmental cluster, an Uzbek media cluster, a international media network, a transnational NGO network and, finally, a set of Uzbek NGOs that are active in the Fergana Valley. From these clusters and networks, we subsequently derived the issues of the Ferghana Valley disclosed by each cluster. Because David Stubbs knew how to distinguish between Uzbek NGOs that are organized by the government and those that are more independent, we felt we reached 'the ground', in a sense, when we made the list of issues on which the latter are working (see Figures 1a and 1b). Thus, network analysis on the Web here served as a tool for the disclosure of the activities of local non-governmental organizations. As we relied on 'worldwide' networks on the Web to get to local NGOs and their agendas, our small case study opened up for questioning the idea that the insertion of NGOs into global networks involves a distraction from local concerns.

Our Web study of the Ferghana Valley problematized for us the tendency in some studies of ICTs and NGOs to grant local articulations of issues a normative and analytical priority over global ones. To begin with a banal but no less crucial point, Web study of a faraway region in Central Asia makes it particularly clear how much is required to access a 'locality' in terms of resources and skills, from our particular vantage point as researchers based in urban centres in Western Europe. As such, the Web could be understood as making more broadly relevant an important insight in anthropological theory – that access to the 'local' depends on particular large-scale infrastructures (Gupta & Ferguson, 1997). With respect to the use of ICTs by NGOs, of special importance is the way in which the question of resources arises, and how it concerns the ability of variously positioned sources to publicize issue accounts, in a medium like the Web but also beyond it. Thus, our exercise made it clear that it cannot be maintained unconditionally that the closer actors are to the ground, the more they can tell us about what is going on there. In the case of the Ferghana Valley, it was in some sense the other way around. With respect to formalized information about this region, the transnational NGOs were much more informative than the Uzbek government bodies and Uzbek NGOs. While our medium of approach – i.e. the fact that we approached the ground via the Web, instead of actually going there – certainly has to do with this, it also has to do with the particular constraints that different actors face when it comes to the publicizing of accounts of local realities in a worldwide medium like the Web, in terms of infrastructural and moral–political conditions.

In suggesting that global networks may present important sites for the articulation of local issues, Web analysis of issue networks can be understood as a way of making relevant for the study of ICTs and NGOs a particular claim of actor-network theory (Latour, 2005). Several studies of the use of ICTs by NGOs have adopted important ANT insights (Bach & Stark, 2005; Sassen, 2006), not least its proposal to focus, in the study of technology and organizations, on the evolution of socio-technical arrangements rather than on the causal relations between the technical and the social domain. This ANT

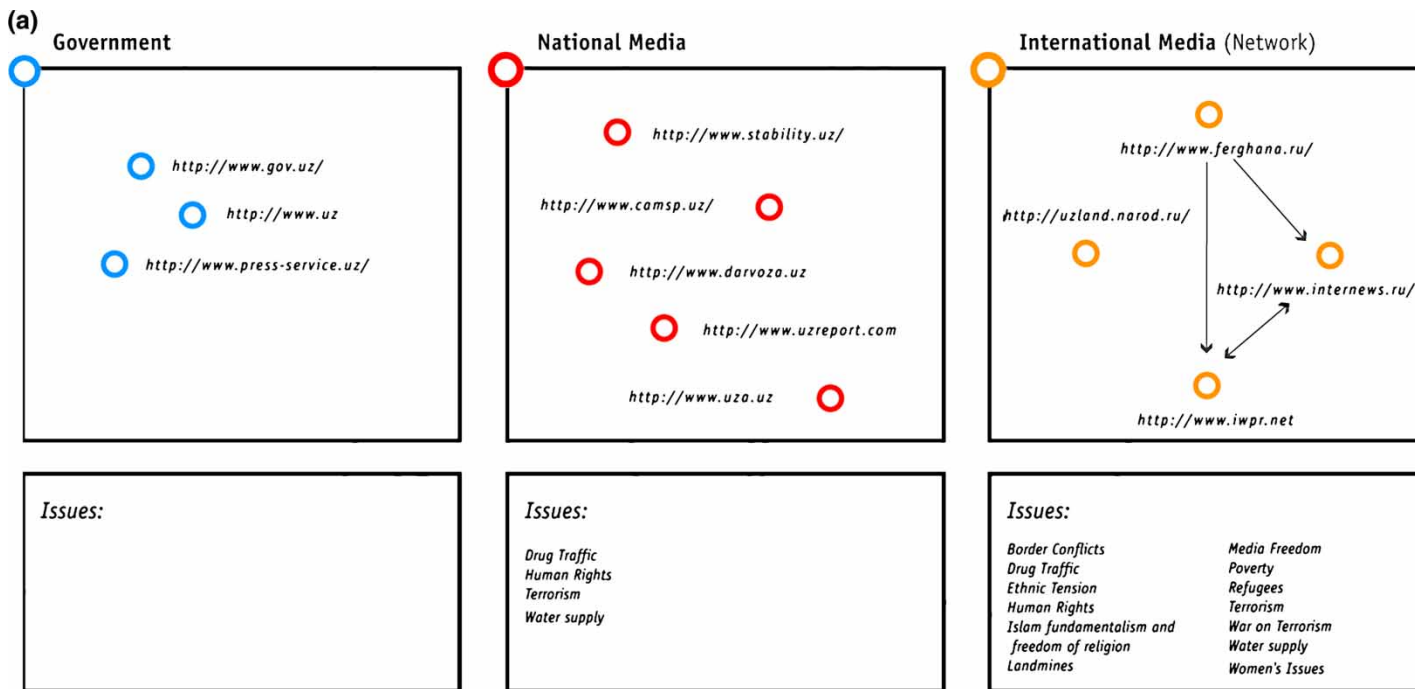
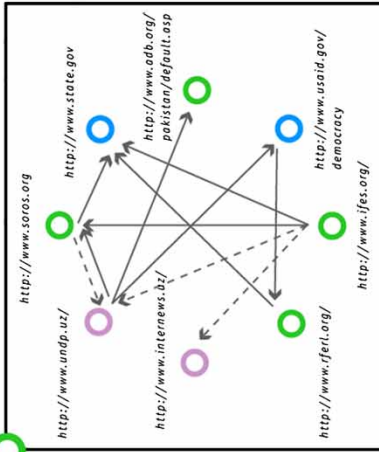


Figure 1 Issues in the Fergana Valley, Uzbekistan, according to the Web, Fall 2001

Source: *issuercrawler.net*, Govcom.org Foundation, Amsterdam.

