Lessons of the Lower Ninth: methodology and epistemology of video ethnography

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Abstract

This essay is an account of use and advocacy of video ethnography as a social research method. We focus on the contemporary technology of digital video in contrast to prior methods of ethnographic data collection, using the Lower Ninth Ward of New Orleans after Hurricane Katrina to describe the capture of an infrastructural context. The importance of audio is emphasized, including the sound of silence and natural sound. Comparing camcorders to still cameras, we argue that former are superior for methodological reasons, including vivacity and deflection (the process through which methodological tools construct the boundaries of interaction). We conclude by arguing that video ethnography has important epistemological consequences, representing an opportunity for the expansion of social scientific outputs, understanding, and public engagement. © 2006 Elsevier Science Ltd. All rights reserved.

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...for the Third Age was over, and the Days of the Rings were past,
and an end was come of the story and song of those times [1].

1. Introduction

Unique moments define different methods and encapsulate their strengths and weaknesses. This article focuses on audiovisual ethnography as a method, and uses our field experiences in the wake of Hurricane Katrina—in some ways the worst natural disaster in American history—as an illustration. Although video data may be used for structured coding and quantitative analysis [2], video ethnography is fundamentally qualitative in nature. It is more revealing to compare it to close cousins, such as traditional ethnography and photographic representation, than to surveys and experimental work.

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In his introduction to ethnography for epidemiologists, Michael Agar tells about an episode that occurred in southern India in which he took a packed lunch in his knapsack before walking to a nearby village. The cook placed a lump of charcoal on top of the food, not for cooking but for protection against spirits. That led to discussions with villagers about the occasions (particularly around noontime) and types of people (especially young wives and labor migrants) that were particularly liable to danger and attacks, eventually resulting in a greater understanding of village culture and modernizing influences [3]. Agar's story, which he cited as a parable to illustrate participant observation, the importance of context and coherence, and the construction of understanding from problems or "rich points" in fieldwork, may be found in a section with the nostalgic title "The Old Days."

The "Old Days" of remote villages and lumps of charcoal are passing. In the new millennium, developments in connectivity, communications technology, and continually evolving media have become so important that the international community came together not once but *twice* for World Summits on the Information Society. In the fall of 2005, the second summit approached, as did Hurricane Katrina. For one group of sociologists at Louisiana State University, the hurricane swept away our doubts, and the flood washed away our sociographic sins. It became a defining moment, as epistemology and practice collided, and opportunity and obligation merged. Our team had spent the last few years exclusively in international work—Nairobi, Thiruvananthapuram, Accra, Concepcion, Los Banos. Now we were truly in the eye of the storm, and the storm was at home. As one colleague said, when Katrina hit, "Maybe all that experience was just preparation."

In what follows, we outline several considerations for the practice of video ethnography. For the video ethnographer, the social world consists of actors and events. The ideal of video ethnography is the capture of situations, the real occasions of dyadic, group, and crowd interactions, where the dynamics of social life occur [4]. Video ethnography is compatible with the "extended case method" described by Buroway [5], but it does not presuppose a particular theoretical approach.

While our own approach is a form of radical micro-sociology, we do not see a great deal of difference in its sociotechnical application were the investigator to approach his or her subject using Marxist concepts of domination and reproduction. Macro and micro approaches to sociology are uninteresting from the standpoint of data collection, since reified theoretical constructs like "society" cannot be filmed. Close observation of the micro world is not just an option but a necessity. There is only one possibility for the video ethnographer: to film the events and actors within the frame and to embark on a tenacious search for the best possible frame for the longest possible time. In that sense, *video ethnography is the purest form of sociological consciousness*—because it is consciousness rather than theorizing. Theory might tell you what is important, but it will not get you your shot.

In the first section of this essay, we introduce a particular social context, the Lower Ninth Ward of Orleans Parish in early October 2005, about one month after the worst natural disaster in American history. Using the Lower Ninth in most of our illustrations, we first describe our initial experience, capturing the infrastructural context of time and place. We then turn to the importance of audio, emphasizing both the sounds of silence and the importance of wild sound. In the next section, we argue that camcorders are superior to cameras for methodological reasons. The degree of vivacity is important here, but also the degree of deflection—the process through which methodological tools construct the boundaries of interaction. Finally, we argue that video ethnography has important epistemological consequences, representing an opportunity for the expansion of social scientific outputs, understanding, and public engagement. While we stop short of proposing that ethnographers completely cease the use of still cameras and stand-alone microphones, we do feel that they are a waste of time and money, anachronistic at best.

