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## ETHNOGRAPHY IN LATE INDUSTRIALISM

**KIM FORTUN**  
Rensselaer Polytechnic Institute

Think about the timing. The 1984 Bhopal disaster—marking the risks of industrial order, and the already degraded state of industrial infrastructure. The “American” plant in central India was underdesigned for safety, and had not been maintained. The 40-ton tank that released its contents into the air of a sleeping city on December 3, 1984, is where the many failures of many involved systems came together, at a boil (Fortun 2001).<sup>1</sup> Thousands were killed; hundreds of thousands of others were exposed, their bodies becoming even more laced with toxics than mine, yours, and all others in our late industrial age. Understanding of the chemicals released in Bhopal remains inconclusive; they are among the over 100,000 chemicals registered with governments around the world for routine use; the data hasn’t been collected, the science hasn’t been done, to understand how these chemicals affect human and ecosystem health. Thousands of new chemicals continue to be introduced each year (see Figure 1).<sup>2</sup>

The Bhopal plant site today is decrepit and eerie. The old control room is open air and crumbling. The old piping configuration still stands, rusted; former Union Carbide worker T. R. Chouhan can still narrate its workings, pointing out the pathways and junctures leading to the reaction in Tank 610.<sup>3</sup> On the perimeter of the site, an old waste disposal site still oozes chemicals (Centre for Science and the Environment [CSE] 2009). The smell is truly worse than shit. It is the smell of late industrialism. Children play and cows graze within it (see Figure 2).



17 **FIGURE 1.** Tank 610 at the old Union Carbide plant in Bhopal India. Forty tons of toxic methyl  
18 isocyanate were released from this tank in the early morning hours of December 3, 1984.

Zoom out to picture Delhi. New, gated communities house a multinational corporate elite. The future they work for, that they have anteriorized, is that promised and motored by neoliberalism, bolstered by digital infrastructure and wealth but still energized by coal and oil. There are many more cars on the road. And increasing rates of asthma. People can't breathe. Another sign of late industrialism (CSE 2011).

And people can't think. According to a survey of "American Environmental Values" sponsored by the Sierra Club and other environmental organizations, Americans are paralyzed by issue complexity. The survey also reports that "libertarian values are ascendent over communal values" (SRI Consulting 2006). Complexity, but little collectivity. Not a great combination.

This is a world in which Clarence Thomas, former attorney for Monsanto, becomes a U.S. Supreme Court Justice. A world in which Iraqi farmers are told that they are required to plant "protected," crop varieties, defined as new, distinct, uniform and stable—as Monsanto seeds. Seed saving was made illegal; contracts to purchase herbicides, insecticides, and fertilizers were also required (Sourcewatch n.d.). The complexity of these conditions, the entanglements—of business and government, of law and politics, of war and farming, of natural and technical systems—is stunning, and sobering.



**FIGURE 2.** Degraded components of the Union Carbide pesticide plant in Bhopal, India. The site is now abandoned, but remains contaminated with pesticides, chlorinated benzenes, and heavy metals. Groundwater serving local communities is also contaminated.

This is late industrialism, where we've come since 1984.

Again, think about the timing: 1986, Clifford and Marcus's *Writing Culture*, a call to rethink thought—about anthropology and ethnography, authority and the purpose and responsibilities of scholarship. It was historically attuned, and a call to remain historically attuned, a call to always ask about the conditions in which ethnography is produced, and must work within, a call to recognize how discursive forms, including those of ethnography, stage, direct and limit, what is said and not said, who is heard and benefits, who and what remains subaltern, outside articulation. It embodied and animated what has become known as the “language turn” in the humanities and the human sciences.

The original critique was directed at the conceptual, discursive, and social forms of what could be called high industrialism. The concern was with discursive exclusion and the promise of polyvocalism, with ways around the disjuncture between dominant ways of understanding the world, and what ethnographers encountered on the ground.

How, today, do we both stay with and update the call? How, today, at a time when social order and sensibility are worked out on talk shows, a time in which we are *Outfoxed* (2004) by the news, and even the best of coverage insists on

1  
2 “balance,” granting equal time to those few who refuse to believe scientific evidence  
3 of climate change, working with constructs of fairness and appropriateness that  
4 embody simple to the point of simplistic notions of democracy and truth (Boykoff  
5 and Boykoff 2004).

6 It is also a world noisy with new media, streaming through products with  
7 planned obsolescence (Slade 2006). Cell phones and iPods last a year or two. In  
8 2009, when broadcasters switched to digital TV signal, millions of analog TVs  
9 became garbage. Electronic waste piles up and circulates globally, leaching toxins  
10 into humans and animals, soil, air and water.<sup>4</sup>

11 The pipes that carry water to and waste away from households, hospitals,  
12 schools and businesses are now aging, even in metropolises like Washington, D.C.  
13 The D.C. sewer was built in 1889. The average D.C. water pipe is 77 years  
14 old (Halsey 2012). Across the United States, water and sewage systems haven't  
15 been updated; they leak and overflow.<sup>5</sup> And they have no way to deal with what  
16 now passes through them: water laced with runoff from roads and effluents from  
17 manufacturing plants, but also with pharmaceutical residues, including synthetic  
18 hormones (Zota 2010). Amphibians are the new canaries in the coal shaft, exhibiting  
19 skewed sexual development, and extra limbs (Lanoo 2008; Slater 2012). Queer,  
20 in a way that cannot be applauded.

