

Executive Summary

Policy Made Public: Technologies of Deliberation and Representation in Rebuilding Lower Manhattan

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New digital technologies have figured critically in the process of deciding the future of Lower Manhattan after September 11th, not only supplying the infrastructure for soliciting public input but also opening new channels of communication between citizens, designers, advocacy groups, and decision-makers.

The research builds on our previous ethnographic work on organizational responses to September 11 and on the early stages of public dialogue about the redevelopment of the World Trade Center site. One component of the current research is a comparative longitudinal study of participation in three public forums held to discuss the future of Lower Manhattan, forums that relied on face-to-face, exclusively online, and mixed technologies of deliberation. Interviews conducted shortly after each forum generated data on the modal users of online deliberative forums relative to those who participated in face-to-face deliberative forums. Another round of interviews, conducted twelve months after the initial ones, will yield insights into the impacts of online deliberative forums by comparing participants' attention to, engagement in, and expectations of the development process over time. The project's second component focuses on the online dialogues themselves. A discursive analysis of a sample of the twenty-six online discussion groups that accompanied the face-to-face forum will identify the conditions that facilitate or obstruct group discussions to approximate the equality, reflexivity, reciprocity, and openness that scholars have seen as hallmarks of authentically democratic deliberation.

The third and fourth components of the research turn to the process by which multivocal public dialogues are translated into "public concerns" and then into design plans. By compiling an archive of all the websites devoted to Lower Manhattan redevelopment issues and tracking changes in the form and structure of the websites over time, the project will examine how old and new advocacy groups are adapting to a political landscape in which new deliberative technologies may be challenging traditional mechanisms of citizen participation. In the fourth component of the research, the focus is on communication between citizens, on one hand, and architects and public officials on the other. Analysis of the website database will chart whether and how architects and urban planners are capitalizing on new digital technologies to involve residents more directly in design. Interviews with representatives of the agencies charged with overseeing the development process will examine whether and how they are relying on internet-mediated representations of the public in their decisionmaking—and with what effect.

Policy Made Public: Technologies of Deliberation and Representation in Rebuilding Lower Manhattan

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As they recovered from the immediate shock and devastation of the September 11th attack, the citizens of New York and their elected representatives were confronted by the daunting challenge of deciding the future of the World Trade Center site. So much had been destroyed: Thousands had perished. Tens of thousands had been displaced from their jobs. Tens of millions of square feet of office space had been destroyed or damaged. Critical infrastructure hubs in transportation, telecommunications, and electricity had been devastated; large corporations forced to relocate; small retail, hotel, and restaurant businesses crippled; students, employees, and local residents displaced and traumatized. The meaning and identity of Lower Manhattan as a financial district was now uncertain, and a city whose dynamism was in large part as a global crossroads was now a place of insecurity. It was clear that redevelopment of the site would be the most significant undertaking in the city's history.

As they rise to meet these material and emotional challenges, New Yorkers are confronted by social and political challenges no less daunting. There are so many stakeholders with so many disparate claims: The families of victims have claims for compensation and moral claims about the status of "hallowed ground." The Port Authority, as the owner of the land, faces claims from its bondholders. The leaseholders of the properties, with claims from their creditors, place claims on their insurers. Companies file claims for compensation. And all of these business entities press their interests on various governmental units and agencies whose multiple and overlapping jurisdictions compound the complexity of the decision-making process. Meanwhile residents, schools, religious and cultural institutions in the adjacent neighborhoods claim a role in the redevelopment process, acknowledging the legitimacy of the claims of the victims' families but questioning proposals for a 16 acre memorial ("we don't want to live next to a cemetery"). Others point to studies showing that the economic and psychological impact of the attack is greater in neighborhoods distant from ground zero and argue that funds for redevelopment should be spent citywide. Some housing developers point to high vacancy rates among existing office space in Lower Manhattan and argue for new residential construction. Low-income groups argue that it should be affordable housing. Others argue for another kind of diversity that brings universities, museums, and an opera house to the site. Environmentalists argue that the site should be a model of sustainable "green" development. Taxpayer groups argue that the properties should be developed with an eye to improved fiscal revenues. Architects press for impressive buildings, arguing that not only New Yorkers but all people touched by the event need monuments as imaginative as the immensity of the tragedy. And urban planners denounce the architects for proposals in which design leads the program instead of the program leading the design.

On one principle the various stakeholders agree: redevelopment of the WTC should be an open and participatory process. The answer to the attack on our democracy can only be more democracy. Exemplary, in this respect, is the following passage from the mission statement of the Civic Alliance, a confederation of scores of civic associations,

“On October 1, 2001 more than 75 civic leaders gathered in an overcrowded conference room to begin a process so daunting we hardly knew where to start. The yet-to-be-named Civic Alliance to Rebuild Downtown New York had many different ideas on how to rebuild, but were united behind one goal – to transcend business-as-usual in support of an open, inclusive rebuilding process that would stand as a monument to democracy.”