(b) **International Organisations (Network)**



Footnote:org (the global site received the link, not the national one.)

NGO's in Fergana Valley:

(addresses, phonenumbers, and (occasional) e-mail addresses on the web)

Mumtozbegim
 Businesswomen's Association, Kokand
 Girl's Studio
 Nozigitim, women's club in makhalla
 Center "Manoviy Barkamollik
 Center of social and legal support of family "Malika"
 Diloram, Cultural Center
 Open Club of Youth
 Sog'lam Avlod Uchun (For a Healthy Generation) Initiative Group
 Abdulla Kadyri Foundation, Kokand Department
 Sog'lam Avlod Uchun (For a Healthy Generation) Initiative Center "Ikitor"

Charitable Fund "Jamila
 Fergana Regional Centre "Ikitor"
 MADAD, center for social protection of lonely, aged and disabled
 Red Crescent Society, Kokand
 Charitable Centre "Mehr-Sahovat
 ECOSAN, International Foundation, Kokand
 Mussajo, the Ecological Centre in Kokand
 Infocom, Information Cultural Center
 Red Crescent Society, Kokand
 The Fergana Regional Branch of Company for Protection of the Rights of the Consumers of Uzbekistan

Issues:

Consumer Rights
 Culture and Education
 Disabled
 Disaster Relief
 Elderly Issues
 Environment
 Human Rights
 Information Exchange
 Medical Issues
 Women's Issues

Issues:

Border Conflicts
 Democracy
 Drug Traffic
 Economic Growth
 Ethnic Tension
 Freedom of Religion
 Freedom of Information
 Health
 Infrastructure Development
 Islamic Fundamentalism
 Poverty
 Terrorism
 Water Supply
 Women's Issues

Figure 1 (Continued)

proposal is of special relevance for these studies, as it allows them to exorcise the demon of the isomorphist understanding of the relations between technical platforms and organizational forms. Rejecting explanations that posit formal similarities between networks of machines (ICTs) and networks of social actors (NGOs), these studies instead focus on the formation of heterogeneous assemblages of software, organizations and technical infrastructures as they configure in practice (Vedres *et al.*, 2005). For our purposes, another relevant ANT contribution is its critique of the diffusionist model of the dissemination of knowledge: the notion that knowledge is first produced locally and only then finds its way elsewhere (Callon, 1986; Latour, 1987). ANT research has described in great detail how the production of scientific knowledge itself involves the circulation of people, information and things between research institutes and a wide range of actors located elsewhere, from funding agencies to scientific journals. As Jonathan Bach and David Stark (2004) have pointed out, ANT's circulatory model of knowledge production is particularly useful for the study of ICTs and NGOs as it helps to explain why networked forms of interaction should be central to NGO practices of information production and exchange. But we would like to add that inferences can also be made from the ANT critique of the diffusionist model with respect to the globalizing, or translocalizing, effects of ICTs on NGO practices. We may expect that, generally speaking, NGOs 'on the ground', just like research institutes, are partly dependent on their connections with particular satellites for the production of accounts of what can be observed there. That is, when it comes to the presentation of issue accounts on the Web, we should not assume that information is produced locally and only then is reported globally. The ANT critique of diffusionist models can then be taken as a warning against the tendency, among some Internet researchers, to assume the primacy of the local and, on that basis, to view the relations among local NGOs and international governmental and nongovernmental organizations as a distraction of local actors from local concerns and constituencies. Such international organizations may be actively involved, not only in the publicizing of local concerns, but arguably also in local efforts to produce accounts of them.

Importantly, however, an ANT-informed appreciation of Web-based networks as sites for the publicizing of issues certainly does not allow us to put aside critical questions regarding the role of ICTs in the globalization of NGO practices. Even if it may not make sense, in addressing this question, to grant local practices of NGOs precedence over their enrolment in global networks, normatively and analytically speaking, there remain good reasons to problematize the globalization effects that are highlighted and facilitated by ICT-based networks. Indeed, another relevant contribution of ANT that to our knowledge has not received much attention in research on ICTs and NGOs concerns its conception of globalization. Classic studies in ANT, like John Law's (1986) work on the Portuguese shipping empire of the sixteenth century, propose that the global is best understood, not as a distinct 'level' of political, geographic and social systems, but as a specific effect of the circulation of

different entities (people, information and things) among particular locations (see also Urry, 2005). Such an ANT-informed conception of the global as a circulatory effect certainly does not entail the dissolution of the problem of globalization, but rather a reformulation. The focus here shifts from the enrolment of actors in global networks to the production of certain mobility and abstraction effects in networks. Such an understanding of globalization, which has recently been developed further in studies of global assemblages, seems to us particularly relevant with regard to issue networks on the Web, where the vulnerability of issue definitions to mobility effects becomes visible. Moreover, the analysis of issue networks on the Web, we feel, may add to the analysis of this type of globalization effect, because of its special focus on the *publicity practices* that NGOs and their interlocutors engage in this medium, a type of practice to which ANT has paid relatively little attention.

The subsumption of issues in the Narmada Dams network on the Web

Recent work in geography and anthropology on 'global assemblages' seems to us to offer a useful perspective for specifying the type of globalizing effects that are highlighted, and arguably facilitated, by Web-based practices of NGOs (Barry, 2006; Ong & Collier, 2005). This line of work follows ANT in defining the global as the effect of a particular type of circulation of entities among settings, and has developed precise accounts of the various socio-technical arrangements in which it emerges. Thus, studies of global assemblages have further refined the circulatory approach to globalization by describing how it involves special techno-spatial arrangements that facilitate the acceleration of entities within relatively homogenized spaces, such as financial markets (Barry, 2006). Important for our purposes is that such an approach directs attention to affinities between globalization and digital information technologies. The latter have been characterized by social scientists in terms of the 'hypermobility' of entities they enable (Latham & Sassen, 2005; Slater, 2002). Thus, digital ICTs have been distinguished from their analogue predecessors in terms of the way in which they facilitate the de-materialization of entities, thereby enabling their enrolment as virtualized objects in world-spanning circuits, from real estate markets to pornography networks. As we will come to shortly, work on global assemblages tends to evince a rather sceptical attitude with regard to publicity media like the Web, but we would like to propose that what goes on in at least some of the Web-based networks in which NGOs participate may be accounted for in terms of the logic of acceleration that this work has foregrounded. Issue network analysis on the Web then provides a means to document how this particular version of globalization plays itself out in the publicity practices that NGOs engage in on the Internet. Moreover, it highlights the ways in which a particular type of object with which NGOs engage on the Web is subject to mobility and abstraction effects: issues.