21 And it is a world of even more experts. A world in which cadres of well  
22 trained men and women carry out highly specific functions that maintain the  
23 technical and economic conditions of our times. People specialize in very particular  
24 domains of production, spending their days immersed in the information flows and  
25 practices of biomedical care for asthma, of transportation engineering, of the  
26 design of convenience stores or shopping malls. There is incredible particularity,  
27 and incredible complexity. Incredible skill and pervasive deskilling.<sup>6</sup>

28 Much of the infrastructure, many of the paradigms that have held it up, are  
29 exhausted. Things are falling apart, again.

30 What is the task of ethnography at such a moment?

### 31 32 33 **QUESTIONS CONCERNING ETHNOGRAPHY**

34 The word technology comes from Greek *τεχνολογία* (*technología*); from  
35 *τέχνη* (*téchnē*), meaning “art, skill, craft,” and *-λογία* (*-logía*), meaning  
36 “study of-.”  
37



2 How can we leverage the affordances of ethnography to understand and engage  
3 a late industrial world? How, particularly, can we leverage understanding of how  
4 ethnography works as articulated in *Writing Culture*, in synch with a 1980s flurry of  
5 feminist and postcolonial criticism? What would make ethnography “appropriate”  
6 to the historical conditions in which we find ourselves today? What designs on/of  
7 ethnography should we cultivate?<sup>7</sup>

8 I write here—of leveraging, affordances, how things work, appropriateness  
9 and design—from within Science and Technology Studies, where many of us love,  
10 and love to study technology, understood expansively. Technology, from this  
11 vantage point, is something crafted to enable and direct, routing desire, making  
12 new things possible and possible to imagine. And it should, etymologically speaking,  
13 have an in-built reflexivity, a study of that which is crafted, and of how craft happens  
14 and should happen, that occurs alongside the making and use of the technology.<sup>8</sup>

15 Ethnography can be thought of as a technology in these terms, as a means  
16 through which things are enabled. And ethnography, like other technologies can be  
17 designed in different ways—to draw out what is, the state of things, or to show what  
18 is at odds with extent theory, ethnography as cultural critique (Marcus and Fischer  
19 1986). Ethnography, like other technologies can also be designed to challenge  
20 and change existing order, provoking new orderings of subjectivity, society and  
21 culture, having what Steve Tyler, in *Writing Culture*, called a “therapeutic effect”  
22 (1986).

23 Thus far, it seems to me, we have made good use of ethnography for the first of  
24 these, for understanding, and critique. And critique, to be sure, is transformative. I  
25 don’t at all mean to suggest that ethnography has “just” been critique. I do, however  
26 think there are new possibilities to pursue, directed at transformation, but without  
27 the teleological overtones of activism as usual.

28 Ethnography, I want to suggest, can be designed to bring forth a future anterior  
29 that is not calculable from what we now know, a future that surprises. Ethnography  
30 thus becomes creative, producing something that didn’t exist before. Something  
31 beyond codified expert formulas.

32 The future is anteriorized when the past is folded into the way reality presents  
33 itself, setting up both the structures and the obligations of the future. The future  
34 inhabits the present, yet it also has not yet come—rather like the way toxics inhabit  
35 the bodies of those exposed, setting up the future but not yet manifest as disease,  
36 nor even as an origin from which a specific and known disease will come. Toxics,  
37 like the future anterior, call on us to think about determinism, but without the  
38 straightforward directives of teleology.

1  
2 Derrida, rereading Levinas, reminds that the “future anterior could turn  
3 out to be—and this resemblance is irreducible—the time of Hegelian teleology.  
4 Indeed, that is how the properly philosophical intelligence is usually administered,  
5 in accord with what I called above the dominant interpretation of language—in  
6 which the philosophical interpretation precisely consists.” Derrida also suggests  
7 other possibilities, describing how the concept of the future anterior could have  
8 “drawn us toward an eschatology without philosophical teleology, beyond it in any  
9 case, otherwise than it” (1991:36–37).

10 Derrida writes of the future anterior to think about what both demands and  
11 makes possible a future that would not merely be a continuation of the present.  
12 The future anterior, Derrida says, puts in place a “lace of obligation” that both  
13 binds and unbinds the ethical actor. The possibility of pursuing justice beyond the  
14 determinations of law is one important effect (Derrida 1990:329).

15 Biologists and historian of biology, and translator of Derrida, Hans Jorg  
16 Rheinberger can be read as describing how a future anterior is pursued in science,  
17 through the building of experimental systems. These systems are systems, carefully  
18 designed to work in a way that generates surprises. Experimental systems are not  
19 testing devices, designed to confirm what is already known. They are designed to  
20 allow for the emergence of questions that could not be asked before (Fischer 2007;  
21 Fortun 2003; Rheinberger 1998; Ronell 2005:45–48).

