

"I just saw a piece on 'Good Morning America' on the Robin/Stone/AIDS story and also on the local news here in Raleigh NC that talked about the National AIDS Hotline nearby in Research Triangle Park. I was sorting papers at the time so I may have missed something, but apparently the hotline is getting a lot of calls as a result of people watching GH. It surprised me how many had not known until now that AIDS had anything to do with them."

With Stone's death that November came the bad news that Robin, whose first HIV assay had been negative, now tested positive for HIV. Having used Stone's character to educate viewers about AIDS in its many manifestations, the importance of tolerance and social support, and the ups and downs of treatment, the show used Robin to exemplify "long-term nonprogression" and regularly update viewers about treatment advances, including protease inhibitors.

All these examples contribute to AIDS media discourse. They may not embody the imagination, political acuity, or pizzazz of John Greyson's wonderful music video *The AIDS Epidemic* (1987), but now, ten years later, I would take them over a green snake any day.

Paula Treichler (1999)

How To Have Theory

in an epidemic:

Cultural Chronicles

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AIDS, HIV, and the Cultural Construction of Reality

Scientific activity is not "about nature," it is a fierce fight to construct reality.

—Bruno Latour and Steve Woolgar, *Laboratory Life*

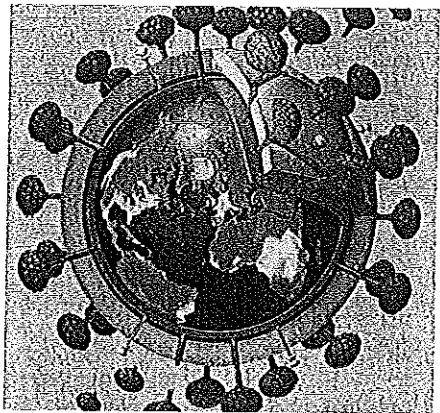
You don't have 500 dollars for the operation? For 50 bucks I'll touch up the X-ray.

—Groucho Marx

As the AIDS epidemic entered its second decade, its importance as a social and cultural as well as a biomedical crisis was widely acknowledged. The Fifth International AIDS Conference in Montreal in 1989, for example, was titled "AIDS: The Scientific and Social Challenge" and featured more social and cultural presentations than in past years. Richard A. Morisset, M.D., chair of the program committee, wrote in the official program that the conference was expected to be "an extraordinary one" not only for its scope but also for "the profoundly humanistic philosophy guiding it." He continued: "Anyone who has kept a close watch on the series of International Conferences on AIDS that began in Atlanta in 1985 will have noticed how these encounters have gradually opened up. Originally, you will recall, the meetings dealt almost exclusively with biomedical topics. Yet scientists soon had to admit that AIDS is not simply a medical problem, but also a human drama" (Morisset 1989, 6).¹ With nearly one-third of the panels and papers devoted to "social aspects of the epidemic," the commitment of the Montreal conference was clear.

What is less clear is precisely what it means to describe AIDS as a social or cultural phenomenon or, in a phrase becoming common, a *cultural construction*. To call AIDS *cultural* may mean simply that—like any great event or crisis—AIDS significantly affects social life and symbolic expression. But to call it *culturally constructed* invokes long-standing debates about human knowledge and the nature of the world. This is far from evident in Morisset's opening statement, which characterizes the *problem* as medical, the *drama* as human, and links the recognition of AIDS's social

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This image of HIV appears on the cover of AIDS: A Global Crisis, a handsome spiral bound booklet produced and distributed by the Wellcome Foundation (1989); inside, a more technical image of HIV appears. In contrast to most representations that fill the scholarly, popular, and marketing literature, this image is labeled "Artist's Impression of HIV 1" (5.1: copyright Graphico Hamburg, Hans Ulrich Osterwaldel). The virus is very differently stylized on the cover of the Italian newspaper Panorama (23 June 1991, an issue highlighting the 1991 international AIDS Conference then under way in Florence (5.2)).

challenge to a humanistic philosophy. The anchoring tradition remains biomedical: "Naturally, we all know that the ultimate solution will eventually come to light in a laboratory. But meanwhile, what can the virologist or microbiologist offer an AIDS victim and his or her loved ones to ease the burden? To help them combat the ignorance and intolerance they face, which are growing day by day?" (Morisset 1989, 6). Here, the human sciences, handmaidens to the biomedical sciences, do their best to ease the suffering and combat ignorance until the laboratory can find the "ultimate solution." The "social challenge," primarily a matter of helping individuals cope with pain and death, is what happens "meanwhile."

The biomedical vision embodied in this conference statement is widely shared and deeply embedded in Western postindustrial culture. The discourses of virology, molecular biology, and immunology permeate the ways we think and talk about the AIDS epidemic. "We report here," wrote the Pasteur Institute research group in *Science* in 1983, "the isolation of a novel retrovirus from a lymph node of a homosexual patient with multiple lymphadenopathies" (Barre-Sinoussi et al. 1983, in Kulstad 1986, 49).

Just seven years later, the sprawling exhibitors' area at the 1990 Sixth International Conference on AIDS in San Francisco was dominated by an immense three-dimensional glass model of the human immunodeficiency virus (HIV). Not only aesthetically stunning, HIV had become an intensely personal experience as well. Andrea Walton, for example, "one of the one thousand people with HIV who attended this week's conference," was profiled by a San Francisco television station; the camera followed Walton as she wandered through the exhibit hall and paused to scrutinize the model glass virus: That's my enemy—that's what I fight every day. I'm feeling overwhelmed because it's killing me—and it's actually pretty. There are a lot of things in nature that are deadly and pretty and I guess that's what I'm dealing with" (Saiz 1990).

Elsewhere in the world, the virus is also experienced and represented in many ways. In a Central African Republic pamphlet on AIDS written in Sango (c. 1988), the immune system is shown surrounding the human figure like a rope; viruses, pictured as beaked and bat-like birds, are eating through the protective boundary. In the Brazilian magazine *Veja* (10 August 1988), HIV is pictured attacking cells that look like Caspar the Friendly Ghost, a popular way of illustrating the immune system in 1950s medical textbooks (see Haraway 1989a). Paul Farmer (1990) shows that understandings of AIDS (SIDA) among villagers in rural Haiti were diverse until 1987, when accumulated knowledge and firsthand experience of the disease led to a shared model based on tuberculosis and, therefore, believed to be caused by a microbe. Writing about the cultural construction of AIDS in Botswana, Benedicte Ingstad (1990) notes that, with incidence still low, people sometimes talk about AIDS ironically as the "radio disease"—widely publicized but not yet experienced. Although associated with violation of sexual proprieties, the disease will need to become more common before traditional healers can decide whether it should be diagnosed as a traditional [Tswana] disease or as a "modern" disease.