The study that we performed in 2004 of the controversy surrounding the Narmada Dams on the Web brought into relief de-materialization effects that affect issue definitions in this medium. In this case, we observed how the implication of international organizations in the controversy resulted in the generalization and abstraction of the issues at stake in it. Equally crucial was the fact that these effects were *demonstrated* to occur in this medium, which raises the question of the affordances of the Web as a site for public contestation of globalization effects by NGOs.

The controversy that developed over the course of the 1990s around the large electro-hydraulic dam project conducted in the Narmada Valley in Northern India serves as an important exemplary case of political globalization. Indian and Western NGOs here established a 'first' by succeeding in their advocacy campaign against one of the international funders of the project: the World Bank eventually complied with the NGO demand to withdraw its support for this project (Goldman, 2001). Our Web analysis of the controversy, however, directs attention to a somewhat different form of political globalization that played itself out in this controversy, one that has also been highlighted by the sociologist Shalini Randeria. In her insightful analysis of the controversy, Randeria (2003) has described how the issues at stake in the controversy underwent redefinition when international NGOs started to take an interest in the affair. Whereas organizations active in the region had initially focused on issues of resettlement and compensation of the affected population, the controversy over the Narmada Dams shifted to different questions once international organizations became involved: that of the World Bank's support for big infrastructural projects in developing countries and the ways in which such projects benefit Western companies (see also Baviskar, 1995). A similar effect was observable in the Narmada Dams networks that we located on the Web. It was not concerns over the Narmada Dams but general concerns with big dams as a tool of development that took centre stage.

Using the Issue Crawler software, we located an on-line transnational network concerned with the affair. Relying on the links pages of the Narmada Dams campaign sites of two international NGOs that were especially active in the controversy surrounding these dams, the Friends of River Narmada and the International Rivers Network (its India links page), we found a network with a strong global bias (see Figure 2). Perhaps unsurprisingly, the majority of pages belong to Western NGOs and intergovernmental development institutions, which moreover take up the most central positions in the network (i.e. they are the most linked within this issue space). A few regional, South East Asian organizations are present in the network (two environmental NGOs, the dam construction company and a newspaper), but these are located towards its margins. This 'global' character of the network in terms of its actor composition and formal organization was also reflected on the level of content. Some pages in the network do discuss local issues, such as the site of the Friends of the River Narmada. Its press releases catalogue the problems the affected population is having to deal with as construction of the dams is

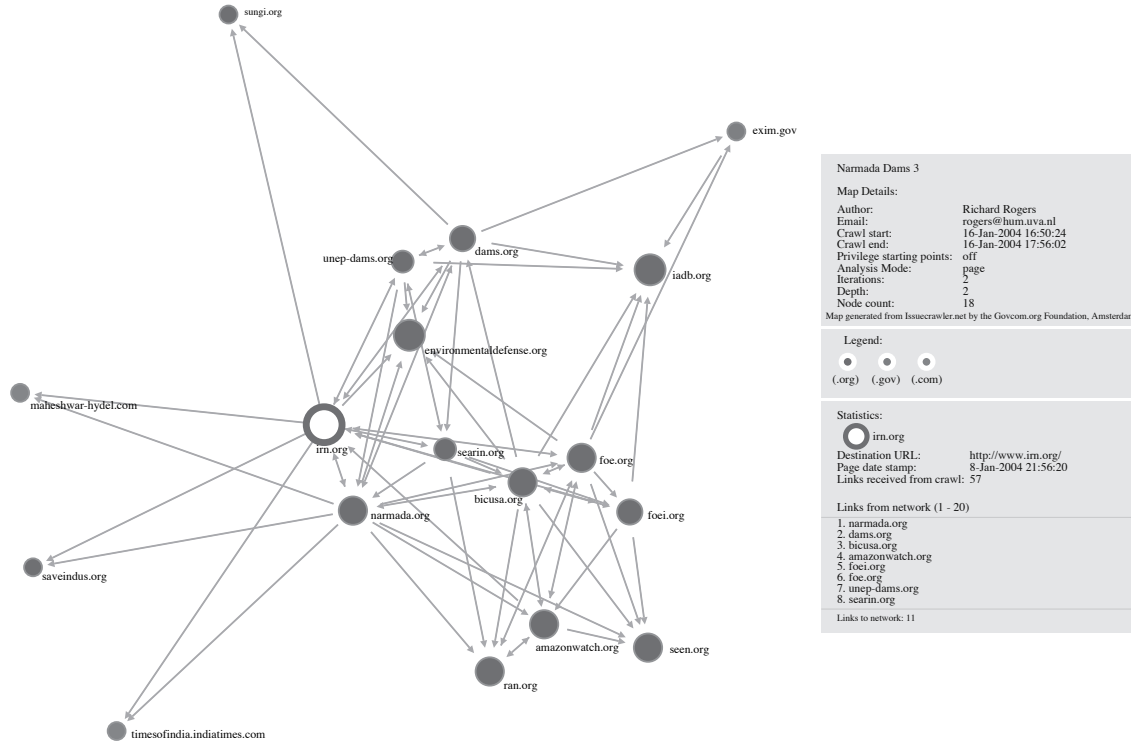


Figure 2 Narmada Dams network on the Web, Winter 2003–4
Source: issuecrawler.net, Govcom.org Foundation, Amsterdam.

proceeding: villages are being submerged, robbing villagers of their houses and agricultural lands, while little has been done to provide them with alternative housing and land. While these problems were also mentioned on the Websites of the international NGOs that form the majority of pages in the networks, those pages nevertheless tended to focus on rather different issues: corporate globalization and the 'development effectiveness' of large dams. Also, many of the international NGOs that treat the Narmada Dams on their Websites equally provide information on a wide range of other large dams that are being constructed elsewhere, from the Three Gorges Dam Project in China to the dams along the Xingu River in Brazil.

