

## Ethnography In/Of/As Open Systems<sup>1</sup>

*Kim Fortun*

Marcus, George E., and Michael M. J. Fischer. *Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences* (2nd ed.). Chicago: University of Chicago Press, 1999 [1986]. xxxiv + 194 pp. including notes, references, and index. \$13.00, paper.

Rapp, Rayna. *Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America*. New York: Routledge, 1999. xiii + 361 pp., including notes, references, and index. \$45.00, hardback; \$20.95, paper.

*Anthropology as Cultural Critique* was first published in 1986. The second edition was published in 1999. In the interim there has been a great deal of change within the discipline of anthropology, within the university, and within the wider world. The continued relevance of the book in its second edition, as an orientation to cutting edge anthropological work, would, then, seem to be in question, given that it takes as its task a reading of the pulse of anthropology, situated within the political and theoretical currents of the 1980s. The first edition lays out an agenda—or, more accurately, articulates an ethic—for further work that would build from a particular temporality. And that temporality, in the 1990s, took a number of turns.

What makes *Anthropology as Cultural Critique* as relevant today as in the mid-1980s is how it demonstrates that anthropology is at its best when

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understood to be operating *within* an open system, *as* an open system, and as the study and production *of* open systems. In other words, the book describes and encourages anthropological work that situates itself in a complex world, irreducible to prevailing ways of describing and understanding that world. Codified discourse and theory is assumed to be one step behind and out of synch with the reality to which it was meant to refer. The best response, according to Marcus and Fischer, is for anthropology to cultivate and practice an ethic of openness to new theory, to new topics, and to the possibility that the very categories of analysis that we have relied on in the past should be set aside. This, in turn, would enable anthropology to focus on open systems as “objects” of study. Rather than focusing on a single village, ethnographers would turn their focus to the ways particular locales are articulated with global culture and political economy. Rather than focusing on what personhood in a given locale and social structure *is*, ethnographers could trace out what forces constitute and disperse persons as subjects. Thus, open systems are promoted on many levels: as a way to understand the *context* of anthropological work, as a way to understand anthropological *method*, and as a rich *focus* for anthropological inquiry.

In this review, I draw out this argument, first through a discussion of the first edition of *Anthropology as Cultural Critique*, published in 1986, and then through a discussion of the new introduction to the second edition, published in 1999. I also review Rayna Rapp’s book titled *Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America*, drawing out how it, too, engages open systems in a number of ways. In a concluding section, I discuss how ethnographies written in/as/of open systems operate as experimental systems that, in the words of biologist Francois Jacob (1988), are “machines for making the future.” This builds on interest in the culture and practice of science in both books reviewed, and sets up a discussion of how ethnography achieves ethical charge.

#### **FIRST EDITION, CIRCA 1986**

The first edition of *Anthropology as Cultural Critique* was conceived in 1982 and published in 1986. I think of the book as emerging out of the whirlwind around 1984, a focal year for my own research, a year marked by great promise and by disaster. In 1984, Reagan swept into his second term, already having gutted many federal agencies, pushing much of the work of government into nonprofit organizations situated somewhere between the state and “the people.” National debt spiraled out of control, and rock musicians sang cynically of the American Dream. Macintosh released the Apple II, with a now famous television commercial suggesting that personal com-

puters would revitalize individualism, democracy, and a global economy. Meanwhile, people educated and politicized during the 1960s came of age, helping institutionalize critiques of authority that once depended on a clear opposition between what was inside and what was outside “the establishment.” *Anthropology as Cultural Critique* was in the making during this time.

Within anthropology, there were many discussions about the state and future of the field (MacCannel & MacCannel, 1982; Ortner, 1984; Shankman, 1984). Marcus and Fischer emphasized that the discussion that they wanted to encourage was slightly different than most, because it would be responsive to currents *outside* the academy. While engaged with critiques and new theoretical interests within the discipline, and within the humanities and social sciences more broadly, the touchstone for Marcus and Fischer was the rapidly changing, power-fraught wider world. What they wanted to encourage was anthropological work open to the dynamism of the world, and thus open to the possibility that established methodologies, units of analysis, and ways of writing ethnography needed to be rethought.

For Marcus and Fischer, the 1980s were a time when conventional ways of thinking about the world needed to be—and indeed were—intensely questioned and challenged. Across academic disciplines, there was a sense that many of the concepts that had oriented empirical work and social theory since the nineteenth century—the social actor, class, the state, even culture—were out of date, if not obsolete. Technological advance, economic globalization, and the reordering of social relations at all scales had created a reality that was difficult to encompass within these categories, and all but impossible to encapsulate within general and historically comprehensive theories. This provoked what Marcus and Fischer refer to as a “crisis of representation,” which marked a generalized lack of confidence in the adequacy of established ways of describing social reality. While the debates that indexed the crisis were not new, they were, according to Marcus and Fischer, cast in a fresh, historically specific way, responsive to particular political, economic, and technological events. The shared challenge in the 1980s was to figure out “how an emergent postmodern world [was] to be represented as an object for social thought in its various disciplinary manifestations” (p. vii).