Government officials and civic associations recognize that the “business as usual,” closed door politics that built the Twin Towers are especially not tenable in circumstances where the principles of an open society are generally perceived as under attack and at stake. Because the process of reconstruction will be as important as the product, rebuilding the physical space of Lower Manhattan has launched a reshaping of the space of the public sphere. In the wake of September 11,th small-scale public forums proliferated and were soon followed by more systematic efforts on the part of governmental agencies and leading civic groups to solicit input from the public about the design of an appropriate memorial and the future of the World Trade Center (WTC) site. These public forums used very different technologies of deliberation—from ideas recorded on butcher block paper, to polling via personal touchtone keypads, to threaded online discussions. They offer a remarkable opportunity to compare technologies of citizen participation in governance.

The proposed research will examine the reshaping of the public sphere in an era when the field of representation (in multiple senses of the term) is itself co-evolving with new digital technologies. To what extent and how is the public sphere reconfigured when it encompasses expressions and representations in the new interactive medium of a *virtual* public sphere? What and who are the actors (entities, organizations, individuals) debating New York’s future in the online public sphere? What are the “named places,” paths, and patterns of interaction defining its topography? How are the social interactions supported in the virtual political sphere changing the dynamics of the broader political field?

By *policy made public* we refer to a twinned process. We propose to examine, along the first dimension, practices that exploit the new media to facilitate public participation in the policy-making process. By systematically comparing face-to-face, exclusively online, and mixed technologies of deliberation we address central questions in the study of online citizen participation. Can online forums bring into public dialogue people who do not usually participate in conventional political institutions? Under what conditions does the discussion that takes place in such forums approximate the standards of equality, reflexivity, openness, and reasoned argument that scholars have seen as necessary for authentic democratic deliberation? Does participation in online dialogues spur other kinds of civic and political engagement? What kind of deliberative weight do the results

of online discussions have in policymaking processes? And what are the changing internal dynamics among leaders and constituents of civic associations – with their claims of “representation” outside of electoral politics – when ordinary citizens have new possibilities (realized or foreclosed) for direct access to information and more immediate access to the policy making process?

Policy made public refers not only to representations *of and by the public* but also representations made *to the public*. We propose to examine, along this second dimension, how government agencies, civic associations, architects, and urban planners are using new technologies to present their policies, designs, and programs to the public. In this “politics of representation,” when display of models is not limited to a particular time and place, architects and urban planners do not need to await official recognition to present alternative visions for redevelopment. Similarly, government sanctioned planners and designers can appeal directly to the public for support for their proposals, 24/7. Where and how are such designs made available online? What new visualization technologies (e.g., virtual walk-throughs, traffic pattern simulations, interactive GIS mappings) are being deployed? Which institutional sectors – e.g., universities, private firms, professional associations, civic groups, individuals – are proving to be innovators in exploring these new technologies of representation for displaying redevelopment programs to the public? Are government agencies stimulated, if not compelled, to provide comparable public access to proposals being officially vetted? How do different segments of the public vary in opportunities to acquire the visual language and interpretive skills to read and manipulate these new interactive representations?

Our two dimensions are analytically distinct; but, in the practices of the digital political field, they are actually interrelated. Our research design takes this into account. Each of the two major components of the research – the first focusing on technologies of deliberation and the second addressing technologies of representation – takes the other as a secondary theme. In a complex political setting, deliberative democracy can seldom be direct democracy. Proposals produced in forums where members of the public deliberated among themselves are not immediately enacted but must still be translated, represented, within the policy making process. Similarly, the representations of policy programs to the public will figure in further rounds of public deliberation. Thus, the core problems of this study – the relationship between deliberative and representative democracy, of the part that can stand for the whole, of direct authorship and delegated authority – are as old as democratic theory (for an overview, see Pitkin 1967) here recast in the era of digital technologies.