2. Drive-throughs and infrastructural context

To borrow from Fellini's description in his *Satyricon*, the Lower Ninth Ward of New Orleans embodied "the infinite variety of life." In the period after Hurricane Katrina, even as the waters were being pumped from the now famous ward, Hurricane Rita swept through the makeshift levees and the Lower Ninth flooded again. In early October, when the water was finally gone, on the first day

residents were allowed back, we received permission to enter. Not knowing where the main breach occurred and disoriented—like many of the residents themselves—we passed the checkpoints but turned the wrong way, right off St. Claude into the Holy Cross neighborhood.

And so it was that our first interviews were in the "lower" Lower Ninth. The houses were demolished. Rubble and belongings littered the streets and yards. There were a few residents—every third or fourth block. The devastation was complete. Professional novelists and wordsmiths, with greater skill than sociologists, are inadequate to a task that is trivially simple for any passing tourist with a camcorder: *capturing the infrastructural context of time and place*. So we simply rolled down the windows, pointed the cameras out the vehicle, and began taping segments of the streets south of St. Claude, turning right and left at random. This was a moment in time, a temporal slice of the Ninth Ward at the time that residents returned.

It did not take a sociologist to recognize that recovery would be difficult and time-consuming at best—if it occurred at all. What we missed, in those early days, was the more systematic video work that is necessary for large-scale areas—we were simply too stunned.[1] We evolved a more useful type of capture which we hope to repeat every few months for the next ten years. Our procedure is to begin at the boundary of Orleans Parish, at the 17th Street Canal near Lake Pontchartrain, and to drive the city streets through the parish from the east and into St. Bernard Parish, finishing our tour at the Chalmette Battleground. The route is winding, and generally (but not completely) avoids major thoroughfares so that the speed of the vehicle can be sufficiently slow. Cameras are positioned from the rear windows at 45 degrees to forward, while a navigator calls the turns to the driver. Videographers call for stops to change and label tapes. A single drive-through of this nature provides a video map of the urban landscape, while a series of drive-throughs provides comparative infrastructural evidence of change—or for much of New Orleans after six months—stasis.

3. The importance of audio

Few use the preferred term for the method described here: *audio*-visual ethnography. To put it plainly, audio trumps video. It simply cannot be overemphasized that the most difficult and crucial issue in the practice of the method is the acquisition of audio. Consumer-level camcorders have combined the acquisition of audio and visual signals since their introduction in the 1970s. This contributes to their user-friendliness, but typically leads novices to a fundamental pitfall involving the neglect of sound. Most people, when they get a camera in their hands, push the "Record" button and watch the screen, figuring that the audio will take care of itself because the microphone is pointed in the direction of the lens. But for the many cameras fitted with omnidirectional microphones, that is not the case. In documentary work until recently, and in feature films even now, sound and picture were recorded separately. The advantage of such a system is that audio cannot be ignored and the necessary attention is given to its quality. Of course, the disadvantage is that a great deal of effort must be spent on the accurate synchronization of timecode and the recombination of sound and picture in post-production. Indeed, if modern camcorders did not solve this problem there could be no serious advocacy of video ethnography as a method: it would simply be beyond the reach of the single investigator.

Early 21st century ethnographers need to establish that sound is more important than picture in order to redress the imbalance that occurs when those who are used to field notes and sound recording first experience the vivacity of video. It is virtually impossible to ignore the sheer beauty of the small screen. What is quickly revealed through careful screening of tapes and confirmed through audience screenings in classrooms and professional meetings, is that a shaky camera and a poorly framed shot can be irritating. But given the familiarity of contemporary audiences with modern editing techniques, it is often ignored or viewed as interesting. In contrast, poor-quality audio is always irritating, always detrimental to analysis and presentation, and injurious to results.

[1] Robert Sampson and colleagues used such a method for their systematic coding of "broken windows" issues in several hundred neighborhoods of Chicago [6].

Given the importance of sound, it may seem odd that audio-visual data in the immediate aftermath of Hurricane Katrina will be remembered for the sounds of silence. As we realized our Ninth Ward navigation error, and approached St. Claude from the south, every street was blocked by military personnel. At the fourth try we made our way through and crossed over into the most devastated section of the city, a landscape of horror and haunting beauty. None of the former residents were there—it was still considered too dangerous in this area, and perhaps too sensitive. The streets were mostly impassable—a few had been cleared to allow heavy equipment to reach the Industrial Canal levee. Odors of mold, rot, and flesh were commingled in this place of ruin. There were limited opportunities for drive-through video that would establish the infrastructural context. So we got out and as we walked through our "nearby village," we felt as if we had encountered another planet, not another culture. We did not think to bring a lump of coal, but we had our cameras and microphones.