Anthropology, according to Marcus and Fischer, was at the vortex of this challenge, because of its mandate to richly describe the real world and to provide comparative perspective. This mandate, in their view, had renewed relevance because of the scope and pace of change in the 1980s, linked in many ways to economic globalization and concomitant questions about the future of cultural difference. At the same time, anthropology was riveted by important criticisms. Marcus and Fischer point in particular to

Derek Freeman's *Margaret Mead and Samoa: The Making and Unmaking of an Anthropological Myth* (Freeman, 1983). This book received mainstream media attention even before its publication, for its virulent attack on the legitimacy of Margaret Mead's ethnographic work on Samoa. Marcus and Fischer also point to Edward Said's *Orientalism*, and its argument that anthropology not only had but continued to be complicit with colonialism, because of its way of representing non-Western peoples, rarely giving them a chance to express their own views and interpretations (Said, 1979). Both books dealt blows to the authority of the ethnographic fieldworker as an expert commentator on society and culture—at a time when expertise of this sort had renewed relevance. In the wake of such criticism, the challenge, as Marcus and Fischer understood it, was not for ethnography to regain an authority that was lost, but to recast ethnographic authority in ways responsive to both critiques of past ethnographic work and to a changing world.

The work of recasting ethnographic authority was, according to Marcus and Fischer, already underway by the 1980s. Indeed, the first edition of *Anthropology as Cultural Critique* can be read as an ethnographic reading of anthropology itself, which enacts a number of its own findings. The ethnographies focused on in the book—including Paul Willis's *Learning to Labor*, June Nash's *We Eat the Mines and the Mines Eat Us*, Steven Feld's *Sound and Sentiment*, and Marshall Sahlins' *Culture and Practical Reason*—all, in some way, took anthropological work in a new direction, through the design of ethnographies that systematically question established methodological and theoretical formulations (Willis, 1981 [1977]; Nash, 1979; Feld, 1982; Sahlins, 1976). They began with doubt about the categories through which we typically order the world.

One set of ethnographies reviewed explores personhood and emotion in new ways. Michelle Rosaldo, for example, maps the emotional landscape of the Ilongot by focusing on headhunting, a predictable, usually exoticizing focus of anthropological attention, but in this case used as a prism through which Ilongot life cycles can be viewed, and understood to be structured by gender and cross-generational relations (Rosaldo, 1980). An understanding of Ilongot personhood is an emergent effect of Rosaldo's study. Rather than starting with a particular construct of personhood and proceeding to flesh it out descriptively, Rosaldo got to personhood by another route, which allowed her to understand headhunting as one node in the complex web of Ilongot experience. In effect, Rosaldo provides readers with the Ilongot's own understanding of headhunting, an understanding that she can describe, yet admits that she cannot empathize with.

Another set of ethnographies reviewed reorient political economy. The challenge, as laid out by Marcus and Fischer, is to find a way to embed

“richly described local cultural worlds in larger impersonal systems of political-economy” (p. 77). A key goal is to use empirical work at the local level to reshape “dominant macro frameworks for the understanding of historic political-economy, such as capitalism, so that they can represent the actual diversity and complexity of local situations for which they try to account in general terms” (p. 88). Marcus and Fischer acknowledge that the task is not straightforward, both because of the kinds of material required to support such an account and because of the challenge of representing multiple scales and angles on systems within a single text. What is highlighted in the ethnographies reviewed is, then, research and textual design. Paul Willis, for example, is applauded for his study of class formation, carried out through ethnography among British working class “lads” at school (Willis, 1981 [1977]). Pursuing a slightly different tack, Michael Taussig describes indigenous understandings and critiques of capitalism among Columbian peasants and Bolivian tin miners, in a text structured for continual engagement with Marx’s concept of commodity fetishism (Taussig, 1980).

The ethnographies reviewed in *Anthropology as Cultural Critique* have little in common topically or theoretically. They are not part of a recognizable subfield of the discipline. Most do not share the theoretical interests that Marcus and Fischer have in the so-called postmodern and poststructural. In other words, their cohesion as a set is not obvious. As (ethnographic) writers, Marcus and Fischer constituted the ethnographies referred to as a set, based on their innovative research and textual designs. Like the ethnographies it reviews, *Anthropology as Cultural Critique* denaturalizes the anthropological gaze, and takes the risk of configuring its own “object of concern.”

The particular contour of anthropology that Marcus and Fisher want to draw out is delineated in a chapter titled “Repatriation of Anthropology as Cultural Critique.” Here, Marcus and Fischer align the anthropological works they focus on in the 1980s with earlier critical and often expressly experimental traditions—the Frankfurt School; Surrealism; American documentary criticism of the 1930s, carried out by artists and social workers as well as by the Chicago School of urban ethnography. Earlier anthropological work is also cast in alignment with cutting edge work of the 1980s. In the United States, Franz Boaz and his students (Margaret Mead, Edward Sapir, and Ruth Benedict) are said to have established the role of the anthropologist as cultural critic by using ethnography to destabilize entrenched understandings of race, personality, sex, and other key constructs. English ethnographers working in the same period also designed studies that enabled them to use ethnographic material from the non-West to query Western constructs. Through studies of witchcraft and magic, for example, Evans Pritchard was able to provoke critical reflection on how belief systems—whether

among the Azande or among Western scientists—immunize themselves from disproof (Evans-Pritchard, 1992 [1937]). Through studies of political organization in the non-Western settings, English ethnographers were able to suggest that the Western way of ordering politics and society may not be the only effective one (Evans-Pritchard, 1940).