If we think of cultural construction as a symbolic model of reality, these formulations of HIV raise several questions. What kind of correspondence do we presume to exist between the representation of a virus and its reality? Is this reality universal and unchanging? What features of culture determine the form in which reality is constructed? What is the role of language in articulating and popularizing a particular construction? Is any articulation a construction? Do different representations make a difference? Three general takes on these questions are familiar. First, the virus is a stable, discoverable entity in nature whose reality is certified and accurately represented by scientific research, a high degree of correspon-

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dence is assumed between reality and biomedical models. Second, the virus is a stable, discoverable entity in nature but is assigned different names and meanings within the signifying systems of different cultures; all are equally valid, although not all are equally correct. Third, our knowledge of the virus and other natural phenomena is inevitably mediated through our symbolic constructions of them; biomedicine (including germ theory) is only one of many, but one with currently privileged status. While none of these views is purely realist ("HIV is an autonomous physical reality that we merely label") or purely idealist ("HIV is an abstraction that exists only in the mind"), the first—despite the provisional nature of much scientific inquiry—is characteristic of science and medicine; the second of a nonjudgmental cultural relativism that nonetheless often assumes the fundamental correctness of Western biomedicine; and the third of a radical constructionism that foregrounds such mediating processes as language and makes few claims about universal truth.

Professionally allied to both the first and the third positions, medical anthropologists have tended, by default perhaps, to take the middle ground on this epistemological and ontological continuum: most seem more comfortable with the notion of a single, stable, underlying biological reality to which different cultures assign different meanings than with the view that everything that we know about reality is ultimately a cultural construction. Ingstad, for example, argues that health officials in Botswana should recognize traditional healers' knowledge and influence over villagers' health-seeking behavior. Yet, ultimately, she privileges a Western biomedical account of HIV infection, noting that some healers are cooperative and receptive to modern health information while "others are skeptical, prefer to keep a distance, and may promote behavior that is counterproductive to prevention. Considering the seriousness of the AIDS epidemic and the likelihood that the incidence of the disease will increase in Botswana in the near future, it is important that healers be made to feel that they have a role to play in the prevention of this disease" (Ingstad 1990, 38). The "be made to feel" of this conclusion suggests, perhaps, the moral and intellectual burden of carrying out ethnographic fieldwork driven in part by the threat of a particularly vicious and terrifying infectious disease for which Western health intervention strategies seemingly remain the best form of prevention. As new cases of AIDS around the world continue to escalate, many researchers engaged in cultural analysis are having to develop theory under crisis conditions and, at the same time, efficiently produce data to guide prevention programs. Our growing knowledge of cultural difference and specificity does not make

this easy. Pedagogy across culture involves more than translating prescriptions for behavior change into different languages; inevitably, we need to know more about the meaning of given practices and conceptions, their place in a community's social and cultural life, the political economy that frames them, and the contingencies that sustain or discourage them.

There are pressing reasons for attempting to clarify the concept *cultural construction*. In the face of the epidemic's growing toll, the moral and technical limitations of a facile constructionism are obvious. To paraphrase Pauline Bart, everything is cultural construction, but cultural construction isn't everything.² "Culture," moreover, figures so insignificantly in the crude realism of most discussions about AIDS that cultural scholars hardly have time to do more than lobby for its inclusion somewhere in the big picture. Yet, with its long-term influence over the direction of policy, research, education, and legislation, the AIDS crisis makes it all the more imperative to take seriously the conceptual clashes between different symbolic models and the ways in which biomedicine is itself culturally constructed. Because the question of culture is central to interdisciplinary work on AIDS and to wider struggles against the epidemic, this chapter explores relations between AIDS and culture and seeks to refine our understanding of how AIDS can plausibly be characterized as a cultural construction. The epidemic demonstrates the unique value of the concept *cultural construction* and, at the same time, highlights the danger of using it.

Cultural Construction and Mannheim's Paradox

If we are asked: "How can a logical construct like culture explain anything?" we would reply that other logical constructs and abstractions like "electromagnetic field" or "game"—which no one has ever seen—have been found serviceable in scientific understanding.—A. L. Kroeber and Clyde Kluckhohn, *Culture*

"Culture," writes Raymond Williams, "is one of the two or three most complicated words in the English language" (1976, 1983, 87). As Williams shows, *culture's* historical legacy encompasses both material and non-material meanings—for example, both the concrete objects that a cultural community produces (pots, books, television sets, glass models of HIV) and the complex of practices, attitudes, beliefs, and ideas that make up its way of life. This is a duality on which ethnography rests and the reason for the elaborate fieldwork practices aimed at helping the investigator

reconstruct the signifying or symbolic system underlying another culture's everyday life. At once useful and problematic in examining the AIDS epidemic, it is one of several dichotomies that the term *culture* invokes: Williams notes that *culture* has served to distinguish *material* from *spiritual* development yet also to distinguish *human* from *material* development. In American anthropology A. L. Kroeber and Clyde Kluckhohn's (1952) exemplary and instructive semantic history of the word and concept was instrumental in institutionalizing ethnographic, relativist definitions of *culture* over older elitist and chauvinist uses of the term to mean progress toward the practices and values of European civilization. In his appendixes to Kroeber and Kluckhohn (1952), Alfred G. Meyers notes that anthropologists tend, in contrast, to hold up other cultures as a "didactic mirror" [p. 208] that reflects unfavorably on modern society.) Their review demonstrates, too, that the term continues to embrace both specialist and nonspecialist meanings.³

The term *cultural construction* derives less from the field of anthropology than from the sociology of knowledge. Our current understandings are informed by a number of sources, including Karl Mannheim's *Ideology and Utopia* (1936, 1985), a study in the sociology of knowledge that examines the way in which knowledge is bound up with being. For Mannheim, although all knowledge of the world is finally indirect and partial, any object of knowledge becomes clearer with the systematic and cumulative analysis of different ways of seeing it (from Dilthey: "situational determination" or "seat in life"). These ways of seeing are existentially determined, not mere perspectives but fully naturalized worldviews; identifying them is the task of the scholar or researcher (the "socially unattached intelligentsia"). Political and historical change comes about, in part, through the clash between two ways of seeing the world that Mannheim terms *ideology* and *utopia*. For Mannheim, *ideology* is not the politically tainted doctrine of conventional usage but a serious worldview; it is a position that constructs the world as situationally congruent—that is, so that the status quo is reinforced. *Utopia* constructs the world as situationally transcendent—so that the status quo is challenged. "The world," the same material object, is rendered by ideology and utopia as two very different realities, each of which the world's material data appear to support. Particularly useful is Mannheim's emphasis on the hermeneutical activities that produce different constructions. Both ideology and utopia produce distorted determinations of reality, but ideology works to maintain what is (as ideology renders it), while utopia works to transform reality into its own image. When ideological and utopian visions become

locked in sustained opposition over time, proponents of the two camps inevitably become intimately familiar with each other's positions and, therefore, symbolically and ironically, perfectly situated to engage in a sophisticated exchange of critiques. I return to this symbiosis below.