Technologies of Deliberation

Digital Technologies for Deliberative Democracy. That the rebuilding of Lower Manhattan would not be business as usual was evident in the variety of public forums devoted to the rebuilding process that sprang up in the months after September 11. Hearings sponsored by the Lower Manhattan Development Corporation (LMDC), the chief decision making agency in the redevelopment of the World Trade Center site, took a conventional form: participants lined up at a microphone to make statements to

representatives of the agency. A very different kind of forum, *Imagine New York*, was sponsored by a coalition of civic groups led by the Municipal Arts Society in April 2002. In facilitated workshops held around the city, 3,500 New Yorkers met to talk about the future of Lower Manhattan. Participants' individual and group ideas were recorded on sheets of butcher block paper, then transcribed, collated, and synthesized by a steering committee to produce 49 visions that were released to the public. Whereas *Imagine New York* transformed group discussions into a set of recommendations for rebuilding largely by hand, another deliberative forum, *Listening to the City*, used sophisticated digital technology to create an "electronic town meeting." Sponsored by the Civic Alliance in conjunction with the LMDC and the Port Authority, *Listening to the City* brought 4,500 people to a midtown convention center on July 20, 2002 to review proposed plans for the WTC site and to deliberate more broadly about the redevelopment of the area. Facilitated small group discussions were punctuated by individual polling by way of personal computerized keypads. Poll results, along with themes synthesized from the small group discussions through table computers hooked to a wireless local area network were periodically projected onto giant screens. Shortly after the July 20th event, eight hundred people began two weeks of online discussion in a second phase of *Listening to the City* organized around similar themes. Participants' recommendations for the redevelopment of the site were periodically posted on the website along with individual polling results.

These forums offer a rare opportunity to study systematically the political *users* and *uses* of new technologies of deliberation. *Imagine New York*, the July 20 *Listening to the City* event, and the subsequent online dialogues operated in roughly the same period and addressed similar substantive themes but relied on three distinct models of public deliberation: traditional small group, face-to-face deliberation; face-to-face deliberation in a large group assisted by digital technologies, and online deliberation. By interviewing participants at the time of their participation and then again twelve months later, we will gain insight not only into *who* participated in the different deliberative forms but also about how their experience shaped their subsequent involvement with the ongoing redevelopment process. By closely studying the online dialogues themselves, we will be able to identify the discursive and organizational conditions that made for more or less deliberative discourse. Finally, interviews with key organizational actors in the planning process will enable us to compare the ways in which the results of the three deliberative forums have been disseminated and used. In particular, we will be interested in how the results of online deliberation fare in contrast with those of face-to-face deliberations in gaining political credibility and influence. Together, these lines of research should help us to assess the prospects for online deliberation as a possible alternative to face-to-face public deliberative forums and, more broadly, as an institutionalized feature of public policymaking.

An important subset of studies on digital governance has focused on the internet's capacity to foster the kind of public deliberation that creates an informed citizenry, deeper civic engagement, increased trust in political institutions, and more participatory governance. Early claims that the internet would create a Habermassian public sphere free of the inequities that characterize usual political interaction have yielded to more cautious assessments (DiMaggio et al. 2001). There is strong evidence of persistent

income and educational disparities in access to the internet as well in patterns of internet use (Robinson et. al 2000; NTIA 2000; UCLA 2000). Research has thrown into question the claim that internet usage promotes civic and political engagement (Bimber 2001, for example, found that internet usage was positively associated only with financial donations to campaigns among forms of political engagement; see also UCLA 2000 and Rice 2002). And against an idealized view of internet dialogue as a modern public commons, researchers have pointed out that internet forums often encourage only brief interactions among like-minded participants, domination by a few participants, and *ad hominem* attacks on those with differing views (Wilhelm 1998; Davis and Owens 1998; Rojo and Ragsdale 1997; Berkman Center 2002; see Stromer-Galley 2002 for a review). The verdict on more organized experiments in public online deliberation, for example, Santa Monica's Public Electronic Network, the Minnesota E-Democracy forum, the United Kingdom Citizen Online Democracy, Bologna Italy's IperBoIE project, and lower-profile public consultative efforts has been similarly mixed (Dahlberg 2001; Frenz and Rule 1999; Stanley et al. 2002).

If one message to be taken from the recent scholarship is that the internet is by no means intrinsically democratic (DiMaggio et al. 2001; van Dijk and Hacker 2000), another is that we need to identify the features of electronic dialogue that foster effective deliberation as well as the circumstances in which such deliberation is likely to have impacts on actual policies and political processes. This points to two lines of research. If we think of deliberative discourse as characterized by an openness to diverse points of view, equality among participants, reflexivity about the rules of the game, and the mutual validation of reasoned arguments, then we can begin to identify the organizational and discursive conditions in which online discourse evidences those features (on the requirements of deliberative discourse, see Cohen 1989; Dryzek 1990; Fishkin 1991). Scholars of online dialogues have just begun to move in this direction, using content- and discourse-analytic methods to assess whether a particular online dialogue approximates standards of deliberative discourse (see Stanley et. al. 2002; Dahlberg 2001; Schneider 1996; Wilhelm 2000; on computer-mediated vs. face-to-face communication, see Baym 2002). The next step is to identify the mechanisms by which shifts from debate or discussion to deliberation occur and the conditions in which they are likely to do so.