What these traditions of work have in common is open engagement with the world. Writing of the Frankfurt School, Marcus and Fischer describe this as “a lucid and self-conscious vision of the historical moment in which they are writing” (p. 120). The historical moment not only provides rich topics for study, but also orients the design of studies—so that “results” can feed back into the larger system within which the study is carried out, provoking shifts and displacements. The design of such studies is purposeful, and could even be argued to be extractive.<sup>2</sup> The world is mined for empirical material that can be used to undermine idealist constructs of the world. In the 1920s and 1930s, this project was motivated by the failure of the working class to take the lead expected of them in revolutionary movements, by bourgeois buy-in to dictatorship, and by the surprisingly harsh poverty of the Depression. Marcus and Fischer locate experimental anthropological work in the 1970s and 1980 in similar fissures between the real and the ideal.

The ethnographies that index what Marcus and Fischer refer to as an “experimental moment” in anthropology in the 1980s are characterized more by an ethos than by a particular theoretical framework, reflected in overlapping efforts: effort to actively and critically construct the “objects” of their studies, producing purposefully partial rather than masterfully comprehensive descriptions, aware of possible complicities with colonial practices and imaginations; effort to be critically attuned to the times in which ethnography is produced, and thus to the discourses and symbol circuits within which ethnography will be read, and have an effect; effort to perform textually what an ethnography argues, in recognition of the complex ways that ethnography can operate as a mode of communication; and effort to let ethnography operate as social theory, and as a mode of ethical-political engagement.

Read as ethnography, *Anthropology as Cultural Critique* is about a particular current in cultural anthropology at a particular historical moment. But what it draws out is a way of doing ethnography that links empirical description of the present to possibilities for a critically different future. What it describes are aspects of the present at odds with the way the present presents itself, hegemonically. The book takes cultural anthropology in the 1980s as its “object of concern,” and purposely focuses on those instances when anthropology is something other than what could be predicted. In turn, the ethnographies that inform the book are themselves focused on

unexpected “objects.” They were chosen as examples because they creatively construct their objects of concern rather than rely on predictable categories and units of analysis. One way that they perform cultural critique is through this destabilization of predictable categories. They refuse “the present,” categorically speaking, in order to better understand the real world.

The first edition of *Anthropology as Cultural Critique* calls upon the concerns and doubts of anthropologists in the late seventies and eighties to articulate an ethos for critically engaged anthropological work. It encourages readers to pursue anthropology as an open system, purposefully riveted by changes in the world, and in theory. It also encourages readers to actively experiment with new research topics, methods, and textual designs. The approach they advocate is bold, and also questioning. Instead of having a paralyzing effect, the doubts and concerns of scholars in the 1980s are turned into a resource. The second edition takes this engagement with doubt further, turning doubt back on the book itself, and also highlighting how doubt positions ethnographic informants to be collaborators in the production of critical analyses.

#### **LATE EDITIONS, CIRCA 1999**

The second edition of *Anthropology as Cultural Critique* has a concluding section titled “Some Detailed Statements About Errors of Omission and Commission.” The title is borrowed from Malinowski’s appendix to his study of garden magic in the Trobriand Islands, published in 1935 (Malinowski, 1935 [1965]). Readers are also told that the section was inspired by Gregory Bateson’s 1958 epilogue to his 1936 work *Naven* (Bateson, 1936 [1962]). These references situate what follows in a tradition of anthropological thought that encourages the expression of doubt, amendments, elaborations, and critical response from readers. According to Marcus and Fischer, it is openness of this sort that grants contemporary ethnography its authority.

One of the errors of commission that Marcus and Fischer concede regards the way *Anthropology as Cultural Critique* has contributed to arguments about the “end of anthropology,” because of the purported end of ethnographic authority. Marcus and Fischer emphasize that they never intended to augur the end of anthropology. Their goal was to encourage the articulation of new “regulative ideals” for the discipline, which simultaneously acknowledge the past (including anthropology’s relationship to colonialism), and renew the relevance of anthropology for the future. As I will discuss in the concluding section of this essay, the goal can be thought of as scientific, in the very best sense. What are encouraged are practices of anthropology not unlike experimental practices within the natural sciences.