Where there are no people, there are no interviews. Where there are no interviews, are there no voices? There was the voice of the ethnographer reacting to strange surroundings. There were interactions between investigators, our team. But far more important was the background soundtrack, the record of silence. It is standard for production sound engineers to practice listening, to become adept in the recognition and assessment of "invisible" sounds, low-frequency hums and haws, ticks and taps, even the equipment murmur of the microphone, infiltrating the precious traces of audio record. With very little effort—take the Sony MVR-7506 headphones and a shotgun mike—the ethnographer discovers the audio that provides a continuous, imperceptible soundtrack in the real world. This leads to an important rule: in all cases, the ethnographer should "kill video" for at least one minute and record what are termed "wild sounds." Not only does this provide a sampling of real audio context, but it provides an essential sound track for mistakes and problems that need to be covered during editing for presentation.

The silence of the Ninth Ward was a *magnified* version of the soundtrack that accompanies all hurricanes, and perhaps all "natural" disasters. Wind and rain are generally brief, of great interest to the news photographer but of only momentary interest to the ethnographer, whose main work is to understand the monumental social process of the aftermath. For Hurricanes Katrina and Rita, mikes and headphones were unnecessary to the recognition of the dominant detail. Almost everyone whom business or sorrow brought to the disaster zone soon commented on the silence. That recognition is social: we hypothesize that it contributes to the solidarity that follows a disaster, then dissipates as the conventional, machine-based soundtrack reemerges in the medium and long term. A soundproof room in a recording studio is designed not to eliminate sound but to "proof" desirable sounds from outside, unwanted sources. The silence of disaster zones, bereft of machines and reduced in population, clarifies the human step—in the metallic bend of an awning now on the ground, the crunch of glass—and purifies the natural track—the mosquitoes buzzing near their new breeding puddle, the rapid rumble of wind. The background distills the voices within sound holes. The tradeoff in traditional ethnography is that less systematic measurement of variables is accompanied by richer contextual formatting. In the new world of video ethnography, the context is profoundly enriched with sound and images.[2]

During the introduction to the main science and engineering event at the World Summit on the Information Society, the video images of the devastated Ninth Ward were shown as a backdrop. It was relatively easy to segregate the audio—since the speaker would provide that—and roll the video. It could remind the audience of the temporality of information and communication technology, of the intrusion of an alterative to the "highbrow" technologies that were the focus of the Summit, a world without communication, where people had been and would soon be once more.

4. Why video ethnography is superior to photography

[2] Regrettably. it continues to lack the olfactory track of the original.

We begin with an example of deflection, the sociotechnical process of boundary construction. The London Avenue canal is infrequently visited by the media, now that Hurricane Katrina is long gone. It was much less interesting because it was the most complex of the three major canal breaches. The 17th Street canal and the Industrial Canal were popular for their social stories: rich whites and poor blacks who had been wiped out, who did or did not have insurance and political clout. London Avenue homeowners were different: they were a mix of whites and blacks, living together, and the blacks were sometimes better off. We interviewed three retired homeowners in the wreckage of a house. After some discussion of canals and evacuations and rebuilding, an elderly man, still leaning on his walker, asked that the camcorder be turned off. "I was near General McArthur when the Japanese signed the surrender," he said. "We went into Tokyo and looked around. You know, after we'd bombed it, Tokyo did not look as bad as New Orleans after Katrina." The statement was powerful, not for its literal truth, but for its location, its placement in time and wreckage. We asked him why, why not have such a compelling account on camera? "This is not about me," he witnessed. "This should not be about me."

Sarah Pink [7] characterizes visual ethnography as both photography and video, but she devotes less attention to video for the justifiable reason that it remains a minority practice.[3] Her volume contains little that focuses specifically on the best method of data collection for ethnographers, and devotes most of the articles to the anachronistic technique of photography. Various authors argue for the importance of photography, either as an interview stimulus or a way to examine social context. We disagree with this view; photography is a poor second and should be avoided in favor of video if at all possible.