22 Ethnography, too, can be designed in such a way.

23 Partly because ethnography, historically, by definition, perhaps, certainly as  
24 articulated in *Writing Culture*, has affordances that call for openness to what is  
25 foreign, Other, not yet articulable (Bhaba 1994). It tolerates, indeed cultivates,  
26 open-endedness.

27 Ethnography also has a record and habit of shifting in concert with the times,  
28 responsive to both historical conditions and internal critique (of the sort *Writing*  
29 *Culture* offered). And these conditions can be discerned ethnographically. This is a  
30 critical step in the design process that I put forward here.

31 Ethnography, at its best, provides a powerful and efficient way to read historical  
32 conditions. It produces both situated and comparative insight, is able to see across  
33 scale, and leverage different analytic lenses. It can draw out nested and proximate  
34 systems, sensitive to their similarities, differences, and synergisms. Postcolonialism  
35 and neoliberalism, for example, can be seen as phenomena that cut across space in  
36 similar ways, and as phenomena that are exquisitely specific in their instantiations.  
37 The ability to recognize both is an ethnographic signature. So, too, with language  
38 games. The discursive dynamics that we observe and parse can be recognized as

2 those of modernity or “the Enlightenment” and Patriarchy, for example, and also as  
3 specific to particular problem domains, domains with particular information flows  
4 and practices, their own ways of making sense. Many such problem domains today,  
5 in our late industrial times, involve complex conditions, conditions involving  
6 many nested systems—technical, biophysical, cultural, economic—and thus a  
7 multiplicity of interactions, which keep the parameters of “the problem” from ever  
8 settling down. Complex conditions resist explanation in available terms, producing  
9 what I have come to think of as discursive gaps, and discursive risks.

10 Discursive gaps emerge when there are conditions to deal with for which there  
11 is no available idiom, no way of thinking that can grasp what is at hand.

12 Discursive risks emerge because of a tendency to rely on established idioms  
13 and ways of thinking, nonetheless.

14 As when the idioms and thought styles of mechanics are imposed on toxics,  
15 for example. The particular dynamics of toxics are then ignored. Ignorance is  
16 produced. We are continually told that “there is no evidence of harm to humans”  
17 because the evidence deemed necessary is at odds with the condition it is meant to  
18 represent. What is Other to the dominant idiom is colonized by it.

19 Another example is when water and other resource wars are cast as religious  
20 or ethnic wars. It may be that religion and ethnicity are part of the puzzle, but habits  
21 of reading in these terms produce ignorance about environmental determinations.<sup>9</sup>

22 Feminist theory has, of course, taught us much about this kind of cycle, and  
23 the violences of it. Ethnography can help break the cycle, leveraging its capacity to  
24 get at the exacting specificity of a given problem domain. This is critical in these  
25 times, late industrial times in which most problem domains are like the tightly  
26 coupled complex systems described by sociologist Charles Perrow in his seminal  
27 book *Normal Accidents* (1984). The industrial systems Perrow describes—nuclear  
28 power plants, chemical processing plants, air transport networks—are made of a  
29 tangle of technical systems, which are so tightly coupled that it must be considered  
30 “normal” to have runaway incidents that exceed what experts can understand,  
31 much less control. Ethnography has affordances that enable it to effectively observe  
32 and respond to this kind of dynamic, typical of the problem domains of late  
33 industrialism.

#### 34 35 **DESIGNING ETHNOGRAPHY**

36 There are a number of steps in the design process.

37 First, and continuing, is the ethnographic work of discerning discursive  
38 gaps and risks. This is ethnography in a somewhat traditional mode, working to

1  
2 understand what is so, discursively, and materially. Again, feminist theory has  
3 laid ground.<sup>10</sup> We need to understand what is said, what can be said, and what is  
4 disavowed.

5 This understanding, ironically, becomes something we can share, make into a  
6 collective resource, only by rendering it in terms of established idioms, which we  
7 know in advance are inadequate, even violent. This was a key teaching of *Writing*  
8 *Culture*. What we can think or say—even within and in the idiom of anthropology—  
9 cannot but be within established systems of ideality. Thinking in terms of theory,  
10 even poetics, delimits us. So we must proceed with humility, humor, and reflexiv-  
11 ity, reaching to move from the overdeterminations of description to provocation,  
12 knowing that we will have to design for something otherwise.

13 We must next loop, leveraging ethnography not only to describe what is  
14 at hand but also to respond to the discursive gaps we have come to see, and  
15 understand.<sup>11</sup>

16 Our task now becomes creative. We must try, through the design of an  
17 experimental ethnographic system, to provoke new idioms, new ways of thinking,  
18 which grasp and attend to current realities. Not knowing in advance what these  
19 idioms will look and sound like.

20 Ethnography must, then, create a space for deliberation, for worrying through,  
21 for creativity. It must stage encounters. Operating a bit like performance art.