Marcus and Fischer also concede that the framing notion of “repatriation” in *Anthropology as Cultural Critique* was open to misunderstanding. Critics have argued that the concept of repatriation, in conjunction with the related concept of cultural critique, “assumes an already existing world of many different, distinct ‘cultures’ and an unproblematic distinction between ‘our own society’ and an ‘other’ society” (Gupta and Ferguson, 1997). The problem, critics say, is that this way of thinking about the anthropological project spatializes cultural difference in ways complicit with liberal pluralism, which needs to be questioned. It is important that Marcus and Fischer acknowledge this criticism for a number of reasons. One reason, which Marcus and Fischer themselves highlight, is that conceptions of “cultures” as self-contained are simply inaccurate. Cultures, particularly in the contemporary world, are open rather than closed systems, best described in terms of flows, diasporas, and hybrids. According to Marcus and Fischer, this blurring of borders complicates comparisons *between* cultures, while making the comparative dimension of anthropology all the more important. The challenge, as they see it, is to develop a “thoroughly dialectical and mutually probing practice of comparison,” in texts that provide rich juxtapositions that draw out rather than assume differences (p. xxix). A key task for ethnographers is to figure out *what* to compare, in order to generate understanding about the powerful ways that difference operates.

A second reason that it is important to respond to the criticism that *Anthropology as Cultural Critique* works with an understanding of different cultures as given and distinct is because of the political urgency of rethinking what culture is, and how different cultures can work together, in this particular historical context. Earlier critics were concerned that *Anthropology as Cultural Critique* constructed culture in a way that suggests that liberal pluralism is both possible and ideal. These critics were responding to a context replete with politically vacuous constructs of “multiculturalism” and global “harmonization.” Today, the context is different. While ways of thinking and talking about multiculturalism and globalization still need work, liberal pluralism urgently needs to be articulated and upheld. As the war on terrorism progresses, how we think and talk about culture, and its relation to liberal pluralism is critical. Such acknowledgment of the relationships between scholarship and the world is expressly encouraged in *Anthropology as Cultural Critique*. Marcus and Fisher encourage a practice of anthropology attuned to the swirl of discourse around what is studied, attentive to both intentional and unintentional ways that scholarly articulations play into politics. Practically, this requires attention to the political dimensions of basic concepts and research design. One track is by way of the negative, taking care not to render “objects of study” significant and interesting by

orientalizing them, and taking care not to assume that cultural difference is obvious.

There also is an affirmative tack. Anthropologists can find instances of pluralism in action, drawing out the many forms pluralism can take and how participants imagine its value. Anthropologists can also double back on orientalism, detailing ethnographically how people constitute their own histories, and situate themselves within global culture. This kind of work would be ethically engaged on two levels: it is designed to unsettle entrenched, Orientalist understandings, and in so doing produces rich descriptions of the reflexive idioms and evaluative modalities employed by the people studied. As I will discuss in relation to Rayna Rapp's book, cataloging the rich array of idioms and evaluative modalities employed by people in different settings can help enrich conventional ethical discourse. Rapp is particularly interested in bioethics discourse, and in the discourse of feminism. Her ethnographic material helps expand both discourses, exemplifying how critical anthropology can make concrete and positive contributions to public life.

The importance of constructing rather than assuming the "objects" of anthropological study is emphasized throughout *Anthropology as Cultural Critique*, and is, in my view, a key reason that the book can be read as an orientation to *critical* anthropology. This is drawn out, albeit in the inverse, in the criticism mentioned above, about the possibility of *Anthropology as Cultural Critique* playing into a simple model of pluralism. While Marcus and Fischer try to make clear that liberal pluralism is neither a grounding assumption nor ideal for them, they do embrace a mode of anthropological practice that is accountable to the ways anthropological writing ends up supporting dominant constructs of society and culture, even if unintentionally. In other words, they embrace a mode of anthropology that is attuned to the swirl of discourse around what is studied, and keyed into the way that anthropological writing relates to entrenched understandings. At a practical level, this requires attention to the political dimension of basic concepts and ethnographic research design. One tack is by way of the negative, taking care not to render "objects of study" significant and interesting by Orientalizing them, or taking care not to suggest that cultural difference maps easily onto the pretty and benign mosaic of liberal pluralism.

There also is an affirmative tack. Marcus and Fischer emphasize that an important way that anthropology remains engaged with the world is to make use of ethnography to query, and perhaps unsettle, established ways of understanding what the world is and should be. They would encourage anthropological work that engages both "the strengths and weaknesses" of liberal pluralism by detailing ethnographically what pluralism does (and doesn't) look like on the ground, in everyday experience. They also would

encourage anthropological work that doubles back on Orientalism, detailing ethnographically how people constitute their own histories and situate themselves within global culture. This kind of work would be ethically engaged on two levels: it is designed to unsettle entrenched, Orientalist understandings, and in so doing produces rich descriptions of the reflexive idioms and evaluative modalities employed by the people studied. As I will discuss in relation to Rayna Rapp's book, cataloging the rich array of idioms and evaluative modalities employed by people in different settings can help enrich conventional ethical discourse. Rapp is particularly interested in bioethics discourse, and in the discourse of feminism. Her ethnographic material helps expand both discourses, exemplifying how critical anthropology can make concrete and positive contributions to public life.