That Mannheim treated ideology as a subject for serious investigation was important for Peter Berger and Thomas Luckman's influential work *The Social Construction of Reality* (1967), originally formulated as a project for sociology, although ultimately taken up more vigorously by other fields. Drawing on Dilthey, Mannheim, Weber, and others, Berger and Luckman argue that we routinely experience the world in the form of multiple realities. Given the constraints of environment and biology on the human animal (i.e., human beings have no species-specific environment), the worlds that we inhabit are largely socially—not physically—constructed. We work to create meaning, to achieve and maintain a cognitive coherence, because our ability to be in the world at all is at stake [no habitat will do it for us]. When problematic sectors of experience threaten to disrupt the totality, we work to integrate them, often by marking them as "finite provinces of meaning" (Berger and Luckman 1967, 25) through explicit linguistic transitions. Although anchored in its specific set of social determinations, each of these multiple realities is nevertheless experienced as total, nontrivial, and inescapable. The commonsense reality of everyday life occupies a privileged position for Berger and Luckman; although it is but one reality among many, it offers a realm where our subjective experience of the world seems trustworthy and meanings seem to be unproblematically shared with others. The object of sociological analysis is the self as it goes about creating meaning in everyday life.⁴

Originating in a phenomenological analysis, *The Social Construction of Reality* had immediate resonance throughout the social sciences. The book's very title, its insistence on the validity of multiple socially determined realities, and its analysis of ideology's function in deploying what we think we know to resolve knowledge that has been rendered problematic—all provided a way of thinking about the production of knowledge that moved away from the pervasive realism and totalizing determinism of postwar social science. But, in the United States, Thomas Kuhn had in 1962 published *The Structure of Scientific Revolutions*, a sociology of knowledge in the natural sciences; although more or less cleansed of its Continental and phenomenological influences, Kuhn's analysis treated scientific theories as social constructions rather than assigning them (as even Althusser did) to a realm of truer discourse that transcends social history. True, Kuhn ultimately pulled back from the precipice of radi-

cal, constructivism (in the enlarged 1970 edition), yet, as a compelling and socially situated account of scientific change, the book's influence and liberatory potential were enormous, in some respects preempting and even superseding the project of Berger and Luckman.

On such works is founded a dialectical view of the intersections between the real material world and human consciousness—dialectical because the known world is determined neither by "reality" nor by the perceiving mind but is rather a product of the interaction of the two, a product continually modified first by one, then by the other. Such works also provide a foundation for self-reflexivity in the social sciences, enabling social and cultural critics to characterize positivist accounts (of social life or scientific progress, say) as themselves "social constructions." Making this argument in *The Interpretation of Cultures*, Clifford Geertz charges that positivist social science is not qualified to analyze symbolic action adequately; it is the ethnographer who is best equipped to attempt "the perfection of a conceptual apparatus capable of dealing more adroitly with the meaning." Geertz insisted that the cultural be inserted into the study of sociology of knowledge, challenging the widespread view that science is radically different from ideology—that, in the recurrent simile of the literature, thought determined by fact is like a crystal clear stream while ideological thought is like a dirty river. (That the study of ideology itself repeatedly and inevitably becomes ideological is what Geertz labels "Mannheim's paradox.") Geertz continues: "Where, if anywhere, ideology feaves off and science begins has been the Sphinx's Riddle of much of modern sociological thought and the ruthless weapon of its enemies" (Geertz 1973, 194).

The Sphinx's riddle can be read more broadly as the problem of any constructionist approach, for where, if anywhere, does construction leave off and reality begin? That cultural constructionism is itself culturally constructed, the product of particular intellectual interests at a particular point in history, creates the potential for theoretical paralysis or relativism, which may in turn inspire impatience, the embrace of a relativist realism, and charges of idealism, mentalism, armchair speculation, or semantics. But there are differences between the kind of dialectic embodied in cultural constructionism and the conventional realist-idealist dualism. This is made clear by more radical versions of constructionism in which ideas have a life and logic of their own yet are in intimate dialogue with the material data—including the discursive data—of a real world (a constructed perceptual and interpretive apparatus, albeit one designed to

minimize or erase its own effects [e.g., scientific method]). A constructionist view must, therefore, encompass the apparatus as well as the data. The Sphinx's riddle is answered then, or at least finessed, by such studies as Karin D. Knorr-Cetina's (1981) application of a rigorous ethnography to the sociology of knowledge; setting out to examine the production of scientific knowledge in a laboratory setting as an anthropologist would study a strange culture, Knorr-Cetina moves away from social explanations for scientific research, in Kuhn's sense, to an emphasis on meaning, discourse, and the discursive construction of knowledge within a given disciplinary culture. Insisting on the manufactured, made nature of science, Knorr-Cetina concludes that science must be seen as radically constructive rather than descriptive and that scientific discourse is not qualitatively different from other discourse. Noting the laboratory's concern with "making things work," she emphasizes the etymological connection between fact and fabrication. One can compare Ludvik Fleck's earlier definition of a scientific fact not as an entity with established ontological autonomy but as that which constrains subsequent scientific discourse: "a stylized signal of resistance in thinking" (Fleck [1935] 1979, 98).

Crucial insights here are the recognition of the role of discourse and the insistence that discourse entails concrete practices. Like Foucault's system in which entities are products of the discourse that embodies them, Knorr-Cetina's detailed analysis dissolves any strict dichotomy between material and nonmaterial elements of scientific research (e.g., laboratory apparatus vs. "ideas"), between objects and discourse, and between science and ideology. Scientific laboratory operations, she argues, are constituted by the exegeses and symbolic manipulations in the laboratory itself. These construct an argument primarily designed to make sense within the field. Written communication—mainly in the form of scientific journal publications—crystallizes the laboratory's entire argument and stakes its claim. As a discursive field of interaction, science is directed at and sustained by the arguments of others; writing is, therefore, at the heart of its social and symbolic foundation. But writing is in no simple correspondence with natural reality, and Knorr-Cetina reminds us of Pierce's assertion that manifestation in writing reveals the presence not of an object but of a sign (i.e., not of a referent but of a symbol).

Knorr-Cetina also asserts, quoting Dorothy L. Sayers ([1927] 1987, 70), "Facts are like cows—look them in the face long enough and they generally run away." But the observer must get close enough to phenomena to glimpse their true character: getting a good hard look requires uncovering the rules of everyday practice and attempting to capture the meanings in

the culture being observed. In short, one must go beyond simply the desire to understand or even to describe the other culture; one must let it speak and then give voice to the story it tells. This approach does not guarantee an inconstructed account, indeed cannot, for this is impossible, but it does enable us to achieve a "decentered constructivity." Finally, scientific inquiry and the study of science always take place within a given context, a context that includes the community of one's peers. Departing from conventional notions of peer review as a rational and authoritative evaluation by a scientific elite, Knorr-Cetina argues that a scientific laboratory does not simply enter its product—its publications—into open competition in the scientific marketplace; rather, the publication is shaped from the beginning by the gatekeeping operations of scientific peer review. Gatekeeping thus influences the entire research process, including which research project is selected and how it is pursued. Gerald Geison's [1995] compelling study of Pasteur's laboratory notebooks argues this same point in detail, tracing the interaction of the lab work with the broader social and scientific worlds in which it took place as well as the discursive conversion of everyday notes and records into public science, specifically into the format of the scientific journal paper. Geison argues not that the notebook science is more "true" or "real" than its public representations but rather that the relation is interesting and far from transparent (involving, e.g., what Geison calls "formalistic discrepancies").