22 Readers thus become users of the systems we build; our interlocutors become  
23 party to what we say. Ethnography becomes polyvocal, as called for in *Writing*  
24 *Culture*, in a way that literally keeps the conversation going, and open.<sup>12</sup>

25 The goal is not to give everyone a chance to speak, as a matter of fairness.  
26 The model is not the town hall meeting or the talk show. But it is about being  
27 open to intervention and foreigners, about hospitality, and solicitude.<sup>13</sup> The goal is  
28 to come together—to literally collaborate, performing the labor of difference, to  
29 articulate something that could not be said, could not be brought together before.

30 Let me provide a few examples of what this might look like:

### 31 32 *The Asthma Files*

33 First, a project that I have undertaken with a number of colleagues, which  
34 we call *The Asthma Files*. I want to highlight the ethnographic looping that I called  
35 for earlier—how insight from the research is being fed back into the design of the  
36 project, functioning as what we call “substantive logics,” which operate alongside  
37 what we call “design logics,” drawn from what is usually thought of as “theory.”  
38 These substantive logics lay out the discursive habits, gaps, and risks of the problem



2 domain in which asthma operates, made up of overlapping systems and worlds. The  
3 worlds of epidemiology and pollution science, of biomedicine and school nurses, of  
4 young athletes and old women, of families in urban housing projects, and in rural  
5 households around the world in which cooking fuels generate an ever-present,  
6 eventually unnoticed but still debilitating smoke.

7 In studying these worlds, and their interactions, we have come to see patterns  
8 and habits, incapacity and inability. A *Lancet* review in 2006, for example,  
9 questions whether *asthma* is an overly monolithic term, which glosses amazing  
10 variation in asthma occurrence. Operating at more of a micro level, a research  
11 group at the University of Texas Medical Branch at Galveston that focuses on  
12 severe, life threatening asthma, has recently changed directions, provoked by  
13 recognition that established understanding of who is at risk, and when, are simply  
14 wrong, or at least out of synch with the data if looked at through the lens of  
15 advanced informatics. In recategorizing people according to their “protein profiles,”  
16 and correlating those to subsets of asthma severity, new research directions have  
17 opened up.<sup>14</sup> Hesitations and shifts like these produce important openings for the  
18 kind of ethnographic encounter I want to help stage, encounters that would trouble  
19 established frameworks, facilitating slippage, so that new questions and idioms can  
20 emerge.

21 Such staging has to consider where the conversation is likely to go. The goal  
22 is not to give everyone a chance to voice his or her perspective, rearticulating  
23 what they think and see. The goal is create a space of creativity, where something  
24 surprising, something new to all emerges.

25 The ethnographer sets the stage accordingly. In dealing with asthma, many  
26 tendencies have to be diverted. First is the tendency to remain disassembled,  
27 such that the various parts never come together. Epidemiologists with large asthma  
28 cohort studies not knowing about air quality data sets maintained by state and federal  
29 government agencies, which they could draw into their analyses, at least attempting  
30 a reading a environmental determinations, for example. Another tendency is to  
31 hierarchically order the types of data and knowledge in play. Asthma geneticists,  
32 for example, reifying the types of data genomics is able to produce, with huge  
33 investments of time and expertise, such that the data produced by air chemists  
34 and chemical engineers, drawn from monitors along highways and atop schools,  
35 is never considered usable, always too noisy, not true enough to what a specific  
36 human body is exposed to and incorporates. A third tendency we actively work  
37 against is a tendency to locate care and cure in the biomedicalized, inhaler-ready,  
38 compliant individual. This is the teleology of most asthma education, carried

1  
2 out by very well meaning nurses, coaches, and parents; a teleology we want to  
3 displace.

4 So we have designed a web platform that supports collaboration among ethno-  
5 graphers working on various components of this puzzle, enabling a collective, mul-  
6 tised ethnography, which we try to keep intensely cross-linked. As the platform  
7 evolves, our interlocutors who work on asthma will be drawn in to the site itself  
8 so that they, too, like the ethnographers involved, are immersed in what we think  
9 about as a juxtapositional logic, a logic wherein divergent ways of seeing (often  
10 the same thing) are brought together.<sup>15</sup> The structure of Bateson's *Naven* comes  
11 to mind here (1962); we want to draw out what one gets when one sees through  
12 different analytic lenses, from different vantage points. Not to resolve differences  
13 nor to merely celebrate diversity, but to provoke encounters across difference that  
14 produce new articulations.

15 This is requiring new kinds of discipline, the discipline to design and then work  
16 with ethnographic questions sufficiently standardized to allow juxtapositions to be  
17 animated. We query all of our interlocutors about the kinds of data they create,  
18 use, and idealize, for example. We also ask about their methodological anxieties,  
19 workarounds, and biases. There are about 30 questions we try to return to. These  
20 questions must be adhered to for the platform to really work. Forced methods,  
21 so to speak, with a critical intent akin to the "forced readings" that Gayatri Spivak  
22 showed us to be so productive (Spivak 1987, 1993).