A second critical area of research is on the impacts of online deliberation, both on specific policies and on participants' relations to political institutions generally. Here, we need more comparative, longitudinal, and policy-focused studies. Although there are rich studies of online versus face-to-face work teams (e.g., Hollingshead et al 1993; see also Hollingshead and Contractor 2002 for an overview of studies on group communication support systems), we lack systematic comparisons of online and face-to-face *deliberation* (Gastil 2000). In the last decade, efforts to involve citizens in face-to-face deliberations have proliferated, including deliberative polls, citizen juries, citizen assemblies, and large-scale citizen forums (Fishkin and Lutkin 1999; Burton and Mattson 1999). Some research suggests that these exercises have contributed to a heightened sense of political efficacy, trust in political institutions, political sophistication, and political engagement among participants (Fishkin and Lutkin 1999; Gastil 2000). Can the same benefits be claimed for participation in online dialogues? To answer that, we need to determine both

who is participating in different deliberative forms (Stromer-Galley 2002) and what impacts their participation has on their views of and relationship to other forms of political action (Jankowski and van Selm 2000). That participation in a deliberative dialogue builds trust in political institutions should not be taken as a given. One can imagine that dialogue participants who found public officials unresponsive to the recommendations they had collectively generated might become *less* trusting of political institutions or that participation in public deliberative exercises might lead to more exigent expectations of public influence and, therefore, less satisfaction with the process. We need, therefore, to learn more about how participation in public deliberation shapes people's views of and relationship to an actual policymaking process rather than to politics or political representatives in the abstract.

To advance these lines of investigation, we propose, first, *a longitudinal study comparing participation in Imagine New York, Listening to the City face-to-face dialogue, and Listening to the City online dialogue*. Who participates in public deliberative forums? Who participates in online forums? And what impacts do such exercises have on participants' views of and involvement with the policymaking process? To answer these questions, we will rely on two rounds of interviews spaced twelve months apart with a sample of participants in the face-to-face deliberative forum (*Imagine New York*), the digitally-assisted face-to-face forum (*Listening to the City*), and the online forum (*Listening to the City online*). Polletta has already conducted 40 interviews with participants in *Imagine New York* and 46 interviews with participants in the *Listening to the City* meeting held on July 20. Interviews, which were conducted by phone shortly after the event and included open-ended and closed questions, covered participants' reasons for participating, their previous civic and political experiences, the perceived strengths and weakness of the deliberative technology, participants' confidence in decisionmakers before and after their participation, the kinds and degrees of opinion shift they experienced as a result of their participation, and their knowledge of and attention to the Lower Manhattan redevelopment process. For data on the online users, we hope to use a survey conducted by Weblab, the nonprofit that organized the online forum. The questionnaire, which included open-ended and closed questions, was constructed independently from ours, but there is enough overlap to make much of the data comparable. In addition to these three groups, Polletta will shortly interview a control group of people who registered for *Listening to the City* but did not take part in it.

We plan to re-interview both the online and the face-to-face forum participants and the nonparticipants in July 2003. Answers to the first round of questions will enable us to compare respondents' past experiences of civic and political engagement as well as their expectations about the purpose and yield of their participation in the deliberative forum. We should be able to ascertain whether the three deliberative forums served distinctive "publics"—and whether the online dialogues tapped a public that usually avoids more established forms of civic and political participation. The second round of interviews will shed light on how participation in the three deliberative forums shaped respondents' subsequent involvement in the redevelopment process. We will be interested here in whether participants paid more attention to the redevelopment process as a result of their

deliberative experience, whether they sought new sources of information on the process, whether they participated in other activities related to the redevelopment process, and whether they participated in other kinds of political or advocacy efforts. We will also be able to assess how important a perception of officials' responsiveness was to respondents' satisfaction with the process, and whether participation in a deliberative forum generated higher expectations of influence and thus more dissatisfaction with the process than expressed by a control group of nonparticipants. Data generated from the two rounds of interviews should thus enable us to flesh out profiles of the modal users of the different deliberative forms as well as to assess the influence of participation on interviewees' subsequent political engagement.

We further propose a *discourse-analytic study of the Listening to the City online discussion groups*. To what extent do online dialogues approximate the equality, reflexivity, reciprocity, and openness that scholars have seen as the hallmarks of deliberation? To answer that question, we will conduct a discourse analysis of a sample of the 26 online discussion groups that were conducted as a part of Listening to the City in the two weeks following the July 20 event. By tracing conversational sequences, we hope to identify the factors associated with a shift from debate to deliberation (Stanley et. al 2002). By deliberation, we mean discussions in which participation is diverse and unconstrained, speakers acknowledge other points of view as legitimate, back up their own views with reasoned arguments, and acknowledge shifts in their perspectives (see Dahlberg 2001; Schneider 1996; Yoohan, Kim et al. 2001). We are especially interested in the conditions in which speakers seek out and/or bring to bear on their discussions technical information about a particular issue—something that students of democratic discussion recognize as essential to effective deliberation but see as too often lacking in deliberative forums.