For Knorr-Cetina, the constructed nature of science is defined through concrete practices situated within the culture of a discipline. Bruno Latour and Steve Woolgar, whose study *Laboratory Life* ([1979] 1986) builds on Knorr-Cetina's work, further sketch this cultural domain. Observing that fact means simultaneously what is fabricated and what is not fabricated, they maintain that scientific accounts are necessarily provisional and uncertain; this is their essential character, whether explicitly articulated or not. They define the construction of scientific facts as "the slow, practical craftwork by which inscriptions are superimposed and accounts are backed up or dismissed." It is through practical operations, they continue, "that a statement can be transformed into an object or a fact into an artifact" (Latour and Woolgar [1979] 1986, 236). There is no inherent or persistent difference between material and intellectual dimensions of construction: what is the subject of today's intellectual dispute is incorporated into tomorrow's laboratory furniture. (Compare Antonio Gramsci's rejection, so influential in the development of cultural studies, of the classic Marxist dichotomy between materialism and idealism [Laclau and Mouffe 1985]. Stuart Hall's [1980a, 1980b] discussion of the mediations between discourse and material practice that mass communication rou-

tinely produces, or Donna Haraway's [1989b] characterization of Harlow's primate research as the transformation of metaphor into hardware.) Those accounts of phenomena that have come to be taken for granted as reified autonomous objects—black-boxed as Bruno Latour [1987] puts it—constitute what is referred to as reality. Characterizing the social study of science as "the construction of fictions about fiction construction," they also define reality discursively as the set of statements considered too costly to modify.

What does this mean in terms of human disease or a "natural" entity like a virus? Where the object of knowledge is a living human being—or even a living host environment for a virus—symbiosis is even more intense. A virus—any virus—is a constructed entity, a representation, whose legitimacy is established and legitimized through a whole series of operations and representations, all highly stylized. Each of these must be critically analyzed on its own terms rather than accepted as though a scientific assertion about a virus stood for a referent rather than a sign. Yet we encounter peculiar difficulties in the cultural analysis of medicine. On the one hand, the biomedical model shares qualities with physics or molecular biology, appearing to describe entities and phenomena that are transcultural and natural. On the other hand, it is the human body—and the perceiving self—that gives the virus its host environment, experiences and reports its effects, and undergoes treatments (and cognitive and affective events) that may change both the environment and the virus.

It is said of Western medicine that the patient comes to the physician's office with an illness but leaves with a disease. Disease is thus taken to represent the medical model, illness the patient's subjective experience or, in anthropological terms, the native's point of view. Current conventional wisdom is that the patient's view must be honored; the physician is, therefore, urged to understand the patient's construction of reality, to read the native's text. This fits nicely into current ethnographic theory. George Marcus and Michael Fischer (1986), for example, argue that *diagnoses* is the primary underlying metaphor for ethnography today. This has a pleasing and contemporary ring to it and seems in one sense perfect: the social in dialogue with the physical, the cultural with the natural. Yet, as Atwood Gaines and Robert Hahn observe, "for many anthropologists, Bio-medicine is the reality through the lens of which the rest of the world's cultural versions are seen, compared, and judged" (1985, 4). And, as Arthur Kleinman notes (in the introduction to Gaines and Hahn [1985]), the entry of the social sciences into medicine has for the most part prompted not dialogue but "an enriched biomedical monologue" characterized by the subversion of social science to medicine's aims. As a model for research or

clinical practice, the notion of dialogue breaks down, for in whose words does the body speak?

This question lies at the heart of Michael Taussig's germinal essay "Re-ification and the Consciousness of the Patient" (1980), which addresses at once the moral foundations of the physician-patient encounter and the particular social and historical conditions that cause moral questions to emerge now as problematic. Taussig forcefully challenges the recommendation that physicians learn to understand what constitutes illness for people of diverse cultural backgrounds—to understand, that is, the "cultural construction of clinical reality": "Like so much of the humanistic reform-mongering propounded in recent times, in which a concern with the natives' point of view comes to the fore, there lurks the danger that the experts will avail themselves of that knowledge only to make the science of human management all the more powerful and coercive. For indeed there will be irreconcilable conflicts of interest and these will be 'negotiated' by those who hold the upper hand, albeit in terms of a language and a practice which denies such manipulation and the existence of unequal control." "It is a strange 'alliance,'" writes Taussig, "in which one party avails itself of the other's private understandings in order to manipulate them all the more successfully." The issue, he argues, is not "the cultural construction of clinical reality" but the "clinical construction of culture" (p. 12). In this view, Western medicine must be seen as an ideological system (in the sense of Mannheim, Berger and Luckman, and Geertz): it is experienced by its practitioners as inescapably natural, as what is, and whatever data they collect will sustain a vision of biomedical knowledge as true. Taken for granted as reality, the underlying system of biomedicine is precisely what need not be examined.

The unfolding journal literature on HIV reads like a case study on this point, documenting, on the one hand, the instability of linguistic signs and their presumed referents and, on the other, the efficient ways in which instability is repaired. The compilation of papers published in *Science* from 1982 to 1985 (Kulstad 1986), for example, illustrates several ways in which the research laboratory of the virologist Robert C. Gallo at the National Cancer Institute (NCI)—"codiscoverer" of HIV with Luc Montagnier of the Pasteur Institute in Paris—was able to stake out fairly ambitious territory: by repeatedly citing each other's work, members of a small group of scientists quickly established a dense citation network, thus gaining early (if ultimately only partial) control over nomenclature, publication, invitation to conferences, and history. The "Introduction and Overview" chapter of the *Science* collection—written, quite appropriately, by a leading AIDS researcher who is, however, within the NCI network (Max Essex)—serves to

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stabilize the scientific narrative up to that point: reinforcing some lines of thinking, omitting untidy anomalies, cleaning up terminology. Subsequent articles in journals like *Scientific American* by Gallo and others accomplished the same kind of textual cleansing and fortification. As we would expect, the journal literature on AIDS journal literature (e.g., Small and Greenlee 1989) documents the increasing reality of "the AIDS virus" as a legitimate object of scientific study and shows that citation evolves an intertextual life of its own. As the *Science* collection suggests, one group of influential papers can significantly shape subsequent citation patterns, fix nomenclature, and stimulate or close off particular avenues of research. But it also suggests that density of signification may tell us as much about a given laboratory's authority in the field to produce statements as about the concrete operations by which it claims to transform statements into scientific objects. This may include the power to influence acceptance or rejection of papers for publication, to shape the language of someone else's publication, to determine the significance of research for other scientists and the media, the effect is not only to help or hurt individual scientists but to set a gold standard for future discourse. Using the Freedom of Information Act to trace the history of the identifying names given by various laboratories to the AIDS-related viruses and viral strains that ultimately emerged as HIV, John Crewdson (1989) found that records of Gallo's lab created a chaotic trail of signifiers that often simply disappeared. While much of this may not be rare in scientific investigation and publication, questions and controversies in this case continue to call attention to the apparatus of production, to the practices through which facts are fabricated, and to the tenuous correspondence between objects and signs.