23 Developments in the environmental health sciences have also taught me to be  
24 patient with this new discipline. It has only been through hard won standardization of  
25 the metadata on environmental health data sets that environmental health scientists  
26 have been able to push into being new ways of understanding and representing  
27 toxicity, regional air quality, nested ecosystems, and other objects of concern.  
28 Diversity of content and form has had to become interoperable (Fortun 2011).<sup>16</sup>

29 Our digital platform thus operates as both a research tool and as a space  
30 to share research results. We offer what we think of as staccato readings, short,  
31 densely cross-linked articulations that quickly move users elsewhere in the system,  
32 where they will see the puzzle from a different vantage point. The system is meant  
33 to provide a portal—a designed way in—to the world as it is, in its incredible  
34 complexity, while destabilizing usual ways of thinking about the world and its  
35 possibilities. So the goals are traditionally ethnographic, in a sense, but with  
36 creative intent.

37 What we want to stage is an encounter with asthma that anticipates discursive  
38 habits that pose discursive risks, mindful, too, of things that need to be articulated,

2 which don't yet have an idiom. Gene-environment interactions in asthma inci-  
3 dence, for example. The connection between air quality and health outcomes. We  
4 know in advance that conventional (scientific) constructs of causation won't suffice,  
5 so we try to animate other ways of making connections, and seeing relationships.

6 We thus loop, turning ethnographic findings back into the system, an ex-  
7 perimental ethnographic system also designed to embody the theories of language  
8 that animated the so-called language turn of the 1980s. So it is both a legacy and  
9 emergent system, theoretically inflected and deeply ethnographic.

### 11 *Convenience Stores and the U.S. (Industrial) Food System*

12 The second project that I want to point to is even more emergent, and focused  
13 on a condition at least as complex as asthma—the U.S. food delivery system. The  
14 point of entry is the convenience store. Michael Powell, another anthropologist  
15 educated at Rice, is undertaking this project in the Los Angeles area, where he  
16 works for an architectural design firm that specializes in the planning of urban retail,  
17 advertising itself as a firm “with a focus on leveraging consumer perceptions.” Much  
18 of his firm's work focuses on food retail, including supermarkets, restaurants,  
19 bodegas, and convenience stores. Through this, Powell has had access to food  
20 executives, marketers, cashiers, and customers. He has learned that there are  
21 nearly 150,000 convenience stores in the United States, constituting a \$500 billion  
22 industry, and that this industry knows it needs to rethink itself and the future. Partly  
23 because tobacco sales, which comprise a huge percentage of convenience store sales  
24 are declining. One type of convenience store also sells gas, which is also likely to  
25 move in different ways in coming years. But what will the convenience store of  
26 the future look like? Will today's convenience store remain? A small, well-lit box  
27 store that sells cigarettes and lotto tickets, coffee, slushees, and hotdogs off heated  
28 rollers on the counter, its shelves stocked with food from who knows where, laced  
29 with preservatives, bound up in plastic?

30 Is something else imaginable?

31 The food industry planners that Powell has interacted with through his firm  
32 want to innovate. And they know how to think about consumer perceptions, and  
33 how they can be shifted. But Powell has been struck by how little they know about  
34 other kinds of thinking about local and global food systems, their interconnections,  
35 and problems. It is not that his interlocutors are not expert; they are intensively  
36 expert, and thus operate in a manner and in a world that is delimited.

37 In Powell's experience, for example, many food industry experts have never  
38 heard of Michael Pollan, a leading voice for people concerned about how healthy

1  
2 today's food is, for people, ecosystems, and economies. There has been a surge  
3 of work critical of Food, Inc. and its factory farms, incredibly high food miles and  
4 unregulated ingredients.<sup>17</sup> And a surge of interest in obesity and other indexes of  
5 food delivery systems gone wrong. But not in the world of the food industry itself.

6 What would happen if these worlds were brought together? One could predict  
7 where the conversation would likely go, based on ethnographic observation of the  
8 assumptions, binaries, and expectations of different players. It could well end in  
9 uncomfortable silence.

10 Could the ethnographer stage something different, a carefully designed en-  
11 counter intended to provoke what neither "side" could say or imagine coming in?

12 Where should the event take place? What questions should be posed? What  
13 sollicitation techniques could be used? How could an ethnographic understanding  
14 of the ways language and meaning work be put to work?

15 Michael Power is now wrestling with all this. I challenge you, too, to think  
16 in these terms—about how the food industry, and its critics, could be shaken up,  
17 but also about ethnography in an array of other problem domains that, in a tightly  
18 coupled way, make up late industrialism.