Representations of the Public. How do efforts at deliberative democracy, such as *Imagine New York* and *Listening to the City*, figure in the broader politics of policy-making? If our first set of questions addressed the impact of deliberation on citizen participants (by doing follow-up studies on the users), our next set of questions addresses the impact of public deliberation on the redevelopment process (by following how the results of the deliberations are used). To study this process we have already begun interviewing the organizers of the online dialogues, as well as members of advocacy groups and official decision-making bodies. Alongside these interviews and participant observation by our research team in various civic associations (continued throughout the duration of the research), we will construct a comprehensive database of the relevant websites devoted to redevelopment issues as well as an archive of press coverage of the redevelopment debate. In short, *the import of the new deliberative technologies for existing structures of governance cannot be understood in isolation from the broader information ecology in which such technologies are embedded*. Our searchable databases make it possible to trace the role of deliberative forums within that information ecology.

In justifying their plans and proposals, decision-makers may refer variously to the results of opinion polls, communications by formal representatives of stake-holding groups, or the results of the face-to-face or online deliberations as indication of “what the public

wants.” Which technologies of public-opinion-gathering figure most prominently in statements made by decision-makers as well as by the various stakeholders in the development process? Do the sponsors of online dialogues face special difficulty in gaining attention and credibility for their efforts to tap informed public opinion? For example, is it harder to get media coverage for an online dialogue than for a face-to-face one? And does the anonymity of online dialogues make it more difficult to claim that those who participate in them are broadly representative of the public?

How have diverse groups sought to interpret and use the results of the public deliberative efforts that have taken place? What are the justifications given for why these deliberations should be taken into account? Claims based on their character as deliberatively democratic are obvious; but, in our preliminary analysis, we also find spokespersons and other commentators making appeals to their “representative” character (e.g., “drawn from a representative cross section of New Yorkers”). Under what conditions is their representivity most salient and, conversely, when are their deliberative features pointed to as proofs of their worthiness for consideration? Our preliminary research further indicates that some advocacy organizations are questioning the representative character of the deliberative forums. They might be demographically “representative,” they acknowledge, but no one or no forum, they challenge, can claim to represent “the public.” There are only discrete publics, and the real work of representation is to speak on behalf of named and identifiable social groups. Yet, because the new deliberative technologies are bringing themes of deliberation, participation, and representation before the public, these more conventional interest groups are prodded to demonstrate their own character as open, representative, and participatory – and to do so in the new public space of interactive technologies. That is, the new deliberative technologies must be studied in the broader context of representative claims and representational acts.

We propose *to map representations in the virtual public sphere by creating and analyzing a longitudinal database of the information ecology relevant to the redevelopment debate.* With modest funding from an SGER grant from NSF’s Digital Societies Program we have begun to construct a database of the websites relevant to the redevelopment of Lower Manhattan. To date, we have identified approximately 180 organizations that have sponsored online or offline activities related to the redevelopment process (a list of these organizations is available from the PI upon request). We propose to maintain this database over the next two years, continuing to scan the online environment for new entries, and updating each site at least bi-weekly, more frequently as we automate the process. This online database will be augmented by a press archive (in electronic form). The contents of the press coverage and of the complete population of websites can then be searched for references to specific public forums held on- or offline. We will thus be able to chart how new advocacy groups and old ones refer to these forums, offering competing interpretations of their results. For example, groups calling for the rebuilding of the WTC Towers have recently invoked the July 20th

Listening to the City event as corroborating their contention that most New Yorkers want the towers restored (NYTimes, November 2, 2002).¹

Our preliminary field research suggests that the July 20th event (which received extraordinary coverage in the press and online) was used by various actors, including some members of the Lower Manhattan Redevelopment Corporation, to justify rejecting the initial round of six architectural plans for the site, leading to modifications in the program guidelines and a new RFP extended to a broader range of architectural firms. Our informants inside the policymaking process further suggest that the favorable reception of the July 20th meeting coincided with opinions that were already held by the LMDC. How will the LMDC respond to subsequent public deliberations if the results run counter its plan for the site, especially in a context in which such deliberations have already been recognized by the LMDC as legitimate? Our longitudinal study of the debate, especially during future cycles of deliberations-proposals- deliberations, will allow us to systematically chart the reception of the new technologies of deliberation under varying circumstances of consensus *and* conflict.