First, there is nothing special or unique about photographs when they are used as tools in an interview. It may be true that pictures are sometimes useful as interviewing stimuli, but there is nothing novel about showing people photos, and the practice is not generally more fruitful than skillful questioning. Video can just as easily be shown to informants— immediately with the camcorder that was used to record it, or from a laptop shortly afterward. But the success or failure of video ethnography as a method has little to do with its use as a direct stimulus for informants.

Second, if still photographs are a desired output, they are easily captured with the same devices that are used for video. It makes little sense to become enamored of a technology that offers still but not moving pictures. Six months after Hurricane Katrina, it was common for camcorders to capture three megapixel jpeg images with the push of a button—a camcorder is also a camera. But our video ethnography group rarely uses that option, which brings us to the core reason why modern video is a superior methodological tool: video is high-speed photography. Standard DV format records at 29.97 frames per second.

Third, and our most important objection to the static orientation that selects a moment in time and preserves it for viewing and analysis: process inferences are inevitably based on a moment in time rather than a segment of time. The strongest argument for video ethnography is its ability to capture social process: *the collection of data over a continuous period of time for analysis and presentation.* This should be a noncontroversial claim. Indeed, since both photography and video involve the selection of temporal slices, who could object to the simple point that more data is better than less? The consequence is equally simple: video is preferable to photography and camcorders are better than cameras for methodological purposes. One Congressman put it simply, after the release of the video of a conference call involving the Governor of Louisiana on the day of Hurricane Katrina: "If a picture is worth a thousand words, a video must be worth a million" [8].

4.1 Vivacity and deflection

[3] Pink's discussions of video in ethnographic research and representation are excellent introductions to the subject, especially given the general absence of source material for illustration [7, pp. 77-93, 138-54]. It is as if most sociologists who recognize the importance of video ethnography shy away from its implementation and yield the field to documentarians, which is precisely what they must avoid.

There are objections to this view, offered equally by proponents of stills and those who adhere to traditional audio recording of interviews. Subjects are reluctant to speak on camera. They change their behavior to suit the recording situation. "Under the lights," they reveal only the positive side of the story.[4] These objections combine the notion that methodological interventions change the behavior of social subjects (an issue that is manifestly over-rehearsed and under-studied) with the idea that videography involves special epistemological dangers that undermine the nature of our knowledge about the social world. While the best answer to this objection is simply, "try it for six months and see if this view still makes sense," our theoretical understanding of the matter can be enhanced through the idea of deflection. "Deflection" refers to the process through which methodological tools aid in constructing boundaries for investigator/subject interactions. In the example above, the informant at London Avenue expressed a willingness to share his comparison of Tokyo and New Orleans and the moment of deflection was the request to move off camera. The video ethnographer relishes such moments as opportunities. While the combinations are simple (video, photos, sound only, video without sound, field notes), the moments of transition are endless.

A methodology, in the broadest sense, is the application of a technology or device to some aspect of the world to produce traces that serve as the basis for analysis and interpretation [9]. We describe deflection as a process that involves methodological tools, described as "aids" because the process of boundary-making is valuable, and the negotiation of those boundaries as an important part of developing relationships with informants who are critical to the ethnographic process. In the social science world, deflection is in operation when an interviewer begins to make notations on a hard-copy survey in the presence of a respondent. It operates when an investigator leaves her subject to interact with a computer in a cubicle, or finishes her introduction and begins a small group experiment. It operates when an ethnographer introduces himself as *researcher* for the first time to a group that has gradually warmed to his presence. Our interest here is in videography: how does video recording technology impact the interaction of ethnographer and subject?

Video ethnographers quickly learn that there are several recording interactions that occur with respondents in interview situations. In the ideal typical case, the researcher introduces himself, receives permission to record, turns on the camera, and films in a continuous sequence of questions and answers until the termination of the interview when the camcorder is turned off. Every videographer knows that what may follow is the "Columbo moment"—the deflection of their interaction into a new phase that creates a different kind of relationship between researcher and informant. The subject is now receptive to additional inquiries that are "off the record"[5] and often volunteers additional information that is not randomly related to what has gone before. It is insightful, personal, seemingly confidential. The description "less guarded" directly implies the deflection. The non-recorded phase of the interaction can last longer than the recorded phase. It would be a legitimate, though wasteful, use of video simply to create those deflections since the deactivation of the device involves the activation of confidence: "Now I can tell you some things I do not want other viewers to know." What is shared at this deflection is often indistinguishable in content from the kinds of issues that have been discussed "on camera." But the tone and meaning shift, and the deflection serves the development of the relationship, especially when the subject's trust is reciprocated by the ethnographer. Avoid the tendency to say, "Damn, I wish I had kept the camera running." You don't.