No wonder, then, that the cultural becomes precisely what must be repeatedly transcended (or jettisoned) in order to identify and maintain a sense of what is real and universal. In addition, as Philip Seret writes, "Medical literature virtually creates 'culture' as a reservoir of unhealthy practices to be stamped out" (1990, 18). Such observations inevitably challenge medicine's narration of the real.⁷

AIDS and HIV in Montreal

The evidence for HIV is overwhelming. There is a primary etiologic agent, the sine qua non. Take it away, and you don't have an epidemic.—Robert C. Gallo (1989)

We are 10 years into this epidemic and the HIV picture remains foggy and blurry.—Nicholas Regush (1989a)

AIDS and HIV are now taken for granted as stable, observable entities, fully institutionalized through scientific journals, funding incentives, clinical regimens, health practices, educational brochures, books and poems, personal testimonies, and corporate investments. One sees this clearly at the annual international AIDS conferences that have been held since 1985. At rare moments, however, medicine's narration of the real is interrupted long enough to glimpse other narratives. Such a moment occurred at the Fifth International AIDS Conference in Montreal in June 1989. This was by far the largest conference yet: over ten thousand delegates, one thousand media representatives, one thousand corporate and organizational delegates, and—uninvited—a few hundred AIDS activists. Quite unexpectedly, several factors converged to challenge biomedical control over the epidemic, specifically, the accepted view that AIDS is "Mack truck" of AIDS. Although the participants in the debate never articulated it in quite these terms, their questions about HIV—how it works, how it does damage, how it can be the sole cause of AIDS—inevitably opened the black box of what had been considered settled and wholly routinized within the apparatus of scientific investigation and reporting. Even as the conference overwhelmingly confirmed (in hundreds of scholarly presentations as well as in the conspicuous presence throughout a huge exhibition hall of the one thousand corporate and organizational delegates) that this particular virus had probably become a reality too costly to give up, questions about HIV called attention to the cultural construction of AIDS and, specifically, its construction within the culture of biomedical science.

It is germane to my account to say that most people who do cultural research on the AIDS epidemic have at least a rudimentary theoretical grasp of virology and immunology. The same cannot be said of most scientists' grasp of social and cultural theory. At a press briefing on 8 June, for example, Robert Gallo was asked whether he thought the Montreal conference's unusual emphasis on social challenges was overshadowing the science and whether he would come to these annual conferences in the future. He replied that, while his decision to come the next year would depend on the final conference program, "I must have heard fifty or one hundred scientists yesterday say there wasn't enough time for science." He continued: "I appreciate women's rights, but I would like a chance to make a choice. We didn't expect this amount of diversity. People from Third World nations need a chance to get together, but is here the best place? You can't even find the people you want to talk to here." For Gallo,

the term *social* seems to invoke a range of issues: the amount of conference time allotted to social issues and social sciences as opposed to "science," the visible presence of AIDS activists [whose agenda is apparently what Gallo means by "women's rights"], the "diversity" represented by "people from Third World nations," and the social congestion caused by conference crowds. These characterizations, including the conflation of conventional academic social science with political activism, cropped up elsewhere. Indeed, one could say that, in general, the cultural in AIDS discourse is collapsed with the social into an amorphous undifferentiated domain containing sociology, anthropology, other cultures, other countries, humanism, the humanities, art, linguistics, economics, the media, morality, ethics, religion, popular culture, politics, political activism, the quilt, and anything else that is not paradigmatic biomedical science or clinical medicine?

Yet, by June 1989, social and cultural questions were periodically disrupting the tidy biomedical narrative. A number of questions about HIV had accumulated and not been fully answered by leading AIDS scientists, at least to the satisfaction of the challengers. Most prominent was the bitter struggle between the NCJ and the Pasteur Institute over the name, genesis, paternity, and mechanism of the virus and credit for discovering it. As early as 1983, according to Crewdson (1989), when the Pasteur group submitted a paper to *Nature* that was at odds with Gallo's more well-known representations of the virus, one American reviewer wrote that, if what the French were saying was true, it would be an important paper—but it was not true. The paper was rejected. Indeed, it ultimately required a patent battle and the threat of an international lawsuit by the French to get the true significance and legitimacy of their findings recognized. Many American scientists supported the French, believing that Gallo's laboratory had done sloppy work and perhaps even stolen the Pasteur virus, although their support was often expressed in code or in private, it ultimately spurred international compromises that took into account the interests of the French.

A different challenge came in 1988, when Peter Duesberg, a retrovirologist at the University of California, Berkeley contended that no retroviruses could cause the kind of damage being ascribed to HIV. While other scientists' grumblings about "The AIDS Mafia" are to some degree discounted as professional sour grapes, Duesberg's relentlessness has led him to be treated as a monomaniacal eccentric whose charges drain time from valuable research. Another long-standing critic has been Joseph Sonnabend, a New York City physician who has repeatedly argued that AIDS research

has too narrow a focus: although a number of factors may be involved in the epidemic, he has charged, the government has based all its financing on the assumption that HIV is the sole cause of AIDS. "The HIV hypothesis has consumed all our resources," Sonnabend argues, "and yet hasn't saved a single life." Whether or not HIV is a causal factor, the epidemic in his view is most likely the product of immune suppression caused by dramatic social and environmental changes during the 1970s and the action of other widespread viruses. He has wanted to see these factors investigated as well as the potential role of syphilis, malnutrition, malaria, repeated sexually transmitted diseases (STDs), and drug use; he founded the *Journal of AIDS Research* to provide a forum for nonviral research. When it became clear that the viral etiology of AIDS was emerging as triumphant, the journal's editorship was transferred to a virologist and (ironically, in view of Sonnabend's original intent) renamed the *Journal of AIDS Research and Human Retroviruses*. At Montreal, Sonnabend participated in a press briefing to announce that a range of community research initiatives was being established to explore many causal factors in AIDS and test a wide array of treatments, including nonviral drugs. Meanwhile, the gay journal the *New York Native* published weekly assemblies of counter-evidence, charging that a virtual conspiracy was functioning to champion HIV as the sole cause of AIDS and suppress alternative evidence that would implicate syphilis and/or suggest the role of other viruses.

A common effect of criticism has been to isolate the critics from the scientific establishment, from other journals and science writers, and from many people with AIDS—most of whom have been increasingly inclined to take HIV as an established fact and shift attention to issues of treatment and cure (see Reichler 1991b, and also chap. 9 below). But, at the Montreal conference, media criticism of HIV orthodoxy went more mainstream. Nicholas Regush, an experienced Canadian science writer, has contended for some time that AIDS research is dominated by a small coterie of U.S. government scientists who endorse HIV as the cause of AIDS. Regush argued on a Canadian Broadcasting Corporation radio series in 1987–89 that few journalists (American or Canadian) had critically examined the processes by which the virus theory was constructed and maintained and that even fewer understood or reported the "escalating debate about the actual role of the so-called AIDS virus." As early as 1984, Regush himself had come to challenge the orthodox scientific argument on principle: "I felt that a reasonable argument that HIV could be the cause—could be the cause of AIDS—was being translated all too quickly by science and the media as the cause of AIDS, and no one seemed to give a damn about really

questioning whether in fact that was true or not." Most U.S. science journalists, Regush argued, "are basically fan clubs of certain scientists who believe that HIV is the cause of AIDS. [The coverage of AIDS] is one of the most disgraceful performances by science writers that I've ever come across" ("The AIDS Campaign," 12–13 January 1988).