Our database of websites will also allow us to chart the changing shape of the virtual public sphere. Using protocols developed by Stark and his research team for analyzing civil society websites (for a project sponsored by NSF's Program on Innovation and Organizational Change) we will code website features with the aim of clustering sites according to their explicit and implicit orientation to different audiences, their genre forms, and their positioning within the virtual social space along an axis of information versus participation and an axis of online versus offline activity (Bruszt, Stark, and Vedres 2002; Orlikowski and Yates 1994). Because our study is longitudinal we will be able to trace the typical "careers," or trajectories, of the websites in this field. For example, do some websites become more deliberative, introducing new features such as online forums where earlier they had only provided information? Do other sites, perhaps even those such as Imagine New York, move away from deliberation toward advocacy on the part of discrete and identifiable publics? Similarly, by including hyperlinks in our website analysis, we will be able to chart the changing topography of network ties within the virtual public field (Monge and Contractor 2000; Bruszt et al 2002; Mogoutov 2002). Because the online database will be continuously updated, we will be able to chart the timing and patterns of how reference points (dominant themes, discursive markers, symbolic frames, and references to discrete events) circulate within, and hence structure, the field. This comprehensive database will provide rich material for applying exciting combinations of network-, sequence-, and content-analytic methods (Abbott 1990; Abbott and Hrycak 1990; Stark and Vedres 2001; Vedres and Csigo 2002). By allowing us to chart the circulation and interchange of such reference points, our research design keeps open the possibility that the operative political unit of deliberative democracy is not *within* the new deliberative organizational forms but *across* organizations. In that case, *deliberative association would be a property of the networks that make up the field.*

¹ Misrepresentations, as this example shows, are also part of how the deliberations enter the political sphere.

Representations to the Public. Architects and urban planners make presentations. No less than elected officials and community spokespersons, they also engage in acts of representation. Although their designs and plans might not explicitly represent specific social groups, they respond, consciously or not, to social processes. The problem we address in this part of the research, goes beyond the maxim that “architecture is politics in stone.” We are interested in the politics not only of the stone but also of the representations in three senses: 1) the various models, diagrams, maps, and other images that architects and urban planners present to policy makers and the public are graphically representational, 2) these plans and schemas directly or indirectly entail representations of social structure, and 3) especially in the current circumstances of Lower Manhattan redevelopment, they represent programmatic visions of the 21st century city. These three moments, moreover, are taking place in an era when new digital tools of visualization are available for making these representations. That is, just as the core problems of democratic theory are being recast in the digital era so, too, the relationship between the designer/planner, the policy maker, and the public are being recast in an era of interactive technology. As our research design suggests, we see these possibilities as integrally connected to new opportunities for deliberation and public participation.

We have already begun to survey the modeling tools available to the practitioners. Part of the field building work of Stark’s Center on Organizational Innovation (COI) has been to build ties among social scientists, architects, urban planners, and digital technologists. During the Spring 2002 term, the COI sponsored a special, semester-long seminar, taught by Visiting Professor Mary Lou Maher (of University of Sydney’s Keys Centre of Design Computing) in which grad students in sociology as well as from the Interactive Design Lab at Columbia worked together in a virtual collaborative environment with architectural students at MIT. All of the activity for this course took place in the online environment. In that same semester, two of Stark’s graduate students were full-time participants in urban planning studios in Columbia’s architecture school for which the clients were New York City’s Community Board One (representing residents) and the Alliance for Downtown New York (a major business association). In May 2002, COI organized (under the initiative of Associate Director, Monique Girard, and jointly with Columbia’s Urban Planning Program) a two-day conference that brought together architects, urban planners, social scientists, and community representatives to discuss proposals for rebuilding Lower Manhattan presented by university architectural and planning studios.² (The program of the “EvolveNewYork, Open Studio Conference,” including streaming audio/visual of some of the presentations, is available at http://www.coi.columbia.edu/enyos_schedule.html). These contacts will be important for access to practitioners with experience using the new visualization tools.

Our second task will be to examine the demand side. That is, what kinds of publicly accessible digital modeling tools and other interactive environments are being required (formally or informally) in the policy-making process? In the first instance, do the guidelines to architects and urban planners from the LMDC and other government and

² Participants included such leading figures as Peter Eisenman of Princeton, Diana Balmori of Yale, and Michael Sorkin from New York, as well as presentations from the studios of Zaha Hadid in Yale and in Vienna, and others from Pratt, MIT, Harvard, the University of Toronto, and Columbia.

quasi-governmental agencies include specific requirements for virtual walk throughs of 3D-rendered models, online interactive GIS maps, and other digital models? Specifically, are there technical requirements that these environments must be presented in formats that can be (easily) accessible to the broader public? If not, will civic associations begin to make such demands? How are these demands made, through which media or channels of communication, with what kinds of political justifications, and with what level of technical specificity? Our press and websites archives, together with interviews of key participants, will provide data for answering these questions.