The Narmada Dams network thus displayed a globalization effect similar to that described by Randeria; on the Web, too, the involvement of transnational NGOs in the controversy over a situated project like the Narmada Dams appeared to coincide with the subsumption of local concerns by global issue definitions. Here a transnational network of organizations could be seen to undertake a generalization of the issues at stake, redirecting attention to institutional and structural concerns. Moreover, drawing on studies of global assemblages, it is possible to characterize this issue network on the Web as a particular techno-spatial arrangement that accentuates abstraction effects that arguably are also occurring in other, aligned, spaces of politics. Thus, while Randeria noted how the involvement of transnational NGOs in the political controversy over the Narmada Dams resulted in the generalization of the issues at stake in it, we observe how the informational practices of NGOs on the Web reproduce this generalization effect. However, our study of the Narmada Dams network on the Web also yielded at least one reason to problematize such a critical account of this network in terms of the abstraction of issues that it performs. The Narmada Dams network on the Web can also be said to *actively* put the effect of the subsumption of local concerns by global issues on display. Thus, regular news updates on the website of the Friends of River Narmada (narmada.org), the second biggest node in the network, testify to the fact that the issues, as they were first defined by organizations active in the region, are still awaiting settlement (at the time of writing, August 2007). These news items record that, even if the controversy over the Narmada Dams has been going on for more than a decade now, the affected population in the Narmada Valley still has not received what it initially sought: adequate compensation and assistance in terms of resettlement. The way in which this page is situated in the broader issue network, moreover, further dramatizes this fact: the news pages of the international NGOs in the network confirm that these organizations have shifted their attention to other dams. They carry announcements for workshops relating to other projects, such as the Pak Mun dam in Thailand, but not the Narmada Dams. The network thus draws attention to the disjunction between local concerns and more global interests. Importantly, however, the 'network critique' performed by the Friends of River Narmada, if it may be so put, cannot be understood as a matter of local actors holding global ones to account. The 'about us' section of this site describes the organization firstly as 'NOT the

Narmada Bachao Andolan', the social movement that organizes local mobilizations against the dams in the Narmada Valley, and, second, as 'an international coalition of individuals and organisations primarily of Indian descent' (Friends of the River Narmada, 2007).

It is far from self-evident how the status of the 'globalization critique' staged by the Friends of River Narmada must be assessed, among other reasons because it may have to be understood partly as an effect of the way in which this site is situated in a broader issue network on the Web. Moreover, our network location instrument seems implicated in this particular framing of the news updates available at narmada.org. But, however we may wish to resolve this question, the fact that the issue network not only evinces but thematizes the disjunction between local realities and global issue definitions suggests to us that the Web also deserves appreciation as a forum for the enactment of globalization critique by NGOs. This in turn suggests a particular way in which Web analysis could add to the study of global assemblages. Global assemblage studies appear committed to a certain scepticism with regard to publicity media, both as objects and as sites of social research. To be sure, such scepticism has a long history, as social science has defined itself in competition with the press at least since the beginning of the twentieth century (Jones, 1998). In this respect, social research has long distinguished itself in terms of its ability to 'get behind' the simplified and reductionist accounts of social realities offered in publicity media.⁴ In line with this aspiration, Andrew Barry has argued that, to provide an adequate account of global assemblages, the analyst must be located 'in the middle of events', so that he may critically check public statements against 'the complexity of social forms' (Barry, 2006). However, as we have discussed elsewhere, the merits of an alternative publicity medium like the Internet may be characterized in similar terms (Rogers & Marres, 2002). This indeed suggests one possible approach to the 'critique' performed by narmada.org: in providing its particular version of news it could be said to perform a reality check on other, more dominant accounts of the controversy, not so unlike those undertaken by social researchers. The Narmada Dams network on the Web not only provides an example of the subsumption of local by global issues, but it also testifies to this effect, and indeed could be said to provide a site for contestation around it. As we will discuss below, such an appreciation of the Web certainly does not mean that the criticisms that social scientists tend to direct at the media, those of simplification and reductionism, somehow do not apply to the Web. However, it does mean that at least one important aspect of the publicity practices that NGOs engage in on-line is not adequately accounted for by such criticism. As some of them engage in critical reporting on the Web, this medium must equally be appreciated as a site where reductionist issue definitions are made visible and contested. The relevance of alternative publicity media like the Web for the documentation, evaluation and perhaps dramatization of the mobility and abstraction effects that researchers of assemblages associate with globalization, we feel, deserves more attention. This is also to say that Web

analysis discloses the Web as a site for the publicizing of issues, rather than as a network for collaboration and the formation of socio-epistemic networks, as is often emphasized. One of the important questions then concerns the techniques, formats and genres that NGOs mobilize on the Web in their attempts to contest dominant issue definitions.

How local issues are put to use in the controversy over the BTC pipeline on the Web

In addressing whether and how globalizing effects are co-produced by the Web and NGOs, our analyses of issue networks have directed attention to various circumstances that problematize negative assessments of these effects. We thus remain unconvinced by the notion that the close associations that can indeed be found between political globalization and the Web undermines its capacity to serve, or even disqualifies it, as a forum for civil society politics. Our Web study of the issues of the Ferghana Valley suggested to us that critical judgements of the enrolment of NGOs in global networks, as facilitated by ICTs, do not sufficiently consider the constraints that local NGOs face on the publicizing of issues, which may well depend on associations with transnationally operating NGOs. Our analysis of the Narmada Dams network on the Web added to this the suggestion that such a critical assessment does not adequately reflect the opportunities for the contestation of global framings of controversy offered by the Web. In this case, the issue network on the Web provided a site for the staging of a critique of dominant, global issue definitions. However, any characterization of the Web as a site for contestation certainly deserves critical scrutiny in itself, if only because it remains far from self-evident how exactly such a political form is or can be sustained in the context of networks (Mouffe, 2005). To explore further whether and how issue networks on the Web do indeed present a forum for critical engagement by NGOs, we turn to another controversy in which NGOs participated on the Web, the one surrounding the Baku–Tbilisi–Ceyhan (BTC) oil pipeline.

We would like to begin by describing how our Web analysis of this controversy further complicated our understanding of the forms that globalization may take in issue networks on the Web. This controversy made it clear to us that the *content* of the issue definitions that circulate in issue networks on the Web certainly cannot be taken in all cases as an indicator of the extent to which the network can be said to globalize the controversy in question. Analysis of the BTC pipeline networks on the Web suggested that the mobilization of local issues by local actors, as part of global controversy, does not necessarily ensure that local concerns are taken into account. Indeed, we should perhaps have expected as much, in drawing on the understanding of globalization provided by actor-network theory and studies of assemblages, as a particular type of circulation of specific entities.