Covering a major basic science session at the Montreal conference, in his column of 6 June Regush (1989a) used the foggy slides produced by a defective projector as a metaphor for the current state of AIDS theory: "We are 10 years into this epidemic and the HIV picture remains foggy and blurry." Pursuing the same theme, his column of 8 June took the form of an open letter to Robert Gallo. Titled "OK, Bob! Are You Going to Talk Turkey about HIV or Not?" the column opened by noting that, although Gallo had not arrived in Montreal in time to deliver his listed conference paper, he had nevertheless reassured Regush by phone that the mechanism of HIV's action was well understood:

I admit [writes Regush] I smiled when you said your lab was researching a dozen ways that HIV could somehow indirectly cause AIDS—considering that you once argued forcefully that direct action of the virus on key immune-system cells was all that was required. You summed up your position by saying that given the right strain of the virus, the right dose and enough time, a person will develop AIDS.

But then you added that it was quite possible that a person could live to a ripe old age with HIV infection and not get AIDS.

Look, Bob, we both know this may sound authoritative to a lot of people, but it really isn't convincing. And frankly, it is getting quite confusing. We really need the scientific details of how this all works. (Regush 1989b)

In refusing to grant unchallenged authority to scientific assertions and suggesting central contradictions in Gallo's account, Regush is not denying the value of orthodox science. Like the other challengers cited above, however, he emphasizes that scientific accounts are constructed versions of reality rather than simply transparent discoveries. Science writers, accordingly, must not merely act as scribes, reproducing or translating scientific representations into discourse for the general public, but must also oversee the signification process, examining and cross-checking the discourse at multiple points on the assumption that, if the statements in the literature do not hold up, the objects that they purport to establish will not either. Examining the structure of language—exposing the seams in the apparent seamlessness of scientific accounts—is the writer's check

on reality, carried out on behalf of the public. Thus, Regush urges Gallo to present his findings at Montreal: "Bob, we really need you. The HIV-theory side of the conference is in worse shape than I expected." In conclusion, Regush mentions that Peter Duesberg has called him to say that he is convinced that Gallo does not have the data that he claims to have: "Prove him wrong, Bob."

Gallo tried to prove him wrong that afternoon, at the press briefing from which I quoted above. In response to a packed house and some rather sharp questions, he reasserted his position that HIV was not simply a factor in a "multifactorial" explanation of AIDS. "Look," he finally said to his questioners, "I'm in one laboratory. The world is free to find what it wants. Peer reviews do the decision making, not us." He continued: "Pasteur, NIH, WHO, NCI—these are not stupid people. The evidence for HIV is overwhelming. There is a primary etiologic agent, the sine qua non. Take it away, and you don't have an epidemic. This particular epidemic has as its cause HIV. . . . We cannot demonstrate or explain every aspect of the way the virus causes disease. We don't have to explain everything to agree upon an agent. We have more evidence about this disease, and this agent, than any other in history." Gallo was asked whether he was sufficiently convinced that HIV is the sole cause of AIDS that other sources of pathogenicity should no longer be explored. "Absolutely," responded Gallo, "they should no longer be explored." When Regush arrived, Gallo broke off his comments to address him: "Mr. Regush," he said, "I'm sorry you were late—I opened my remarks in response to your open letter." From the back of the room, Regush responded, "You were the one who phoned me in the first place." The next day Regush's column did not even bother to discuss Gallo's assertions about HIV, focusing instead on the alternative theories of Sommadossi and others.¹¹

I cite these exchanges in some detail to show how dialogue at this conference between scientists and their critics called attention to and at times even disrupted the machinery by which scientific discourse is produced and accepted. The disruption of media machinery was evident as well. The physical setup of television monitors in the media center enabled reporters, individually or in groups, to follow any major conference paper via closed-circuit television without being physically present at the session; at the same time, the media center was closed to all conference participants except credentialled media representatives, with their official green badges, and their individual "interview subjects." In theory, at least, a reporter could cover the entire conference without ever leaving the media center or encountering a single nonmedia person (see chap. 7 below). The

chants and actions of AIDS activists were prominent at the conference, however, delaying the opening plenary session by more than an hour and in the process garnering much of the coverage by giving the media what they wanted: the visual, the quotable, and the unexpected. By the third day of the conference, activists had color xeroxed multiple copies of the official green badges and were regularly attending the closed press briefings inside the media center, including those organized by their friends and colleagues. This "artificial" crowd in turn drew a "real" crowd of "real" media representatives, whose coverage generated more crowd and more coverage, with the consequence of more fully communicating and legitimating nonestablishment perspectives and projects.

This orchestration of simulated identity and its transformation into the real parallels the construction of HIV's own reality. Recall Knorr-Cetina's claim that peer review is not a detached postresearch evaluation process but a continual gatekeeping operation. When, at his famous 1983 press conference, Gallo announced the discovery of "the AIDS virus," he provided it with a proper name—*human T-cell leukemia virus, type III* [HTLV-III]. This name for the virus was subsequently challenged, even down to what the I would stand for; the Pasteur Institute—whose published findings appeared in the same issue of *Science* that Gallo's did—called its virus LAV for *lymphadenopathy virus*, marking its association with lymph gland phenomena rather than leukemia. John Crewdson's book-length analysis in the *Chicago Tribune* in November 1989 reported that Gallo not only peer reviewed grant proposals and manuscripts of close competitors but, in at least one case, changed the wording of a manuscript to bring it into conformity with his own hypothesis that the virus acted like a leukemia virus. While Gallo's network of colleagues at the National Institutes of Health and elsewhere consistently used the name HTLV-III in their publications and the French used LAV in theirs, during this period a number of other scientists and journals used the name HTLV-III/LAV or LAV/HTLV-III to give recognition to both the NIH and the Pasteur Institute or even to express skepticism about Gallo's claims. The slash helped mark the virus's identity as culturally constructed and disputed. The compromise name, HTV, recommended in 1986 by the Human Retrovirus Subcommittee of the International Committee on the Taxonomy of Viruses and adopted in the 1987 settlement of the NIH-Pasteur dispute, was a consequence of this turmoil. As Latour and Woolgar conclude from their study of scientific contestation, reality is often "the consequence of a dispute rather than its cause" ([1979] 1986, 236).

Names play a crucial role in the construction of scientific entities: they

Normalizing
concepts
marked
pool

function as coherent and unified signifiers for what is often complex, inchoate, or incompletely understood. In turn, names establish entities for the public as both socially significant and conceptually real.¹² The existence of multiple signifiers for the virus, even within the pages of the same journal, reproduced the competition among several laboratories and kept alive a tension over just what the signified consisted of and how it was being constructed. It is in this context that the names *HIV* and *AIDS* are still interesting as one legacy of battles in AIDS research for authority, power, and control over resources, including control over the discourses of the field. Many questions remain about the various signifieds represented by the original array of names, but the existence of *HIV* and *AIDS* as unifying signifiers now makes it possible to proceed in discourse as though the questions have been resolved. It takes capital to make capital: as the adoption and acceptance of these terms become increasingly widespread, their linguistic capital continues to accrue.

Montreal did not change AIDS science or science writing, but it did call attention to disjunctions in signification, to "the AIDS virus" as a constructed entity across multiple discourses, to the function of metaphors in showing up favored versions of reality, and to the substantial investment in the notion that reality exists out there to be discovered. In terms of HIV's market currency, the debates over HIV at Montreal did not bring about market failure or anything close to it. But they did bring about scrutiny of the market and, at least in some cases, a more critical examination of individual investment portfolios.