The ideal typical case just described rarely occurs, which is why deflection is much more complex than pushing a Pause/Record button. First, there are four recording variants that should be considered during opportunities presented by the situation and the willingness of the respondents. The technology may be used to record standard video (sound and picture), sound only, video only, or still images. These recording modes are listed roughly in the order of deflection, with standard video offering the greatest potential for shifting interactional boundaries. Note that high deflection is a simple function of flexibility. Video technology does everything that other technologies do (capturing still images or sound) so its deflection potential is additive. Instead of turning off the camera completely, you can "turn off" the image. In the days after Hurricane Katrina, as our team

[4] Lest we be misunderstood, professional lighting is not necessary for the acquisition of good quality video.
[5] The reader is asked to pay particular attention to the pronunciation of this phrase.

interviewed displaced persons in shelters and parking lots, some informants preferred that we capture audio only, in which case we put the lens cap on the camera. Sound recording has long been used in ethnographic fieldwork, and offers greater potential than photography, which is a poor fourth, perhaps higher only than written notes taken on site. Traditional ethnography—"hands free" mode in our terminology—is lowest in deflection, clearly lowest in vivacity, but allows the highest level of observer attentiveness.[6] It is lowest in deflection because after the ethnographer is introduced and subjects are aware of his or her role and presence, there is continuous interaction and no moment marking relational shifts.

Second, the idea that there is one researcher and one informant is a simplification in fact and a situation to be avoided. While it makes the ethnographer's task more challenging, occasions involving multiple informants and even multiple videographers are often the most productive. Subjects will point to objects, activities, and even other subjects. They "take the floor" in conversation, emphasizing and arguing whether or not the camera is on them. Do they amplify their behavior because they want to be filmed, or refrain from speaking because they are reluctant? Our experience suggests it is possible, but unlikely: those who are more vocal in the absence of a camera are also more vocal in its presence. Does the content of their discourse shift, owing to camera consciousness, such that the data collected by the sociologist will be different, the analysis and conclusions different? While this is a possibility, it no different in principle from the same question asked of the traditional ethnographer who has no way of assessing the matter owing to the low level of deflection.

While interviews are necessary background, they are second best.[7] Compared to the interview—a legitimate and sometimes useful means of acquiring information about the social world—an event, even a dyadic interaction, drips with richness and complexity that are sometimes overwhelming. Events (situations, interactions) are the stuff of the social world, the ethnographic gold standard. Since many events are public, broadcast media are not only standard actors but often privileged. The ethnographer, along with the journalist, covers an event, including meetings, forums, and press conferences as well as the actions of voluntary associations, activists, and overtly political organizations. In the U.S. today, "openness" and "transparency" are standards that are often violated, but we have been surprised at the complete access that is often granted without credentials or even introductions.

To illustrate the superiority of video ethnography over photographic methods we describe a Congressional visit to the Lower Ninth Ward, which occurred in February 2006. We present a photograph—an imaginary photograph to be sure—that is close to a perfect, static representation of the disaster that was Hurricane Katrina, and follow with a description of the dynamic process of the event that we inscribed using videographic methods. The Lower Ninth has drawn unprecedented numbers of tourists, political activists, politicians, and media since it became open to the public, despite looking only marginally better than it did after the water was removed. The site of the Industrial Canal breach was, to post-Katrina New Orleans, the primary place of pilgrimage, where the scope and degree of devastation could be seen in an instant, in panorama, with the backdrop of the infamous barge that floated through the levee breach. Most who made the journey came to the site with vivid images of African-Americans stranded on rooftops during the first days of September 2005. This was where "it" happened.

Two important activist groups were part of the Congressional visit, each having a keen interest in the flow of federal funds to Louisiana. The first was Common Ground, a grassroots advocacy group for residents of the Lower Ninth Ward; the second was Women of the Storm, a loose association of prominent women. Their explicit mission was to bring members of Congress to New Orleans to see

[6] Field notes that are recorded off line, as the researcher retires from a period of observation to write and reflect, are rich with selection and enshrouded in interpretation.

[7] Interviews can be both illuminating intellectually and captivating visually when they are seamlessly incorporated into event videography. The primary notion here is to accept that people are dynamic actors in the world, who move around and interact with others, providing information in the context of these activities rather than from the sanctuary of home or office. It goes without saying that these sanctuaries are important loci as well, which is why "stand alone" interviews are a legitimate form of video ethnography. But what needs emphasis in the present context is that they are a specific type of event, among others, and their use should be minimized.

the devastation, in the belief that visual proof would be more likely to open the federal purse strings than conventional lobbying activities.