The controversy on the Web over the BTC pipeline revolved, to a significant degree, around what appeared in the first instance to be local concerns. With the aid of the Web, it was not difficult to determine which issues the BTC pipeline had raised in the regions in which it was being built. Turning to the home page of the international NGO Bankwatch, we learned about a report evaluating 'the situation on the ground' published by Bankwatch in collaboration with two Georgian NGOs.⁵

As construction of the BTC pipeline's Georgian section progresses, a new report from Association Green Alternative, CEE Bankwatch and the Georgian Young Lawyers Association provides an overview of the issues that have emerged so far. The groups' monitoring of affected communities reveals continuing problems with the land compensation and acquisition process as well as with various other basic project requirements. The IFC and EBRD's promised 'additionality' is not adding up on the ground (Bank Information Center *et al.*, 2004).

The report provides a detailed account of the problems raised by the BTC pipeline in the villages along its projected route, ranging from damage to buildings due to construction work on the pipeline, to a lack of information about the project, conflicts over the rightful recipients of financial compensation and air pollution owing to heavy truck traffic (Green Alternative *et al.*, 2004). Indeed, several other European NGOs presented reports of fact-finding missions to 'the Georgia section' of the BTC pipeline on their Websites, such as the British Baku-Ceyhan campaign and Friends of the Earth (Bank Information Center *et al.*, 2003; Welch, 2003). They provide meticulous accounts of events in the villages and towns along the projected route of the pipeline in Georgia and of concerns voiced by their residents. In line with our previous experience, it took a substantially greater effort to locate relevant information on the Websites of for-profit and intergovernmental actors involved in the affair, such as British Petroleum and the International Finance Corporation (IFC), the branch of the World Bank Group that assists with private-sector investments (Rogers & Marres, 2000).⁶ But, having decided to be persistent, we located a report drawn up by a consultancy firm working for the financiers of the pipeline project, which lists more technical, construction-related issues that arose in Georgia (Caspian Development and Export, 2004). We also found a report of stakeholder meetings organized by the IFC and another international financial institution, the European Bank for Reconstruction and Development (EBRD), in two cities in Georgia (CDR Associates, 2003). Here too, we read about problems raised by the pipeline that are distinctly 'grounded'. The report presents concerns voiced by residents of the affected villages, relating to corruption in the land acquisition process, the danger of landslides due to construction work on the pipeline and, again, compensation.

Andrew Barry has provided a detailed account of one of these stakeholder meetings in Georgia. In this account, he develops the argument that such consultations should be understood as 'political demonstrations': as events designed to demonstrate that international institutions involved in the pipeline

are taking into account local concerns and are taking steps to address them (Barry, 2004). A basic analysis of the reports we found on the Web concerning the local issues raised by the pipeline in Georgia, and of the issue network disclosed by the Websites presenting these reports, led us to draw a similar conclusion concerning the NGOs' involvement in the controversy over the BTC pipeline. From the reports, we derived a set of the issues that the BTC pipeline has raised on the ground in Georgia according to these actors. Thus, we came up with the issue list presented in Table 1. Particularly striking about the list and the distribution of issue mentions across the different sources, we found, is that the international financial institutions (IFIs) and the Georgian NGOs address roughly the same issues in their respective reports of the ground. Or, to be more precise and taking into account chronology, it appears that the report by the Georgian Young Lawyers Association, Green Alternative and the CEE Bankwatch Network has taken over most of the issues covered in the report of the stakeholder meetings in Georgia by the international financial institutions and by the international fact-finding mission they conducted earlier with the British NGOs. Thus, the organizations that can be considered close to the ground in terms of their location and background cannot be

Table 1 Georgian pipeline issues of particular actors according to reports found on the Web

	Georgian NGOs	FoE	Transnational NGOs	IFC/ EBRD	BTC company investors
Access to information	X		X	X	
Air and noise pollution	X		X		
Consultations	X	X			
Corruption and extortion	X	X	X	X	
Community investment programme	X			X	
Employment conditions	X	X	X	X	
Local environment	X	X	X	X	
Housing	X				
Land acquisition	X		X	X	
Land compensation (and resettlement)	X	X	X	X	
Landslides	X		X	X	
Monitoring	X				
Oil supply to local population		X			
Pipeline leakage				X	X
Pipeline coating	X				
Protection of cultural heritage		X		X	X
Road accidents and heavy traffic	X	X	X		
Disruption of water supply/telephone lines	X		X	X	X

distinguished from less 'grounded' organizations in terms of the issues they cover, at least not when it comes to their reports on the Web.

An issue network that we located on the Web using our crawler further strengthened our impression of the close alignment between IFIs and international and national NGOs with respect to their definitions of the issues raised locally by the pipeline. As starting points for the location of this issue network, we selected the Websites on which we found the reports on the Georgian situation, as well as the sites of organizations that figure prominently in these reports (see Appendix). The hyperlink-network, we find, contains roughly three clusters: oil companies, climate change bodies and a third cluster of IFIs and NGOs. The joining of the latter two in one cluster (in the bottom right corner of the graph in Figure 3) provides further confirmation of the proximity between IFIs and NGOs in the BTC pipeline controversy on the Web.

Our analysis suggests that, in certain respects at least, Andrew Barry's proposal to understand public debates as political demonstrations may be extended to the Internet. On the Web, the NGO reports enact public demonstrations of the fact that the institutions and companies involved in the pipeline are not taking into account local concerns. The Web here provides a site for public enactments of the accountability of international institutions. However, our small study also suggests that in conducting this demonstration on the Web, NGOs adopt particular *institutional* formats of accountability *for its public performance* (of accountability). Thus, the report by Bankwatch and the Georgian NGOs is particularly clear about the aim of their 'ground check': to prove a lack of compliance of the BTC pipeline project with the standards that international partners in the project (the IFC and the EBRD) have set themselves. As the introduction of the report puts it:

This report provides an overview of the issues that emerged during the construction of the Georgian section of the BTC pipeline. We presume that the majority of the problems are the outcome of violations made by the BTC Pipeline company during the planning period and an inefficient due diligence process implemented by IFC and EBRD. In the present report, we address the problems that the IFC and EBRD would resolve with their so-called additionality.