Third, what kinds of models are presented by official agencies and what are the levels of participation by the public? “Participatory GIS” (Global Information Systems) seems to hold great promise for community-based planning (Harris and Weiner 1996, 1998; Hamilton et al 2001). Although studies of these and related IT systems have typically found only modest levels of participation (Schmidt-Belz et al 1997; Stasik 1999; and Rinner 2001 for a summary), some prototypes such as those that support online public comments on maps (i.e., linking discussion with graphical representation) report encouraging aspects (Kingston et al 1999 for a case study).

Fourth, how do the new interactive technologies figure in the politics of representation in which architects and urban planners —in fact, anyone with a scheme or proposal who has access to some digital resources – can present their ideas directly to the public? For example, do officially sanctioned architectural firms make extra efforts to present their models in easily accessible forms in hopes of capturing public attention and gain public support that can be leveraged in the selection process? How will architects and planners who are excluded from official competitions use web-based tools in attempts to increase the diversity of design solutions? We know from our preliminary research that this process has already begun. In an article in *Architectural Record* occasioned by his participation in the July 20th *Listening to the City* event, New York City architect, Michael Sorkin, argued that restricting the second round of architectural competition to firms who had worked on at least three \$100 million projects effectively ensured that only very large corporate firms would be eligible to compete. Calling for “opening up the process” to “give the people some authentic choices,” Sorkin concluded his essay, “Let us have the kind of real discussion that can only come from having real alternatives. To that end, I invite anyone with a scheme to post it at the following website: www.not-ground-zero.org” (Sorkin 2002).

Our website archive will make it possible to document the number and types of such alternative exhibitions. We can further establish the timing and patterns of the adoption of various forms of digital modeling that are publicly accessible. For example, are private architectural firms and professional associations leaders or laggards? Do official agencies mimic each other or do they learn from other sectors? Are universities innovators or is this role more likely to be taken by civic associations? And how should we understand “innovation” in this context? By purely technical criteria, programs featuring the very latest technologies might be seen as innovative even if they require highly esoteric skills and high bandwidth access. But perhaps innovation in this case proceeds through “socio-technical” solutions – perhaps even “low tech, high touch”

solutions – in which civic organizations create generative environments that foster learning of new visual languages and new navigational skills (Beunza and Stark 2002; Kelly and Stark 2002). These organizational innovations would recognize that in place of “the public,” as an undifferentiated mass, socio-technologies should be responsive to differentiated *publics* in which users are consciously and reflexively part of the design process itself (Suchman 1987, 2000b; Neff and Stark 2002).

The role of digital technologies in the deliberations of policymakers. To understand whether and how the results of digitally facilitated deliberations and representations are entering the deliberations of those charged with overseeing the policymaking process, we will interview key participants in that process. We have excellent contacts in the LMDC (several LMDC members, for example, participated in our Open Studio conference in May 2002) as well as among various civic associations. To what extent are official agencies relying on digitally-mediated representations of the public in their decision-making – and with what effect?

Conclusion

At mid-century, organizational analysts at Columbia University led by Robert Merton and Paul Lazarsfeld launched two ambitious research programs. On one track, Merton and his graduate students Peter Blau, Alvin Gouldner, and James Coleman examined the origins and functioning of bureaucracy using a rich repertoire of methods including small group analysis, ethnography, and survey research. On the second, parallel track Merton and Lazarsfeld established the Bureau of Radio Research to examine the dynamics of mass communication. Methodological pioneers, they developed the focus group method and used projection booths to study the demographics of audience reception well before their colleagues in comparative literature discovered “reception theory.”

Whereas our Columbia predecessors charted the rise of bureaucratic organizations and the emergence of mass communication, we have a new opportunity, at our century’s turn, to *chart the emergence of collaborative, non-hierarchical forms in an era of interactive media*. But the analogy holds only to a point: if Merton and Lazarsfeld could pursue their twinned projects in parallel, ours must be conjoined in an era when questions of organizational design are closely related to design of the digital interface. We take up that challenge in this research project to develop new methodological tools to study the changing topography of the political field in a highly visible test of the transformative potential of democratic participation.

By tracing how the results of the face-to-face, digitally-assisted face-to-face, and online dialogues have been interpreted and used both by their sponsors and by other parties in the process, we will shed light on the dynamics of policymaking, media coverage, and advocacy that determine the degree to which public deliberation actually informs public policy. By isolating the special challenges that the sponsors of online dialogues have faced, we will be able to identify potential obstacles to the wider use of electronic democracy in policymaking.