The Women of the Storm were extremely successful in organizing these Congressional visits to the city. One of the early visits was a three-day affair involving 34 representatives, including House Speaker Dennis Hastert and Minority Leader Nancy Pelosi. The tour included press conferences, a visit to the Mississippi Gulf Coast, and the 17th Street Canal breach. As always, the tour included a visit to the Lower Ninth Ward, to the site of the levee breach. Congressional aides kept the media posted of the group's progress using Blackberries and cellphones. As they closed in on the site, we were asked to move our vehicle to make way for two buses, as the police judged that we might block an exit route. Former residents had been trickling in for some time, and Common Ground activists walked over from their home base, the "blue house" that had been gutted and renovated, symbolizing the hope of return. Instead of the silence that met visitors in the early days, members of Congress were greeted with a cacophony of hammering and packing equipment as contractors for Taskforce Guardian, organized by the Army Corps of Engineers to repair the breached levee, demonstrated their frenetic activity.

We choose a single moment for our imaginary "golden photograph." For the sake of discussion, we assume that the photo is wide angle, and that we will use a low helicopter or crane for our setup. Framing to the east or west is compelled by the choice of foreground and background emphasis. Our photograph is constructed to incorporate virtually all of the principal players and antagonists in the Katrina saga. From east to west we see the following ten actors:

1. Displaced residents of the Ninth Ward and activists from Common Ground, some of whom are holding protest placards, one with a megaphone.
2. Security personnel (New Orleans police and guardsmen).
3. A field of rubble, one city block long, strewn with personal possessions, and no houses standing.
4. A semi-circle of news media equipment including tripods and some cameras.
5. Reporters and camera crews, some of whom hold cameras aloft.
6. Members of Congress in a semi-circle facing a podium.
7. A podium, behind which stands a high-level official with the Army Corps of Engineers.
8. A scattering of staff members and a row of explanatory charts on stands (note these charts are stable—the protesters' charts are mobile).
9. Construction workers with heavy equipment such as cranes.
10. The Industrial Canal levee.

Variations of this unseen "golden photograph" were widely available the following day. However, the variations were different, in that the ground-level shots usually left out numbers 1-3 or 8-10 depending on the photographer's position. The uniqueness and importance of the moment was the culmination of a long series of negotiations by activists at both ends of the socioeconomic spectrum with key decision makers who would shape the future of these ruins through legislative appropriations. Residents faced decision makers across the field of destruction, as the latter stood before technical experts and machines that would provide safety from future storms.

Our golden photograph is static by definition: we do not know what happened, what was about to happen that day. Simple observation and field notes could tell the story, but it would be better if we had a few more photographs. We could see the passion on the faces of the protestors, the approach by Rep. William Jefferson, the movement of the protestors, and the ultimate mingling that occurred with members of Congress before they reboarded their buses. Better still if we could hear the chanting, listen to the Army Corps spokesman, hear the words of the Congressmen, the impromptu interviews, the crash of machines restarting, and the mingling of citizens with government representatives on the street before their departure. The overall structure was indicated in our golden photograph, but the interactional dynamic was most intense at the moment of mingling, as representatives broke ranks and began to greet residents. The bodily movements of the protestors became more subdued as Jefferson approached, began to talk, then began to listen.

Many photographs would be needed in order to see one or two other representatives addressing questions from the media, surrounded by onlookers. A microphone would be needed as well, to

capture events on the outer circle, when a man began to voice his question forcefully and repeatedly: "Why did it take you six months to come?" Before long, decision makers began to emerge from the press circle, shaking hands, discussing in dyads and triads, hugging the residents. The interactions were quiet, peaceful, and hopeful. As members left to board their buses, they told the residents to call them, gave their numbers.

What methodological tool can capture all this? One that registers thousands of photos as well as continuous audio, instantaneously synchronized with these moments in time.[8]

Beyond the inherent fascination of the sequence and the capture of video that allows sociologists who were not there to witness and analyze the event, there is an important research question that can only be addressed by analyzing the video. The flow of that Ninth Ward event took us from the demanding behavior of the protestors and their isolation from the Congressional representatives, through a series of actions, into a merging of the two groups that lasted several minutes before the boarding of buses. Owing to the way the event was organized and its location, the representatives may have actually *outnumbered* the protestors. Security, which initially separated the two groups, dissolved, and the representatives and protestors seem genuinely to enjoy their interactions.