(Green Alternative *et al.*, 2004)

One could say that accounts of 'issues of the ground' in this case serve rather instrumental purposes: local concerns are taken up in the report by regional NGOs to the extent that they help to prove that international actors are failing to comply with their own standards of social and environmental responsibility. In this case, the fact that regional organizations are covering local issues on the Web thus cannot be taken as an indication that the Web is providing a platform for 'glocalization', i.e. that locally situated actors are using the Web for purposes of self-presentation. The meticulous reporting of the situation on the ground here instead is indicative of a compliance of regional organizations with the issue agendas of international organizations. It provides an additional

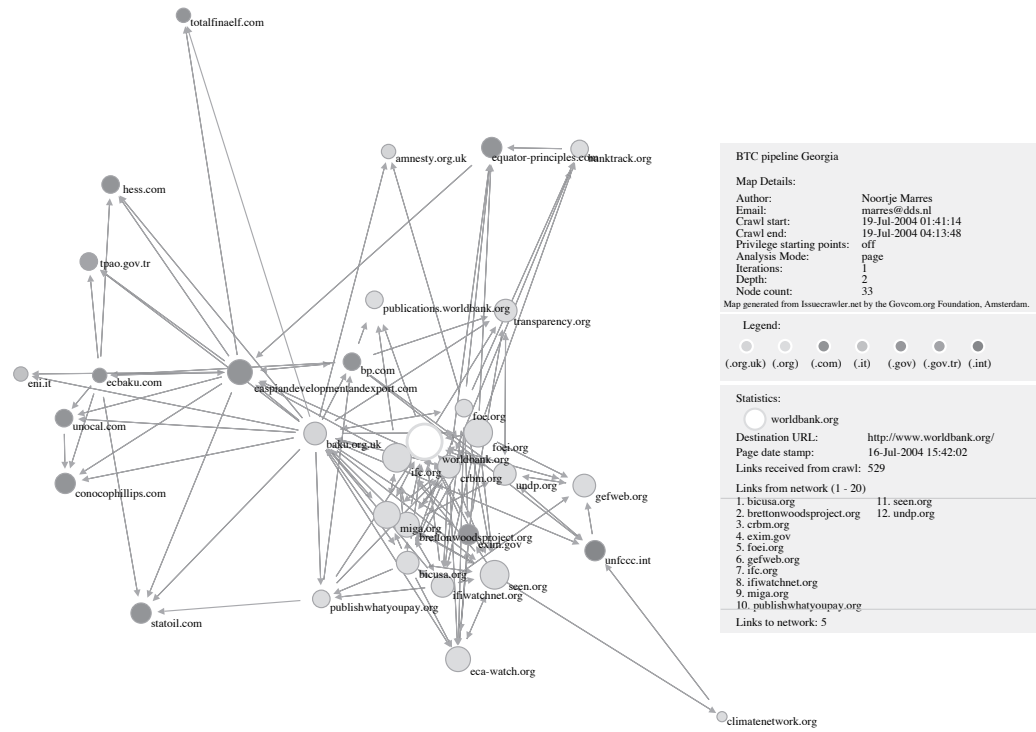


Figure 3 ‘Georgian’ BTC pipeline network on the Web, Summer 2004
 Source: [issucrawler.net](http://www.issucrawler.net), Govcom.org Foundation, Amsterdam.

reason why the differences between globalization and glocalization are best thought of as different modes for the circulation of content.

But perhaps more importantly, it also has consequences for our understanding of the Web as providing NGOs with a public forum for contesting the globalization of controversy. Our Web analysis of the BTC pipeline network suggests that institutional formats of the enactment of accountability were extended to the Web in this case, as the public controversy in this generally accessible medium revolved around the question of compliance with performance standards upheld by the IFIs themselves. Importantly, it should be noted that this observation applies only to the English language sections of the Web space dedicated to the BTC pipeline. Thus, the two Georgian NGOs, the Young Lawyers Association and Green Alternative, also provide information about the pipeline in Georgian that may well rely on very different issue framings.⁷ However, virtually none of the Websites of the international organizations involved in the BTC pipeline acknowledge these Georgian organizations by way of hyperlinks, providing another indication that a preoccupation with local issues in the international BTC pipeline network on the Web does not mean that the organizations involved are taking an interest in local concerns generally speaking.⁸ In these respects, our Web analysis of the BTC pipeline controversy can be taken to affirm the sobering diagnosis with which we began this paper, that the Web facilitates and renders visible an increasing alignment of civil society organizations with the stakeholder networks that are characteristic of global governance (Dean *et al.*, 2006). However, issue network analysis on the Web enables a different account of the ways in which this alignment is (re-)produced on the Web. The 'betrayal' of local constituencies by civil society organizations, which Dean *et al.* observe, may have less to do with the lure of 'global connections' and 'international conferences' than with the adoption of institutional formats for the performance of accountability by NGOs. As NGOs, both in their public statements and in their linking behaviour, establish the international financial institutions as the actors that set the terms of the network, the 'debate space' of the Web appears as an extension of the institutional arena for the enactment of accountability onto the Web. It can be inferred from this that recent claims about the Web as a site for experimentation with new formats of civil organization may have to be met with a certain scepticism (Vedres *et al.*, 2005). Considering how the formats for nongovernmental politics on the Web emerge in trans-organizational networks, in which NGOs link up with the institutions that they attempt to hold to account, the opportunities for NGOs to introduce formats for the conduct of controversy may turn out to be limited. The case studies of the Narmada Dams and the BTC pipeline networks on the Web presented here suggest that NGOs derive their information formats to an extent from international institutions. In both controversies on the Web, NGOs could be seen to adopt issue definitions and accountability formats that were tailored to the critique of international organizations: they mobilized issue definitions that fitted the evaluative standards these organizations uphold

for themselves, such as ‘the development effectiveness’ of large dams. While NGOs can thus be seen to engage in the contestation of international institutions on the Web, the contestations seem in many cases not to extend to the problem definitions that these institutions uphold. These findings may finally also lead us to question whether the Web can be adequately understood as a site for the enrolment of NGOs in governance networks. ‘Network governance’, after all, has been defined in terms of the contestation over problem definitions among stakeholders (Hajer & Wagenaar, 2003; Sorensen & Torfing, 2005). The situation we encountered in the networks that configured around the BTC pipeline on the Web is almost the direct opposite: here regional NGOs adopted the problem definitions of the institutions they were attempting to hold to account. Judging from this case, the significance of the Web for nongovernmental politics is perhaps best described by characterizing it as a site where the failure of ‘global democratic governance’ becomes publicly observable. (The continued commitment to the coverage of local affairs in the Narmada Valley by the Friends of the River Narmada Web site provides a notable exception in this respect.)