Marcus and Fischer are, however, themselves somewhat critical of *Anthropology as Cultural Critique* on this issue. In detailing the errors of commission and omission related to ethics, and the moral economy of ethnography, they discuss how their account of the ways ethics are represented in ethnography is "largely consistent with the narratives derived from the nineteenth and early twentieth century scripts critical of recent forms of domination." The problem with this is two-fold. First, these narratives often miss the complexity of ethical dilemmas and moral struggle lived out in today's world. Old scripts of how domination operates, and can be countered, simply don't address emergent issues (associated with scientific and technological developments, in particular), or fail to address the subtle ways that even classic ethical issues are shaped by historical context. Second, the potential of ethnography to vitalize both social theory and public discourse depends on research designs built on skepticism about the most basic concepts, assumptions, and units of analysis. Ethnography, at its best, provides an (possibly corrective) empirical record, while also testing the basic constructs that undergird social theory and public discourse.

Conceptual reflexivity is one means to ethnography that is critically engaged with both social theory and public discourse. Another means is by choosing topics of study that are loaded with potential to unsettle conventional understandings. Such a choice can be operationalized on different scales. Ethnographers can choose topics that predictably exceed the explanatory scope of established discourses. Projects that focus on emerging scientific arenas are a good bet, for example. Ethnographers can also be more rather than less interested in those moments when their informants are struggling with the inadequacy of established discourses, being as interested in what their subjects doubt as in what they know. Scientists struggling to understand what to make of the new data flows available through developments in information technology are a good example. They need

new scientific methods, and new ways of judging both data quality and experimental results. Often, they also have to figure out how to explain computer models and simulations to journalists and judges, inventing vocabulary as they go.

The challenge that Marcus and Fischer lay out is to turn such informants into collaborators. Software and hardware developers, patent and copyright lawyers, financiers and users of new technologies are described as “among those who regularly say that the concepts by which they traditionally operated have been overtaken by the world in which they now operate, that new concepts and methods need to be formulated” (p. xxv). Marcus and Fischer encourage us to think of such people as “organic intellectuals,” who “together with anthropologists are exploring the emergent new worlds about which they have a mutual curiosity” (p. xxv).

One objective of this approach to anthropological work is to register the doubts and skepticism of contemporary social actors as part of the ethnographic record. This can be understood as a way of taking on the feminist imperative to attend to what is conventionally designated as marginal (Spivak, 1987). Another objective is to pull into public visibility the conceptual and interpretive modes relied on by people operating on the ground, in everyday life, expected to act even amidst uncertainty or doubt. Here, the hope is that anthropologists can provide a repertoire of ways that people deal with the world—as experts and as ethical agents—that can help other people imagine and negotiate a complex world in which established blueprints provide insufficient guidance.

Marcus and Fischer articulate an ethos for anthropology that turns ethnography into an experimental descriptive medium, into social theory, and into a supplement for our ethical imaginations. Rewritten today, *Anthropology as Cultural Critique* could review a new array of ethnographies to “ground truth” this approach. Here I write of one, Rayna Rapp’s *Testing Women, Testing the Fetus*.

### **MORAL PIONEERS**

In 1984, Rayna Rapp published an article in *Ms. Magazine* about her own experience with amniocentesis and decision to end a pregnancy when the fetus was diagnosed as having Down syndrome (Rapp, 1984). Her goal in writing the *Ms.* article was to draw attention to new prenatal technologies, and to spur the development of what she calls a “women-centered” analysis. The many letters that Rapp received in response to this article became some of the first “data” collected for what would become a fifteen year

research project, which resulted in the book reviewed here, *Testing Women, Testing the Fetus: A Social History of Amniocentesis in America*.<sup>3</sup>

Another data flow for Rapp's book started with a phone call. Shortly after her *Ms.* article was published, one of the founding members of a Down Syndrome Parent Support Group called Rapp and challenged some of her descriptions of disabled children, and the social services available to them. Rapp responded by joining the support group, and learning about the world of children with special needs became a research priority. Over time, she interviewed 38 families in which a child had Down syndrome, and worked on an education committee for a parent support group, then for a family court-funded early intervention program for developmentally delayed children. This work significantly enriched her overall data set, and also drew out an important feminist double bind. On the one hand, "there is the need to champion the rights of women to carry or refuse to carry to term a pregnancy that would result in a baby with a serious disability." On the other hand, there is the "need to support adequate, nonstigmatizing, integrative services for all the children, including disabled children, that women bear" (p. 8). This double bind, "the intersection of disability rights and reproductive rights as paradoxically linked feminist issues," became the center of gravity in Rapp's research, and later of her book (p. 8).