Two alternative processes provide an explanation for this transformation. In the first, members of Congress discovered, via the contingent flow of bodies through momentary positionings, a situation that distinctly resembled one with which they were quite familiar: the "meet and greet" routine of the campaign gathering, in which hands are pumped, eyes are locked, physical contact occurs, and the skillful campaigner seeks a "quick bond" with the voter/contributor. In the second process, those very skills, combined with the pain and emotion of the residents, caused representatives to visualize and feel, in a way that their Washington and district residences do not allow, the "truth" of the Ninth Ward, the tragedy and beauty that seemed to encapsulate the universal human experience of life, suffering, and will. Only a careful analysis of the tapes can suggest whether one of these processes is more likely than another.

5. Epistemology and practice

We have argued that camcorders are superior to cameras for methodological reasons. We believe they are also better for epistemological purposes as well. Understanding the social world is the core task of scholarship, and the nature of that understanding is a foundational issue. Most would agree that understanding is a state or process that occurs at the level of individual humans, so the core questions concern the kinds of data that can be collected and analyzed, issues that we began to address above, but also the ways in which the results are presented.[9]

Our starting point is that the understanding sought by scientists and scholars may be individual, but the process is collective. The "lone genius" is a fine image, but modern academic work is fundamentally collaborative, with professors engaging in discourses and presentations that are subject to evaluation and critique by peers. Some go further and engage in outreach in the form of presentations to those outside their specialty areas, outside their discipline, and for the broader public. At the present time, it is fair to say that scholars, funding agencies, and universities value outreach as part of the outcome of the research process, as a "back to fundamentals" reminder for those who burrow too deeply into their own research communities.[10] Work that does not address "first-order questions," or issues of enduring importance, is not well positioned for substantive progress, but only the solution of internal, programmatic problems [13].

If understanding is a cognitive process, its chief media are typically discursive. The collective processes described for over a half century by sociologists of science occur through the mediation of

[8] Doug Harper's sequence of bicycling photos [10, pp. 722,723], taken over several minutes, yields much the same conclusion when he acknowledges that "it is clear that one would need more visual information to explore this subject in satisfying depth. Probably video, with simultaneous sound, would yield more meaningful data" [10, p.725].

[9] "Collective understandings" are nothing more than the aggregation of individuals. It is not useful to speak of "collective understandings" as the understandings of decision makers or elites.

[10] See in particular the symposium on public sociology in *Social Forces* and its follow up [11,12].

symbolic apparatus that are specific to scholarly areas, including words, mathematical models, propositions, equations, graphs, diagrams, images, plots, statistics, path models, and so forth. Talk is an essential element of that mediation, as it occurs in laboratories, hallways, and professional presentations. However, what is generally taken for granted in sociology is that the end product of scholarship is a research article or book that will be read by one's professional peers.

This *text-based* orientation to scholarly output has become problematic in the new millennium, given the shift to audiovisual media that began with the widespread diffusion of television in the last century. For some modes of argument, particularly those in which the subject matter is other texts, traditional texts are preferable or essential. But for many if not most areas of social inquiry, a text-based orientation to presentation is no longer adequate to the task of *scholarly* (not simply public) understanding. When new parents, ordinary tourists, and tennis teachers present data that is better at capturing the contextual richness of ordinary social situations than professional sociologists, it is time to take stock. Nothing is easier than to dismiss the analytical emptiness of a birthday video, amateur travelogue, or coaching method. Nothing is harder than to admit the superior quality of their presentation in allowing the viewer the ability to process the situation and engage in dialogue.

Specific models of understanding range from mathematical and propositional to humanistic and descriptive [14, 15]. The assumption, however, is that the component elements of the argument will be woven together in text, a titled string of paragraphs, broken into sections, with notes, references, and exhibits, often accompanied by an abstract. The text-based orientation is perfect for some purposes, such as literature reviews, or the kind of theorizing that is rooted in commentary, elaboration, and exegesis of the views of prior theorists. It is not at all adequate for our purposes here, for this argument would be more vivid and convincing if the reader could hear a version of this text while viewing sequences comparing the processes of reading and writing, editing and viewing, clips of the Ninth Ward, the drive-through method, and the sounds of silence.