#### 19 20 **IN THE FUTURE**

21 What we are after here could be called the *différend*, or *jouissance*. We want  
22 to reach beyond established systems of ideality, where Derrida and Levinas locate  
23 justice. Philosopher Dawn McCance says it this way:

24 This future anteriority of the mirror stage trope distinguishes Lacan's specular  
25 subject, characterized by "anticipated belatedness" (Weber 1991, 10), from  
26 the conscious subject of metaphysical philosophy, Hegel's *Selbst*, for example,  
27 whose basis is a perfected present . . . [It] means that the positioning of oneself  
28 as a unified ("phallic") subject within the Law-of-the-Father is an endeavor  
29 which inevitably fails. Aware of this failure, yet always attempting to cover  
30 it up, the signifying subject is beset by an inexorable anxiety, a disconcerting  
31 after-effect, an unrepresentable, contaminating and impossible to integrate,  
32 "after the fact [après coup], *nachträglich*" effect. For Lyotard, this after-effect  
33 bears such non-names as "the jews" and *le différend*. Lacan calls it *jouissance*.  
34 [1996:76–77]

35 Drusilla Cornell, reading Derrida and Levinas, explains how it is about justice:

36 As with Derrida, Levinas' conception of time has implications for his under-  
37 standing of justice. For Levinas, Justice is messianic. The "avenir" is not just  
38



2 the limit created by the aporias Derrida indicates, but instead inheres in the  
3 otherness of the Other that cannot be encompassed by any present system of  
4 ideality. The Other is other to the system. Incorporation into the system is the  
5 denial of the Other. Justice is sanctity for her “otherness.” Nonencompassable  
6 by the system, the Other is also noncalculable. The right of the Other, then,  
7 is infinite, meaning that it can never be reduced to a proportional share of an  
8 already-established system of ideality, legal or otherwise. It is the Other as  
9 other to the present that echoes in the call to justice. [1992:137]

10 My point here is not to validate ethnography through philosophy. Instead, we  
11 can let philosophical teachings orient ethnography, so that ethnography produces  
12 something beyond philosophy. Theory thus operates as design logics, geared to  
13 enable ethnographic articulations that are truly creative, and therein a new kind of  
14 truth.

15 We surely need this. Working with toxics, I know especially well that we, as  
16 a society, need to invest in more data, more knowledge. I also know that we need  
17 new knowledge forms; that it is not just a matter of quantity.

18 Ethnography, it seems to me, can be designed to elicit these new forms. Not  
19 because the ethnographer is especially brilliant but because she knows how to listen,  
20 how to discern discursive gaps and risks, how to tolerate truly not knowing where  
21 one is headed. We are trained and positioned, funnily, to tolerate the unknown;  
22 we have an affordance for unimaginable futures.

23 It at times sobers me that I still work Spivak, Derrida, Homi Bhaba, and kin,  
24 not having moved beyond them. But perhaps this is because the kinds of openings  
25 they provided have of late been made elsewhere, or otherwise.

26 Perhaps it is ethnography that now does the work of “theory.” Perhaps an  
27 ethnographic turn has followed the so-called linguistic turn of the 1980s.

28 The language turn, carried by texts like *Writing Culture*, directed our attention  
29 to the ways discursive and textual forms are constitutive of the real, directing what  
30 we see and say, and don’t, and what counts as true, benefiting some, often at great  
31 cost to others. Language also came to be understood as a place of play and supple-  
32 mentarity, out of which quite unimaginable things could emerge. So ideas about  
33 systems that permit or even provoke play are not new. We haven’t, however, really  
34 run with possibilities for building our own systems—experimental ethnographic  
35 systems—that leverage the ways we have come to understand language to work.

36 Such systems could take many forms—that of the book, the digital archive, or  
37 an event, among others—but what these systems would be after would be particular  
38

1  
2 subject effects—subjects able and willing—even wanting, desiring—to become  
3 party to new ways of thinking about and engaging a particular problem domain, a  
4 domain that we have analyzed ethnographically to understand the discursive gaps  
5 and risks that characterize it. What we would seek to engineer, then, would be  
6 something beyond understanding: a subject with a will to know, differently.

7 Such a subject could be called postmodern or specular. But here, in exper-  
8 imental ethnographic systems, there is ethnographic specificity. The systems are  
9 designed to unsettle the subjects and discursive forms with which they deal, in  
10 very specific ways. *The Asthma Files* are designed to respond to the particular dis-  
11 cursive gaps and risk of the complex problem space in which asthma is dealt with.  
12 Michael Powell’s effort to provoke new ways of thinking about the convenience  
13 store and the U.S. food system must be designed to attend to the habits and biases,  
14 discursive gaps and risks of that particular problem space. Ethnographic knowledge  
15 thus provides substantive logics, supplementing design logics drawn from what we  
16 traditionally think of as “theory.”

17 This, it seems to me, is what would make ethnography “appropriate” to  
18 the historical conditions in which we find ourselves. Conditions characterized by  
19 massive violence, marginalization, and injustice; by environmental devastation and  
20 industrial recklessness; by stunning hubris and shrill ignorance. Conditions that  
21 cultivate a will not to know, not to engage, not to experiment.

22 It, of course, doesn’t help that our politicians are defunding National Public  
23 Radio, public education and the sciences, and threatening to “padlock” the U.S.  
24 Environmental Protection Agency,<sup>18</sup> an imperfect agency to be sure, but one that  
25 today can stand as a signal of what we cannot, or will not, deal with: problems that  
26 we don’t know how to fix or even evaluate with currently available tools, problems  
27 that won’t settle down, shifting as natural, social, economic and cultural systems  
28 continually play off one another. Really imagine it: a padlocked EPA, a society  
29 and culture that refuses to invest in complex problems, deeming all experiments  
30 necessary.