This account of the origins of Rapp's research reveals some of the many ways that her book engages with ethnography in/of/as open systems. She wrote the *Ms.* article "hoping to provoke popular feminist discussion and awareness of this topic." The research was thus built on recognition of the critical role played by anthropologists in constituting the "objects" of their study, in this case quite literally. Rapp jump-started her study by entering the stream of representations around amniocentesis, and then proceeded to track these representations across diverse social spaces—the genetics lab, the genetics counseling room, the homes of women waiting on test results—and diverse social groups—geneticists, genetic counselors, lab technicians, pregnant women who chose to use amniocentesis, women who chose to end pregnancies based on the results of amniocentesis, and women who chose to continue pregnancies after test results indicated that they would have what Rapp calls "an un-expected child," affected by Down syndrome. Participant-observation, in Rapp's understanding, was "open-ended by definition" so she followed the phenomena that she was trying to understand across locales, acknowledging that there were no natural boundaries. This movement is mirrored in her textual design, which she compares to a Venn diagram. Each chapter takes up a communicative and practical problem

posed by amniocenteses, viewed through a historical lens as well as through the eyes of her many different informants.

Rapp wanted to help produce a women-centered analysis of amniocentesis, aware that whatever she said would bounce against an array of other discourses and positions—on abortion, women’s reproductive rights, and eugenics; on family, gender, and mothering; on economic, cultural, and reproductive stratification; and on disability and mental retardation; and on medical ethics and the relationship between patients and doctors. At the outset, her goal was to wrest the perspectives of women from “the experts,” relocating the truths of amniocentesis in popular practices. She quickly learned that the perspectives of women did not exist apart from the swirl of discourses in which they took shape. It became clear that “the communicative practices on the basis of which women accept prenatal testing are themselves highly structured,” and that modes of judgment relied on by women were cross-cut by interpretations that could not simply be centered in women, or rooted in the local (p.167). In part, this was because of the creation of new groups of experts, who came to actively intervene in the construction of amniocentesis as a social phenomena and object of ethical concern. Rapp describes, for example, the emergence of genetic counselors as a profession, for women in particular. Genetic counselors aimed to be value-neutral, and simply help women think about the decisions before them. But their discourse revolves around a commitment to individual decision making that is “highly consonant with basic American values” (p. 97). Its effect can be isolating, while also being at odds with how major life decisions, particularly regarding reproduction, are traditionally carried out in different communities.

Bioethicists are another creation that Rapp writes about, describing their emergence and institutionalization since the 1960s and how they draw on an American version of analytic philosophy, “self-confidently unaware of its social-cultural context.” According to Rapp, the “basic corpus of bioethics exhibits a magisterial definition of American ‘society’ as a unified field, and a presumption that the impact of advances in medicine and its technologies might be universally assessed” (p. 44). While Rapp recognizes that bioethicists have provided “an admirable caution against acceptance of prenatal tests as a wholly unambiguous good,” she is critical of their disinterest in the varied realities and interpretations of the women most affected.

Rapp makes it clear that professional bioethics as currently constituted provides a very limited discursive resource to people dealing with amniocentesis. Her book works to correct this, without stating this as an explicit goal, not through a simple replacement of professional with lay

idioms but by drawing out an array of evaluative modes. One of Rapp's findings, for example, was that different modes of ethical reasoning were relied on in different social groups. In making decisions related to amniocentesis, white women tended to be particularly concerned that their own selfishness not overdetermine their decisions; Spanish-speaking women were particularly concerned about fetal suffering; Latina women who had recently immigrated were concerned about how a disabled child would affect their family's ability to assimilate; working class women from many different ethnic groups voiced particular concern about how a disabled child would affect the needs and aspirations of other family members (p. 137). These differences are drawn out in detail; Rapp is committed to a comparative project that foregrounds differences and reveals the different discursive resources available to different communities. She also, however, takes care to emphasize how concerns and modes of ethical reasoning cross between communities, and that "different differences took on salience according to context" (p. 2).

Rapp finds ethnic differences among women dealing with amniocentesis interesting, while recognizing "an analytic tension between categorical labels and descriptive particularity" (p. 2). She also is interested in how women defy typification. Rapp carefully attends to those moments when women did not know what to do, or how to think about what they had encountered. Neither science nor ethnicity, gender nor class provided obvious answers. Rapp's informants were subjects-in-doubt, struggling for understanding and language, defying predictable cultural patterns. Rapp's encounter with subjects-in-doubt was partly a result of her focus on amniocentesis. It also was because of particular dimensions of her research design. Many of her interviews were conducted in women's homes, during the time when they were waiting for test results. This was a particularly unsettled time, a time when the need to make judgments without full understanding was harshly evident, a time when women dealing with amniocentesis were operating as particularly open systems. Rapp aptly refers to these women as "moral pioneers" (306, 317).

The women that Rapp describes become exemplars of the kinds of ethical performance necessary in the contemporary world. Operating without clear guidelines, they must continually interpret and interpolate what is right, wrong, and acceptable even if imperfect. Rapp casts herself as anthropologist with similar demands. With time, Rapp herself became an expert on amniocentesis, and thus had to continually interpret and interpolate acceptable roles for herself. Accepting responsibility for this is, in my view, a key challenge in contemporary anthropological work.