Conclusion

Taking up our tools of Web analysis to explore the alleged globalization of NGO practices, and the role of ICTs in this respect, our case studies led us to question certain assumptions involved in this problem definition. Our analysis of issue networks on the Web complicated two understandings of ICTs that are frequently mobilized to account for the role of these technologies in shaping the relations of NGOs to the global networks of politics: the critical understanding of ICTs as tools of ‘complicity’, favouring the enrolment of NGOs in global networks, on the one hand, and the more optimistic framing of ICTs as alternative technology, enabling translocal communication among NGOs, on the other. In our studies of issue networks on the Web we observed time and again how networks of transnational NGOs emerge as prominent sites for the articulation of local concerns about social, economic and environmental issues in this medium. In our view, neither of the above two understandings of the role of ICTs in NGO practices enables an adequate response to this observation. The first Web study, that of the Ferghana Valley, made it clear to us that displacements of local concerns into transnational NGO networks should not be interpreted only and simply as a dubious globalization effect. Such displacements can at least partly be understood as practical responses to the constraints on issue formation faced by locally situated NGOs: in terms of technical, linguistic but also moral–political infrastructures, global communication networks provide enabling conditions for the articulations of issues which are precisely lacking in the relevant localities. That is, neither a critical judgement of ICTs as forces of globalization nor a positive commitment to alternative uses of them for

purposes of translocal communication sufficiently takes into account the practical constraints *on issue formation* that favour global communication networks as sites of NGO politics.

Indeed, one of the more important suggestions our Web studies raise, we feel, is that the globalist tendencies of civil society networks that can be observed on the Web cannot exclusively be regarded as an artefact *of this medium*. It is not just the hyperlinking practices of certain NGOs and the particular logics of our software that tend to direct the gaze of us researchers towards international organizations. The substantive practices of issue definition that NGOs engage in, as they are documented and enacted on the Web, also exhibit such globalizing tendencies. Thus, in the second case study, the Narmada Dams network on the Web evinced a globalizing logic similar to the one social scientists had identified in interviews with NGOs and activists. As the Narmada Dams were adopted as a cause of concern by international NGOs, local issue definitions were exchanged for institutionally-oriented, more structural issue framings, both off and on the Web. In the case of the controversy around the BTC pipeline, our third case, reports published on the Web by regional NGOs evinced globalist tendencies to the extent that they adopted the formats of accountability developed by international organizations. Thus, in the two cases, issue networks on the Web turned out to be aligned with other organizational spaces in which NGOs operate. In this respect, we suggested, issue networks on the Web may perhaps be most productively approached as sites in which broader tendencies of NGO politics are publicly documented and rendered visible. Such a claim does not necessarily have to be interpreted conservatively, i.e. as suggesting that ICTs do not in fact have the capacity to facilitate a re-orientation of civil society politics towards either global or translocal networks. The point is rather that the significance of issue networks on the Web resides in the ways in which they put on display the problematics of political globalization. Issue networks on the Web then publicly testify to the fact that processes of issue formation tend to take place at a distance from the sites in which these issues make themselves most forcefully felt. ICTs, and particularly the Web, must then be understood, not only in terms of their role in increasing or decreasing the distance between the sites in which issues are negotiated and those in which they are felt, but also as a platform in which the practical tenacity of this problem of distance comes into view.

In studying how NGOs engage problems of political globalization on and with the Web, it may be particularly productive to draw further on actor-network theory and more recent work on global assemblages. The often cited proposal to focus on the formation of social-technical assemblages in the study of technology and organizations is not its only relevant contribution in this regard. Equally importantly, it has proposed to approach the formation of networks as an aspect of processes of the articulation of objects of knowledge, and, in doing so, it has opened up a particular understanding of the local/global distinction that seems well-suited for an account of the Web-based

practices of NGOs. Studies of actor-networks, as well as of global assemblages, suggest that the local and the global must be understood, first and foremost, not as referring to the spatial positioning of actors or to the content of issue definitions, but as effects of the circulation of entities in networks. This latter approach seems by far the most useful to account for issue networks on the Web. Our study of the Ferghana Valley on the Web suggested that, even if a network is dominated by transnational actors, this is not sufficient reason to qualify it as a 'merely global' configuration: these transnational networks in fact seemed better equipped than others for the articulation of local concerns. In the on-line controversy over the BTC pipeline, it became clear that the predominance of 'local issues' in the controversy did not mean that it was oriented towards concerns on the ground, as it was international standards of accountability that decided what counted as a relevant issue. In both these cases, to consider 'localization' and 'globalization' as effects of the circulation of issue definitions in networks provides a way of taking these secondary findings into account. When considering the Web-based practices of NGOs, we then say, globalization can be understood in terms of the instrumentalization of networks and issues.

The question for the constructive and critical observation of the relationship between ICTs and NGOs would then read: does the circulation of issues in networks leave room for their appropriation for local purposes or do they rather contribute to the instrumentalization of issues for transnational political processes? Actor-network theory makes it possible to approach the question of the role of ICTs in the globalization of NGO practices as principally concerned with the effects of issue formation in ICT-based networks. To account for such globalizing or localizing effects adequately, we would have to consider the political saliency of issue definitions, something that we cannot do here. But it is already clear that, in doing so, studies of ICTs and NGOs will have to deviate from previous studies of actor-networks and global assemblages on one point in particular. They will have to attend to a particular type of network circulation to which the latter studies have not granted much attention: those facilitated by publicity media. In the Web studies discussed here, the public presentation or contestation of issue definitions appeared as an important aspect of the use of the Web by NGOs. At the same time, however, it is far from self-evident how on-line publicity by NGOs should be valued, from an ANT-formed perspective, as ICTs in general and the Web play an important part in the current reconfiguration of what is meant by 'publicity' (Turner, 2005). But our Web studies do make clear that NGO publicity on the Web is not likely to be adequately accounted for by drawing on the classic theoretical vocabulary of the public sphere as an autonomous space. They suggest that their use of the Web is marked by close alignments and dependencies between this information space and other political spaces. In the case of the controversy over the BTC pipeline on the Web, we interpreted this idiosyncrasy rather negatively, in terms of the failure of democratic governance. However, the finding that publicity on the Web may take the form

of the publicizing of documents that seem primarily meant for circulation in institutional spaces can also be taken as an invitation to reconsider the possible political gains of publicity for civil society groups, if it is not likely to be the realization of an autonomous sphere. Our exercises in Web analysis suggest to us that the fate of the social concerns that NGOs adopt in the form of issues should be part of the answer.