The Reality of HIV and the Apparatus of Production

In metaphor one has, of course, a stratification of meaning, in which an incongruity of sense on one level produces an influx of significance on another.—Clifford Geertz, *The Interpretation of Cultures*

- First umpire: I calls 'em as I sees 'em.
- Second umpire: I calls 'em as they are.
- Third umpire: They ain't nothin' till I calls 'em.
- Baseball saying

We can construct a set of statements about HIV, varying the points and the degree of transparency to vary the visibility of fabrication and cultural constructedness:

1. HIV causes AIDS.
2. *HIV* is the name that scientific culture gives the virus widely believed to cause AIDS.

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3. *HIV* is the compromise name proposed by an international commission to resolve the bitter international dispute over the "discovery" of a virus judged by many to be a causative factor in the infection and immune deficiency that can lead to the specific clinical conditions diagnosed as AIDS.

4. *HIV* is the acronym adopted in 1986 by the international scientific community to name the virus hypothesized to cause immune deficiency in humans and eventually AIDS, another acronym, adopted in 1982 to designate a collection of more than fifty widely diverse clinical conditions believed to be given the opportunity to develop as the result of a severely deficient immune system.

5. *HIV* is a hypothesized microscopic entity called a virus (from Latin *virus*, "poison") invented by scientists in the nineteenth century as a way to conceptualize the technical cause and consequences of specific types of infectious disease. A virus cannot reproduce outside living cells: it enters into another organism's host cell and uses that cell's biochemical machinery to replicate itself (in the case of HIV, often years after initial entry), at which point the cell's DNA, with which the virus is integrated, is transcribed to RNA, which in turn becomes protein. Our knowledge of this "life history" has been produced by an intense national research effort focused both on HIV and on drugs designed to disrupt its life history at various points; as the major subject of scientific investigation and pharmaceutical research efforts and the major recipient of AIDS research funding, HIV is, therefore, also, as Joseph Sombabend puts it, "metaphorically representative of other interests."¹³

This comparative exercise illustrates some of the tools of "fiction construction": it suggests that reality is always contextual, always to be read and understood in relation to specific discourse practices, specific metaphors, and the representations and claims (e.g., based on its mechanical operations) in which a specific discipline or subspecialty specializes. HIV cannot, therefore, be read and understood as "the same" entity in each of the foregoing statements.

In these five statements, we see a move away from the apodictic free-floating assertion of statement 1 toward the explicit linguistic markers that assign statements about reality to specific provinces of meaning—for example, to those of virology and immunology. Different realities are signaled by these differently constructed accounts of viruses. At the same time, the set of statements shows how realities come to be merged and muddled through discursive collapses. Thus, statement 1 involves the collapse of *HIV* with two other signifiers: *the AIDS virus* and *the cause of*

AIDS. The interchangeability of these three terms—precisely what Roush was questioning in his open letter to Gallo—here goes far beyond the discourses of virology and molecular biology. That the universe of scientific investigation and clinical practice with respect to AIDS is now primarily determined by the simple acronym *HIV* and that *HIV* has come to seem natural, inevitable, and taken for granted as the cause of AIDS mark this construction of reality as the hegemonic position from which AIDS research and treatment are typically understood.

The set of statements suggests that "facts are like cows" and in some sense dissolve in the face of close scrutiny, only to reemerge as soon as one shifts one's focus. As Foucault writes, "A statement always has borders peopled by other statements" (1972, 97), and, as Fleck observes, when scientific terms are broken down to show their underlying assumptions, those assumptions must then be broken down to show their assumptions, and so on, in an infinite regress, with each definition growing larger and more unwieldy [(1935] 1979, 114-15). In place of these semantic pyramids, scientific discourse is a form of shorthand in which facts, once admitted, need no longer retain the history of their fabrication.

The statements also reveal that metaphors do important work. Communication and coding metaphors like *transcription* as a vehicle to describe viral replication, for example, import significant elements into the reality claimed about what viruses do. As I. A. Richards (1936) put it, where tenor meets vehicle, the transaction between the two produces a meaning that cannot be attained without the metaphor because the vehicle brings with it a range of associations that cannot be suppressed or excluded in its new context (a proposition further developed by Max Black [1962]). This gives metaphors a special kind of cognitive power—including the power to shape cognitive processes.¹⁴ In science, Knorr-Cetina (1981, 84) observes that some conceptions, including metaphors, may be seen as interesting or useful because they generate puzzles in new ways, represent resources perceived as unrealized, or mobilize various cognitive interests. In contrast to Gallo's Mack truck metaphor, we see in statement 5 a different set of metaphors drawn from the terminology of communication, computers, and high-tech postmodern warfare. Donna Haraway (1989a) argues that it was the move away from the military/industrial complex of metaphors to the postindustrial information age metaphors of coding and communication that enabled immunology to claim its current high-theoretical status.

Evident in this discussion is the metaphorical and connective richness of both *HIV* and *AIDS*; indeed, AIDS metaphors are now routinely compared

and critiqued to refine their effectiveness and usefulness. For example, Allan M. Brandt (1988a, 415) describes AIDS (like other epidemic diseases) as a "natural experiment" in how societies respond to disability, dependence, fear, and death; society's response reveals its most fundamental cultural, social, and moral values. Using an earthquake as an even more specific vehicle for the idea that a sudden serious calamity like a natural disaster at once reveals the stresses and vulnerabilities of a society, Mary Catherine Bateson and Richard Goldsby (1988) write that AIDS reveals the "fault lines" in our society. But, speaking on the "MacNeil/Lehrer News-hour" (7 December 1989), June Osborn argued that the AIDS epidemic is not like an earthquake, which happens all at once and brings normal life to a standstill, but is drawn out over a period of time, never creating for a broad mass of people enough sense of urgency to address it effectively. Note that there are political implications here as well: if an earthquake—or an epidemic like AIDS—is conceptualized as a natural disaster, an act of God, people in some cultures are less likely to expect or demand government assistance than if it is seen as a massive social or public health crisis (in other cultures, the opposite might be true). At the same time, this metaphorical richness is reciprocal with *HIV* and AIDS exported to explain other concepts just as other concepts are imported to explain them; indeed, there is no lingua *rasa* to be found. As Nancy Scheper-Hughes and Margaret Lock (1986) so eloquently argue, an illness always constructs its metaphorical double, which speaks truth as faithfully as any biomedical diagnosis. If a term is being used in the culture with increasing breadth and frequency, what I have elsewhere called an "epidemic of signification" is inevitable: no matter how literal and denotative a linguistic form may at first appear, it will develop new meanings almost as fast as we can identify old ones. This makes it difficult to predict what a particular metaphor will actually do: The plague metaphor for AIDS, for example, is now so routine that we cannot really say how meaningful it is unless we can examine exactly how and where it is deployed, how it is understood, and how it is acted on. The apocalypse metaphor functions very differently in the history of formulations about AIDS in Africa, in contrast to formulations about AIDS in the West or to formulations about AIDS by Africans. To attribute a particular effect to a metaphor too readily closes off inquiry into contradictory senses of metaphors operating in the culture and inquiry into the legacy of diverse historical tropes.