## **EXPERIMENTAL SYSTEMS, CRITICAL EFFECTS**

*Experimental systems are the working units a scientist or a group of scientists deal with. . . Such systems must be capable of differential reproduction in order to behave as a device for producing epistemic things whose possibility is beyond our present knowledge, that is, to behave as a "generator of surprises." "Differential reproduction" refers to the allowance, if not to the necessity of shifts and displacements within the investigative process; in order to be productive, an experimental system has to be organized so that the generation of differences becomes the reproductive driving force of the whole experimental machinery.*

*An experimental system can be compared to a labyrinth whose walls, in the course of being erected, simultaneously blind and guide the experimenter. The construction principle of a labyrinth consists in that the existing walls limit the space and the direction of the walls to be added. It cannot be planned. It forces one to move by means of checking out, of groping, of tatonnement.*

*Hans-Jorg Rheinberger (1998, pp. 287, 291)*

A key strength of Rayna Rapp's book is its engagement with the practice and culture of science as both promising and concerning. I finished the book sobered by the "technological transformation of pregnancy" and particularly by the entrenched cultural and institutional bias against the "unexpected child," but also about shrinking access to amniocentesis for the poor. I also came away with a richer understanding of the demands and importance of scientific literacy, conceived as something that can help people find their way through the technoscientific dilemmas that characterize (post)modern life. Scientific literacy, as Rapp stages it, is not about being able to differentiate truth from falsehood, but about being able to draw on a wide array of discursive resources to understand and make judgments about technoscientific phenomena.

Marcus and Fischer also engage with science and technology in interesting ways, particularly in the second edition of *Anthropology as Cultural Critique*. Scientists, particularly those working in areas critically affected by the new data flows enabled by technological development, are said to have particularly rich potential as informants, because they are socially and intellectually situated to recognize needs and possibilities for new types of knowledge, produced and validated in new ways. Scientists are also seen as a rich source of metaphors for thinking about social and cultural phenomena. If many of the metaphors for the "functionalist" and "structuralist" vocabulary of earlier social theory drew from the mechanical and physical sciences, useful metaphors for understanding and describing contemporary reality can be drawn from the life and information sciences. Scientists' way of describing bacterial and viral

action, genetic transmutation and symbiosis, for example, offer ways of thinking about society and culture as emergent from mutations, viral transitivity, and rhizomatic growth (p. xxvi). The practice and imaginary order of scientific experimentalism is also pointed to as a rich reference point for ethnographers.

The experimentalism encouraged in the first edition of *Anthropology as Cultural Critique* primarily drew on experimentalism in the avant-garde. The second edition highlights the potential of drawing from experimentalism in the sciences. Both traditions of experimentalism are understood to be about openness: openness to what was once considered uninteresting or intractable; openness to what cannot be explained and to the possibility that what was once thought to be noise can be understood as signal. The goal of experimentalism is what can be called “differential reproduction.”

Scientist and historian of science Hans-Jorg Rheinberger (1998) uses the phrase “differential reproduction” to describe what makes an experimental system used by scientists a research system, rather than a testing device. While an experimental system must be reproductive, drawing on and contributing back to particular genealogies, so to speak, it also must facilitate shifts and displacements that allow something new to emerge. It must articulate and dislocate, stabilize and reorient. This movement, described by biologist Francois Jacob as a “play of possibilities,” makes up a system’s differential reproduction.

The notion of an experimental system is also drawn from the practice and culture of scientists themselves.<sup>4</sup> Rheinberger ties it particularly to research in biomedicine, biochemistry, biology, and molecular biology, and particularly to the writings of Francois Jacob and Ludwik Fleck. Jacob describes an experimental system as a “machine for making the future” (Rheinberger, 1998, p. 288; Jacob, 1988, p. 9). Fleck “considers an experimental system to be a unit of research designed to give answers to questions that we are not yet able to ask clearly.” An experimental system, then, is a “device that not only generates answers; at the same time, and as a prerequisite, it shapes the questions to be answered” (Rheinberger, 1998, p. 288; Fleck, 1979). It provides orientation, without determining where the system itself, or those who use it, go.

Understood in this way, an experimental system is, I believe, akin to the kind of experimental ethnography advocated by Marcus and Fischer, and exemplified by Rapp. Ethnographic texts can themselves be considered devices for continued development of a tradition of thought that necessarily builds in possibilities for shifts and displacement in that tradition of thought. Read as ethnography, *Anthropology as Cultural Critique* can be considered a system to examine and extend thought about anthropology itself. Rapp’s book can be considered an experimental sys-

tem that examines and extends feminist thought, and thinking about bioethics.<sup>5</sup> Neither provide a theoretical framework to be reproduced or tested. What they provide is rather like labyrinths, whose walls orient and limit the options available to a reader without telling her where to go. She is forced to “move by means of checking out, of groping, of *tatonnement*” (Rheinberger 1998, p. 288, citing Jacob 1988, p. 255). At the end, she may have “results”—a stabilized way of thinking about particular phenomena—but she will have gotten there on her own, by moving through the spaces the ethnography lays out.