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Notes

1 At the time of writing (August 2007) the ranking is based on the 5,635 crawl results in the archive of the Issue Crawler, at Issuecrawler.net. For an introduction to our issue network mapping tool, see the Issue Crawler Instructions of Use, http://www.govcom.org/Issuecrawler_instructions.html. For a discussion of Issue Crawler methods, see Rogers (2007).

2 During the workshop, 'Following the displacement of politics on the Web', Centre for the Study of Invention and Social Process, Department of Sociology, Goldsmiths College, University of London, 9 June 2004.

3 'Social life of issues 5: Mapping Central Asian issues', a workshop organized by Govcom.org in collaboration with the Information Program, Open Society Institute, C3, Budapest, 8–14 November 2001.

4 As mentioned, this scepticism with regard to publicity media was also present in earlier work in actor-network theory. This may have to do with a requirement that is characteristic of this approach: the researcher resists the structuralist habit of jumping from observable phenomena to structural causes, and instead goes *slow* in his or her tracing of social associations. For students of publicity media it is practically impossible to satisfy this requirement: such media, because of the wide distribution they enable, potentially produce a radical multiplication of associations, a multiplication that happens too fast and 'wide' for an ANT to be able to follow them. For an exploration of the possibilities of putting science and technology studies – and more particularly the actor-network theory (ANT) developed by Bruno Latour, Michel Callon and John Law – to use in the study of media, see the work by Nick Couldry and Fred Turner (Couldry, 2004; Turner, 2005). Couldry mentions that a problem with ANT in this respect is its lack of appreciation for interpretative processes, as undertaken by audiences. This criticism can in turn be criticized for not sufficiently appreciating the shift towards processes of articulation (and away from the notion of interpretation) proposed by ANT. ANT directs attention to the ways in which particular framings of entities are made to *circulate* socially and away from cognitive–hermeneutic processes happening at the front-end (interpretation by audiences). Preoccupation with the latter is precisely characteristic of diffusionist models, which conceive of the dissemination of information as a movement from source to recipients. However, Couldry also highlights the difficulty of extending ANT to account for publicity media, a difficulty that needs to be addressed. On the one hand, it seems to make little sense to distinguish between ANT and media theory. ANT is and always has been a theory of media (and mediation):

it proposes to describe the genesis of objects and social groups by following traces left by entities in databases, journals, recorded conversations, brochures, etc. In doing so, ANT in a sense refuses the analytical distinction between media and their contents. On the other hand, however, we cannot fail to notice that publicity media (news media, mass media, the Web) have received relatively little attention from actor-network theorists – which suggests that there may be more to their hesitation to study media *qua* media than the ‘clever’ refusal of certain distinctions.

5 In this attempt to locate the local issues raised by the pipeline on the Web, we focused on Georgia, mainly because Andrew Barry had pointed us to two Georgian NGOs working on the pipeline: the Georgian Young Lawyers Association and Green Alternative. Also, when surfing the Web for issues raised by the BTC pipeline in Georgia, we found that Georgia was regarded by international organizations as the most active country in terms of local involvement with the pipeline (see CDR Associates’ (2003) report prepared on behalf of IFC and EBRD).

6 We decided not to consider the presentation of the BTC project on the BP Web site as a report on issues on the ground. The site does present a ‘location report’ on the subject of the pipeline, which, moreover, makes mention of local stakeholders and implications for the region. But we find that this report does not qualify for the simple reason that it presents solutions, not problems (issues). To illustrate this by way of an example, note the manner in which the location report presents the topic of ‘employment and procurement’: ‘As the largest single direct investment in Azerbaijan, Georgia and Turkey, the projects offer significant opportunities to benefit people of all three countries.’ See [www.bp.com/sectiongenericarticle.do?categoryId = 2010429&contentId = 2014945](http://www.bp.com/sectiongenericarticle.do?categoryId=2010429&contentId=2014945), accessed 20 June 2005.

7 We failed to locate any sites of Georgian companies or governmental bodies providing information about issues raised by the pipeline.

8 The one exception is CEE Bankwatch Network, whose (link) list of its members contains a link to its Georgian partner, Green Alternative. However Georgian NGOs are absent from their general link list.

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Appendix

Starting points for Issue Network Crawls performed on [issuecrawler.net](http://www.issuecrawler.net)

A. Narmada dams network on the Web, winter 2003–4

International Rivers Network, <http://www.irn.org/programs/india/index.asp?id=links.html>

Friends of River Narmada, <http://www.narmada.org/resources/links.html>

B The BTC pipeline network on the Web, spring 2004

1 Transnational NGOs

The Baku Ceyhan Campaign, <http://www.bakuceyhan.org.uk/>

Bankwatch, <http://www.bankwatch.org/issues/oilclima/baku-ceyhan/mbaku.html>

2 Companies

Caspian Development & Export, <http://www.caspiandevlopmentandexport.com/asp/links.asp>

3 International financial institutions

European Bank for Reconstruction & Development, <http://www.ebrd.com>
International Finance Corporation, World Bank Group, <http://ifcln1.ifc.org/ifcext/btc.nsf/content/links>

C. The 'Georgian' BTC pipeline network on the Web, summer 2004

1 National NGOs

Georgian Young Lawyers Assoc., <http://www.gyla.ge>
Green Alternative, <http://www.greenalt.wanex.net>

2 Transnational NGOs

Bankwatch, <http://www.bankwatch.org/publications/mlinks.html>
Friends of the Earth, <http://www.foe.org/camps/intl/institutions/bakuceyhan.html>
WWF, http://www.panda.org/about_wwf/where_we_work/europe/where/caucasus/threats/btc-pipeline.cfm
Baku-Ceyhan Campaign, <http://www.baku.org.uk/links.htm>

3 Companies

BP, <http://www.bp.com/sectiongenericarticle.do?categoryId=2010343&contentId=2014881>
Caspian Development & Export, <http://www.caspiandevelopmentandexport.com/ASP/Links.asp>
BTC company, <http://www.btc.com.tr/eng/links.html>

4 International financial institutions

Int. Financial Corporation, <http://ifcln1.ifc.org/ifcext/btc.nsf/Content/Links>
European Bank for Reconstruction and Development, <http://www.ebrd.com>

Note on method

The Issue Crawler (<http://www.issuecrawler.net>) crawls the starting points or seed URLs, fetches the external links from each seed URL and performs co-link analysis, whereby those pages that receive at least two links from the seed URLs are retained. The method may be performed in one, two or three iterations. The visualization of the network is a network graph, where the nodes are clustered according to centrality measures.