31 Ethnography can respond, reading these historical conditions with great care  
32 and solicitude, to stage encounters—in texts, online, in the street, in confer-  
33 ence rooms—that are productively creative, creating space for something new to  
34 emerge, engineering imaginations and idioms for different futures, mindful of how  
35 very hard it is to think outside and beyond what we know presently.

36 Ethnography thus becomes creative—setting language games in motion, pro-  
37 voking different orderings of things, having patience for what we cannot yet  
38 imagine. Writing culture as a future anterior that draws us, with and away from

2 Derrida, “toward an eschatology without philosophical teleology, beyond it in any  
3 case, otherwise than it” (1991:36–37). An ethnographic turn thus supplements the  
4 language turn.

#### 6 **ABSTRACT**

7 *This essay situates contemporary ethnography within late industrialism, a historical*  
8 *period characterized by degraded infrastructure, exhausted paradigms, and the incessant*  
9 *chatter of new media. In the spirit of *Writing Culture*, it calls for ethnography attuned*  
10 *to its times. It also calls for ethnography that “loops,” using ethnographic techniques*  
11 *to discern the discursive risks and gaps of a particular problem domain so that further*  
12 *ethnographic engagement in that domain is responsive and creative, provoking new*  
13 *articulations, attending to emergent realities. Ethnographic findings are thus fed back*  
14 *into ethnographic engagement. This mode of ethnography stages collaboration with*  
15 *interlocutors to activate new idioms and ways of engaging the world. It is activist,*  
16 *in a manner open to futures that cannot yet be imagined. [ethnography, activism,*  
17 *collaboration, future anterior, discursive risks, ethnographic looping]*

#### 18 **NOTES**

- 19 1. For a recent review of the Bhopal disaster, see Ansell and Tinsley 2011.
- 20 2. See the *Washington Post* (Layton 2010) coverage.
- 21 3. I have worked with Chouhan to understand the Bhopal disaster since 1990. During my extended  
22 fieldwork in Bhopal in the early 1990s, the plant site was not accessible. It was accessible when  
23 I visited in December 2010, with Chouhan as my guide.
- 24 4. See details and the plan forward provided by the Electronic Take Back Coalition: [http://](http://www.electronicstakeback.com/designed-for-the-dump/quickly-obsolete/)  
25 [www.electronicstakeback.com/designed-for-the-dump/quickly-obsolete/](http://www.electronicstakeback.com/designed-for-the-dump/quickly-obsolete/). Toxipedia’s  
26 entry on e-waste is also useful: [http://](http://toxipedia.org/display/toxipedia/Electronic+Waste+(E+Waste))  
27 [toxipedia.org/display/toxipedia/Electronic+Waste+](http://toxipedia.org/display/toxipedia/Electronic+Waste+(E+Waste))  
28 [E+Waste](http://toxipedia.org/display/toxipedia/Electronic+Waste+(E+Waste))).
- 29 5. A plan forward is laid out in “Water Works: Rebuilding Infrastructure, Creating Jobs,  
30 Greening the Environment,” a report by Green for All. Download the report here:  
31 <http://www.greenforall.org/resources/water-works/>
- 32 6. Consider the kind of persona cultivated by and emblematic of the sciences, as described by  
33 feminist historian of science Evelyn Fox Keller in *Reflections on Gender and Science* (1985). They  
34 are obsessive compulsive in their desire for control, not so much of others as of oneself.  
35 Attention is subject to the same kind of control as the rest of behavior, leading to a focus so  
36 intensely sharp and restricted that it precludes peripheral vision and simply ignores the unusual,  
37 staying on narrow, established pathways for thought, going right by anything out of the way.  
38 Like tending a garden or forest with manicure scissors. My own research in the environmental  
sciences suggests that a different figuration of the scientist has emerged in recent decades.  
Keller’s description of the subject effects of intensive expertise nonetheless remains important  
in thinking about late industrialism.
7. The slash used here refers readers to George Marcus’s seminal article, *Ethnography in/of the  
World System* (1995).
8. For a historical reading, see Eric Schatzberg’s “Technik Comes to America: Changing Meanings  
of Technology Before 1930” (2006).
9. See, for example, Vandana Shiva’s (2002) writing on conflicts around the Kaveri River in South  
India. Anthropologist David Bond describes another instance of discursive risk: After the Exxon  
Valdez disaster in 1989, the U.S. National Oceanic and Atmospheric Administration (NOAA)  
committed to being better prepared for ocean oil spills. And they were better prepared