Personnel

The research team for this project is uniquely situated to carry out this ambitious study. The PI and Co-PI have long-standing interests in democratic processes, Stark from the study of democratization in Eastern Europe after the Cold War and Polletta from the study of social movements in the United States. The mission of the Center on Organizational Innovation (COI), which Stark directs and to which Polletta is an affiliated faculty member, is to study the co-evolution of collaborative organizational forms and new digital technologies. To that end it has sponsored a set of innovative research projects on how firms and civic associations are using information and interactive technologies (see www.coi.columbia.edu).

Our research team, moreover, has been actively involved in researching problems of response, recovery, and redevelopment in Lower Manhattan almost immediately following the attack on September 11th. Stark and one of his graduate students had been conducting ethnographic research in the trading room of a major international investment bank located in the World Financial Center, and they were invited to observe its painful relocation to New Jersey already during the first week when trading resumed (Beunza and Stark, 2003). On December 4, 2001 the COI convened a closed roundtable discussion focusing on the role of technology in immediate response and recovery. The participants were senior executives, including Chief Information Officers and Chief Technology Officers, of companies directly affected by the attack (such as Cantor Fitzgerald, Merrill Lynch, Deutsche Bank, Sun Microsystems, etc). Analysis of the transcripts of that meeting and findings from our related field research point to the importance of self-organization in response and recovery (Kelly and Stark 2002), and a similar impulse appears to lie behind the spontaneous creation of so many civic associations related to the longer-term process of redevelopment. Struck by the early calls to make the redevelopment of Lower Manhattan a participatory process, in November 2001 Polletta began participant observation of groups and coalitions that formed to press for public involvement in planning. She joined the steering committee of *Imagine New York*, a coalition of civic groups that eventually involved thousands of New Yorkers in discussions about the future of Lower Manhattan, and began to study more broadly the processes by which new and old advocacy groups negotiated a changed landscape of citizen participation.

David Stark, Principal Investigator, is Arthur Lehman Professor of Sociology and International Affairs at Columbia University and a member of the external faculty of the Santa Fe Institute. He is a recipient of a Guggenheim Fellowship and is currently on leave at the Russell Sage Foundation in New York City. Stark has been studying organizational innovation for more than twenty years in a variety of settings, using combinations of ethnographic field research and network analysis of quantitative data. His book, *Postsocialist Pathways* (with Laszlo Bruszt) makes a case for deliberative associations as alternatives to markets and hierarchies in coping with the institutional uncertainties of the transformation from communism. Since joining the Columbia faculty in 1997, Stark has turned to his attention to another transformation: changes in economic and political life in the era of new information and interactive technologies. With

anthropologist, Monique Girard (Associate Director of the COI and a senior research associate for the proposed project), he studied a new media startup firm in Manhattan's Silicon Alley from boom to bust (Girard and Stark, 2002). With Daniel Beunza he conducted ethnographic field research in a Wall Street electronic trading room focusing on changes in socio-technical networks in the wake of the quantitative revolution in finance (Beunza and Stark 2002, 2003). He has also written on user participation in the design process ("Permanently Beta: Responsive Organization in the Internet Era," Neff and Stark 2002), on the use of information and interactive technologies in the immediate wake of the WTC attack (Kelly and Stark 2002), and on the civic associations and interactive technologies in Eastern Europe (Bach and Stark 2002, 2003; Bruszt, Stark and Vedres 2002). As this partial list of co-authored papers indicates, Stark has an excellent record of working and writing together with his post-docs and graduate students, and the proposed project promises similar opportunities for mentoring.

Francesca Polletta is Associate Professor of Sociology at Columbia University. She brings to this research expertise on the conditions for democratic decision-making, the role of advocacy organizations in policymaking, and methods of discourse analysis. Polletta recently completed a comparative historical study of experiments in movement democracy, entitled *Freedom Is an Endless Meeting: Democracy in American Social Movements* (Univ. Chicago, 2002). The book is part of a larger agenda aimed at understanding the processes by which particular understandings of democracy gain institutional purchase, defining new lines of contention as well as modes of cooperation (Polletta 2001). Polletta has published widely on contemporary and historical social movements (Polletta 1998a; Polletta and Jasper 2001; Goodwin, Jasper, and Polletta 2001) and on the role of culture in institutional policymaking (Polletta 1998b). Since November 2001, she has been studying decision-making around the redevelopment of the World Trade Center site, combining participant observation with longitudinal interviews to determine whether new modes of public deliberation are reshaping traditional urban planning processes. Past professional experience in urban design in New York City gives her contacts in those circles as well as a grasp of the complexities of the development process.

Monique Girard is Associate Director of the Center on Organizational Innovation at Columbia University.