In this conception, the reader of the ethnography is cast as an experimenter, as is the ethnographer herself. Both want the object of their study to gather contours over time, becoming increasingly stabilized, but are also willing to “open windows for the emergence of unprecedented events” (Rheinberger, 1998, p. 291).

Such an ethnographer pursues ethnography in/of/as open systems (Marcus, p. 95). She recognizes that because she operates *in* an open system the experimental system that she designs for her research must itself produce the object of her study. That object, in turn, is not stabilized at the outset. It gathers contours, turns in on itself, mutates into something unexpected. The ethnographic text that “represents” this object is also open. It is a system; it delimits where a reader can go, partly by tying forward movement to the past. It also opens up many different pathways for readers, through which they acquire and learn to use the discursive resources the text provides. Readers emerge more literate, even if without necessary conclusions.

Conceptualizing ethnography as devices that shape questions to be asked allows us to think of them as scientific research tools. Their significance lies less in what they conclude than in the discursive resources they provide and the pathways they open up. Their aim, in short, is to improve literacy, to enable people to read the world better. Some would consider this value-neutral. I think that this is what gives ethnography ethical charge.

As Marcus and Fischer highlight, the world is outpacing many established theories. Established ethical theory—embodied in religious and cultural codes as well as in academic treatises—is not immune to such obsolescence. While established ethical theory will remain an important discursive resource, it is unlikely if not impossible that it will be sufficient in itself.

Consider again, for example, the ethical dilemmas confronted by women dealing with amniocentesis. The women described by Rapp did not, and perhaps could not, make related decisions based only on clean ethical guidelines “provided” by religion or culture. Nor would it have been straightforward, I dare to say, if they had been Kant scholars. The decisions before

them were too complex. Simply corroborating existing theory wasn't an option. Instead, they had to read the world, considering the many different implications of the "unexpected child," finding their way, as through a labyrinth. What Rapp's ethnography provides is the walls of the labyrinth, concrete examples of where women dealing with amniocentesis can go. There are many possible paths, all of which open to other paths, some of which later converge, some of which tack in a completely unexpected direction. What the book produces is a deeply contoured (scientific) object—amniocentesis in America—that is itself open to transformation. This is accomplished through a text that builds on and extends, reproduces and differentiates, feminist thinking and thinking about bioethics. The text does not tell a reader what to do about amniocentesis and bioethics, or even where to go with feminist thinking. Instead, it charges the reader to pay attention, to recognize the many forking paths that constitute ethical dilemmas in real time and space. It clues a reader in, about the real world and about the limits and potential of available ways of thinking about the world. This, in my view, gives this ethnography ethical charge.

Marcus and Fischer also provide discursive resources, orientation, and a structure for producing questions about the future of anthropology. Their book, like Rapp's, revolves around "informants" who themselves are posing questions and looking out for paths that fork, double-back, and lead somewhere new. What their book produces is understanding of a contour of anthropology that has the potential to reproduce the discipline with a difference. The difference that makes a difference to them regards openness. Marcus and Fischer are concerned with sustaining and building the relevance of ethnography as a way of producing knowledge and as a mode of communication. To accomplish this, ethnographers will have to pay attention to the currents in which they work, and to the way ethnographic writing enters the stream of representations that shape contemporary life. What ethnography can provide are openings, images, and discursive resources that enable readers to read the world well enough to make out gaps and fissures from which something new can emerge.

This approach assumes that there is something of value—perhaps even of ethical value—in "the new." There is, in my view, humility and sense in this. As feminist legal scholar Drucilla Cornell has explained, it makes sense to recognize "the good" as always deferred, as always outside any known system of ideality (Cornell, 1992). This keeps us moving, yet engaged. It opens up the future by shifting and displacing the forms that would simply reproduce the ills of the past. Openness can, then, be considered an ethic for ethnographic work, an ethic particularly attuned to the so-called (post)modern but also in keeping with traditions of experimentalism in the sciences, in the avant-garde, and in anthropology itself.

## NOTES

1. My title is a play on the title of an important article by George Marcus titled "Ethnography In/Out of the World System: The Emergence of Multi-Sited Ethnography (1995).
2. See Aihwa Ong's critique in *Flexible Citizenship: The Cultural Logics of Transnationalism* (Ong, 1999).
3. Note that *Testing Women, Testing the Fetus* is already a much honored book. It has won the Senior Book Prize awarded by the American Ethnological Society, the Basker Prize awarded by the Society for Medical Anthropology, and the Forsythe Prize awarded by the Committee on the Anthropology of Science, Technology, and Computing.
4. Note that the notion of experimentalism has very different meanings across space, time, and culture. Some (in philosophy of science, in particular) assume that scientific experiment is intended to corroborate or refute existing theory. Meanwhile, many African Americans associate experimentalism with Tuskegee and other instances in which African Americans were used as "guinea pigs." For elaboration on the latter, see Troy Duster's *Backdoor to Eugenics* (Duster, 1990).
5. Note also how an experimental system that is both reproductive and open to the possibility of difference offers a nice image for thinking about a system of biological reproduction open to (but not determined toward) the "unexpected child."

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