Arguments for a continuing orientation to text, for an output based on articles and books, are subject to two inescapable problems. First, the conflation of "written" with "verbal" is clearly unjustified, since oral traditions long predate the textual, and most forms of educational and scholarly presentation rely heavily on oral argument. Second, the traditional approach is restricted to single-track text, an orientation to presentation that is unnecessary, restrictive, and unwarranted. A single-track approach demands the exclusive engagement of visual or aural attention, without the involvement of the other. Although one can imagine individuals who are constitutionally unable to engage both forms of attention simultaneously, the past century of film and broadcast suggest that disability is rare.

5.1 Classroom and conference

The written word has been the primary habitat of scholars since the first universities were formed, but visual methods have long been standard in the context of presentations, pedagogic and professional. When scholars give talks—another way of saying they focus on their audio track—they immediately recognize the value of an overhead projector for the display of graphs, photos, and statistical tables. Even when a text is the basis for the talk, students and first-time presenters are encouraged "not to read the presentation" because it is less interesting for the audience. While overhead projectors have generally been replaced by presentation software, the basic format is the same for the social disciplines: (1) a primary voice provides an introduction of a problem or issue, including an approach or strategy; (2) evidence in the form of exhibits is projected on a screen, accompanied by explanation and clarification; (3) a conclusion is presented. In all of this, a primary audio track is the focus of attention, but may be interrupted by questions and interaction with the audience. The length of presentations varies greatly, from the 15 to 30 minute standard at a scholarly conference to an hour long "job talk," to the three-hour lecture common in China. The use of video in such presentations is easy and compelling.

6. Conclusion

The centrality of digital images in research may require a shift in orientation. Video ethnography is shorthand for *audiovisual* ethnography. Our argument is that just as a survey researcher would wish to ask multiple questions rather than a single question, just as an experimentalist would hope to vary an experimental condition rather than perform a single run, ethnographic work is now best conducted by means of videographic tools. The ethnographer who now chooses to take a series of photographs rather than capture an event on video borders on the perverse. It is one thing to admit one is not experienced with the technology; it is another to refuse to learn a system of extreme simplicity that captures data of overwhelmingly superior quality. A single seminar during the course of graduate training would be sufficient to produce a generation of sociologists who would inspire fear—and thoughts of retirement—in the minds of documentarians.

There are many visual sociologists who, if they reflect honestly on the matter, will admit the truth of this argument and would be willing to make the transition to video ethnography. We believe the time is ripe for a declaration of amnesty, so that photographers and sound recordists feel free to use their photographs as screensavers, and exchange their cameras and microphones for camcorders. With their low cost and ease of use, the current generation of camcorders makes it seem as if an entire industry has been created for our benefit. Ordinary teenagers and tourists have vastly more experience with the technology than the typical ethnographer. It is embarrassing when a professional who specializes in the close examination of social life has nothing better than a camera to record the results of fieldwork involving a staggering expenditure of time and effort, and nothing better to present to his colleagues than photographs in a PowerPoint presentation. And it is frustrating when only slide projectors are available for presentations. It is time for change.

In closing we state two findings based on four years of work in the developing world and six months of immersion in the aftermath of Hurricane Katrina: (1) the importance of editing, and (2) the unimportance of reflexivity. Until the videographer begins to work with the data and edits for presentation, the majesty and complexity of the social world cannot truly be appreciated. Handing over your material to a professional video editor is like asking someone else to write your articles. Writing is part of the crucial process of distilling, analyzing, and understanding one's material. Such a hand off, as every scholar must agree, is not a matter of getting out of grunt work, but an unthinkable loss of opportunity. *Editing is writing.*

The second is that reflexivity—as compared to the critical process of deflection—is a very minor part of interviewing, event videography, and videographic representation. It can occasionally be valuable. Indeed, it is hard to avoid in the early going. One cannot but marvel at one's own genius in spectacular reverse camera work, serious and amusing turn-taking with participants, and the use of the camcorder for break-frame commentary. But your informants know that you are behind the camera. So do your colleagues and viewers.

It is hard not to be nostalgic for the "Old Days," for the walk to the village, the lump of coal, the protection from spirits. But the days of traditional ethnography have passed, with solo sound and photographs soon to follow. The video ethnographer has new destinations, new lumps in the knapsack, and new forms of deflection from spirits. We celebrate the passing of the "Old Days," honoring our masters and forebears, for without them the age of video ethnography would be impossible. Field notes, audio recording, and photographs are no longer adequate for ethnographic data collection, and a text-based orientation to presentation is no longer adequate to the task of sociological understanding. Audiovisual research and representation needs discussion and debate, but *most of all it needs practice*.

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