- 1
- 2 in the summer of 2010, when British Petroleum's Deepwater Horizon platform blew up and  
3 began gushing oil into the sea. NOAA was prepared, for a surface oil slick as in the Exxon  
4 Valdez case—not for a spill gushing up from a mile under the sea, out of control (Bond 2011).
- 5 10. Teresa de Lauretis, for example, emphasizes the need to understand both what systems say,  
6 and what they do not and cannot say. Understanding the gender effects of a social system,  
7 de Lauretis argues, demands “a movement back and forth between the representation of  
8 gender (in its male-centered frame of reference) and what that representation leaves out  
9 or, more pointedly, makes unrepresentable” (1987:25). The analyst must find or invent a  
10 way to move “between the (represented) discursive space of the positions made available by  
11 hegemonic discourses and the space-off, the elsewhere, of those discourses: those other spaces  
12 both discursive and social that exist, since feminist practices have (re-)constructed them, in  
13 the margins (or ‘between the lines,’ or ‘against the grain’) of hegemonic discourses and the  
14 interstices of institutions, in counterpractices, and in new forms of community” (1987:25).  
15 Also see Spivak (1987), Haraway (1988), and Cornell (1992).
- 16 11. This notion of looping recalls George Marcus's effort to vitalize “para-sites,” now on-going  
17 at the Center for Ethnography at University of California, Irvine. Marcus's introduction to  
18 *Para-Sites: A Casebook against Cynical Reason*, a volume in the experimental Late Editions series,  
19 provides a preliminary articulation: [Para-sites are concerned with] forging spaces, sites, and  
20 even objects that facilitate alternative thinking by subjects who are deeply complicit with and  
21 implicated in powerful institutional processes in times of heightened consciousness of great  
22 social transformations. Our interest in how ambiguously alternative perspectives emerge amid  
23 moderately empowered people involved explicitly with major institutional powers has been  
24 a motivating component . . . [The interest is in] “functionaries within important institutions  
25 . . . who are attempting to come to terms with changing practices, opportunities, and self-  
26 definitions. The para-site is thus a space of excess or surplus in a subject's actions but is never  
27 fully controllable by him or her. The achievement is to be able to make and operate in such a  
28 space at all. This is cultural production as close to the skin of events and engines of change as  
29 possible. It is the kind of cultural work that critical scholars or ethnographers, on the lookout  
30 for “found” critical sensibilities, must ally with. [2000:5] Thanks to Kirk Jalbert for bringing  
31 this passage back to mind.
- 32 12. Derrida points to the aporia and paradox in the way hospitality requires one to be the master of  
33 the house or nation, a controlling agent, to lay the table and set the stage for encounters with  
34 foreigners and foreignness. To be hospitable, one has to have the power to host; one has to  
35 exercise control over the event. One must also, however, give up mastery, ownership, one's  
36 possessions, if the foreigner is really to come in, if hospitality is to be realized. So there is  
37 an impossibility at the heart of hospitality (Derrida 1999, 2001 Derrida with Dufourmantelle  
38 2000). So, too, in ethnography. An experimental ethnographic system must be carefully  
staged, carefully controlled, to make way for something new to arrive. Here, too, there is an  
impossibility at the heart of it, but also a promise.
13. “Solicitude” has roots in solicit and soliciting. Derrida put solicitude at the heart of deconstruc-  
tion: Structure is perceived through the incidence of menace, at the moment when imminent  
danger concentrates our vision on the keystone of an institution, the stone which encapsu-  
lates both the possibility and the fragility of its existence. Structure then can be methodically  
threatened in order to be comprehended more clearly and to reveal not only its supports but  
also that secret place in which it is neither construction nor ruin but lability. This operation is  
called (from the Latin) soliciting. In other words, shaking in a way related to the whole (from  
sollus, in archaic Latin “the whole,” and from citare, “to put in motion”). [Derrida 1978:6]
14. Anthropologist Jerome Crowder works alongside this research group, and has  
introduced me. A brief description of their research is here: <http://www.utmbhealth.com/wtn/Page.asp?PageID=WTN000571>. Examples of the visual analytics used by the group  
are accessible here: <http://skbhavnani.com/DIVA/>.
15. Our thinking about juxtapositional logic builds on James Clifford's article “On Ethnographic  
Surrealism” (1981).
16. Critically, the comparisons and juxtaposition in play in TAF are not generated by simple  
term matching or even by semantic webs that delineate when things mean the same thing,



2 despite being said differently. In The Asthma Files, by digital design, comparison is animated  
 3 by an our ethnographic questions, not by answers, such that answers are not expected in  
 4 advance to be the same, or even patterned in a particular way. The Asthma Files system  
 5 is thus built to be open-ended, rather than calculative. Comparisons are not generated by  
 6 matching, but by questions that make things proximate even if vastly different. It is a different  
 7 ways of ordering things, a way of staging collectivity that does not assume consensuses, or  
 8 simple processes of communication. It (is meant to) embody a post structural, rather than  
 9 Habermasian understanding of the way language and meaning production work.

10 17. See <http://www.foodincmovie.com/>.

11 18. I refer here to intentions articulated in the lead-up to the 2011 Republican Presidential Primary.  
 12 For examples, see John Broders's coverage in the *New York Times* (2011; Broder and Galbraith  
 13 2011).

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