The Montreal conference also introduced and strengthened a way of thinking about AIDS itself as no longer inevitably fatal but as a chronic, manageable condition. Although arising from several different discourses

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[scholarly papers, activist press releases, social issues debates], this view achieved currency only when these discourses coalesced at the conference. The term *AIDS discourse* is not simply descriptive but entails an examination of the context—the entire apparatus—through which utterances about AIDS are produced and interpreted and speaking positions made possible. The issue is not whether HIV "exists" or whether a "cultural construction" is pure discourse. The issue is what the grounds and consequences are in a given context for positing HIV and AIDS as realities and embedding them within various networks of signification and what body of "craftwork" this represents. Discourses are also in some sense always oppositional. Any given discourse or context, that is, can always be characterized in relation to some other discourse or context as representing a dominant, negotiated, or oppositional position (see Hall 1980a).

Yet the Montreal conference also makes clear the impossibility of strictly separating a "dominant discourse" from an "oppositional discourse." No discourse is autonomous; rather, discourse is shaped in the light of ongoing day-to-day struggles for survival and legitimacy, in the light of processes of signification, and in the light of what happens when edges touch. Here, Mannheim is especially useful: when ideological and utopian visions become locked in sustained opposition over time, proponents of the two camps become intimately familiar with each other's positions—symbolically dependent on each other for continuing self-definition but also for continuing critique. Through this symbolism, knowledge, differently produced, has come to be shared to such a degree that a range of collaborative research initiatives has been created. One of the reasons for examining AIDS discourse, and the construction of HIV within it, is to see language in the process of formation—terms and concepts entering and reshaping the discursive field. The scientific culture that constructed the virus is now what most effectively disguises its existence as a cultural construction. Thus reified, HIV exhibits a number of predictable characteristics: it is referred to by a universally agreed-on signifier, conventional representations for it have been developed in journals, the media, three-dimensional glass models, and elsewhere; and its reality continues to be verified through ongoing laboratory and clinical operations (e.g., its structure and life cycle can be described). In addition, HIV is now a taken-for-granted reality in discussions and plans across many social and cultural institutions and in the lives of many individuals (scientists, people with AIDS, health-care professionals, others). Pervasive in discourse, HIV is used as a weapon both to defend and to attack the current state of science, as a metaphor to explain other phenomena, and as

an entity through which further research will be generated. Widely identifiable on computer databases and indexes, HIV now exists across the discourses of the culture. Both fabrication and fact, HIV has become, in short, a reality that is too costly to give up.

This is all the more reason to keep track of these costs by asking such questions as: What is the range of existing discourses in which HIV is mentioned? How is HIV articulated to the preexisting issues and codes in those discourses? How do discourses empower people and people empower discourses? To what extent does a "dominant" discourse on HIV continue to be identifiable, under what circumstances and under whose auspices did it emerge, and what kind of resources have been required to sustain its authority? How are authoritative definitions constructed and deployed? Conversely, how are they challenged, evaded, disrupted, or redefined? How does discourse, in other words, work to articulate, codify, maintain, or challenge various forms of authority, power, and control over material resources? And what difference does it make?

Conclusion

The concept of cultural construction can be understood as follows. It is a way of talking about how knowledge is produced and sustained within specific contexts, discourses, and cultural communities; it takes for granted metaphor and other forms of linguistic representation; it presupposes that ideas are produced out of concrete contexts and have concrete effects; it takes for granted hermeneutical activity; it is a complex of ideas and operations sustained over time within a given community; hence, it is institutionalized. Although often confused with idealism or more recently with a view that "everything is discourse," the notion of cultural construction is not a matter of arbitrarily envisioning an unknowable material reality but one of engaging in highly nonarbitrary ways with the material world. Although meaning is indeed arbitrary and fluid, this does not mean that it is arbitrary and fluid within a given signifying system. The predictability and stability provided by a given history, society, culture, and set of disciplinary conventions are anything but arbitrary. This point is often misunderstood when a given meaning or idea is termed a *cultural construction*. Within the signifying system, that is the meaning. No wonder, then, that we expend great effort to preserve belief in a given system where meaning appears stable, indeed, even universal. Recognition that reality is culturally constructed makes such belief impossible.

Why does the concept of cultural construction emerge so strongly now?

Asking what precisely it is that language tells us about material reality, the philosopher Hilary Putnam (1975) posits a "division of linguistic labor," whereby we cede particular realms of reality to acknowledged experts, and suggests that problems and contradictions presented by human disease phenomena may be disguised by the denotative power of medical experts. During a period like the current one in which medical authority is widely challenged, the existing division of linguistic and conceptual labor is inevitably challenged as well. In Montreal and elsewhere, we are seeing a challenge to the "clinical construction of culture" in which "the natives" talk back, articulating their own interests and writing their own texts.

As a crisis named and interpreted through culture, the AIDS epidemic demonstrates the argument that the concepts *culture* and *cultural construction* encompass both material and nonmaterial phenomena and that analysis must emphasize the ongoing interaction and mutual influence between the two. This task presents two difficulties: the first is that the claims of any analysis always press at the boundaries of their established context, dissolving the evidence of origins and disclaimers as they are taken up, with the force of powerful metaphors, in new discourses. The second is that the material and the nonmaterial cohabit much more intimately and inseparably than we usually suppose. If we take Saussure's famous image of linguistic duality as a sheet of paper with the material on one side and the conceptual on the other, we can also always flip the sheet of paper over, with the result that what we thought was the material entity is seen also to have a conceptual life and the conception a material life: metaphor into hardware, but hardware into metaphor, too. Although ideas and conceptions emerge from material reality, that reality has itself been named and interpreted according to the rules and understandings of scientific culture. That scientific findings are overdetermined by culture, however, does not mean that they are not deeply engaged with the story that material reality has to tell. Cultural constructions are not lies, as the touched-up X-ray of Groucho Marx is a lie. To be sustained, a lie requires the invention of an alternative universe: hence, to be sustained, the touched-up X-ray requires the falsification of medical records, the murder of the radiologist, or perhaps the development of new interpretive conventions that redefine what a "bad" X-ray looks like.

With numbers of new cases continuing to escalate and other emerging infectious diseases posing new threats to human health, the moral limitations of a facile constructionism are evident. Even if we will never know reality, specific tasks, goals, and crises may require us to go with our best

shot as though it were real. Yet the enormity of the AIDS crisis should not force us back toward the complacent imperialism of a transparent realism, for this equally abuses the multiple ways in which the AIDS epidemic is experienced, interpreted, confronted. Resisting realism means abandoning, not the real world, but faith in transparency. This raises a third difficulty, however, another version of Mannheim's paradox: an analysis aimed at revealing the cultural constructedness of a body of theory can hardly avoid acknowledging its own cultural constructedness as well. This certainly complicates the voice with which social scientists are to enter these discussions about AIDS and culture. Features so crucial to scholarly projects in the last two decades—features like irony, satire, self-reflexiveness, and the desire to understand how different groups construct and represent reality—do not compete well in an international crisis against the certainties that anchor other discourses, some of which have been noted here.

Although it is useful to characterize AIDS and HIV as cultural constructions, this by no means liberates us from taking responsibility for the existence of a real, material world and analyzing its intersection with our conceptions and interventions; indeed, so long as the analysis is local, provisional, and contextualized in terms of specific purposes, a serious commitment to a constructionist model undermines rather than reinforces relativism or pluralism. Likewise, the use of the concept *cultural construction* intensifies the responsibility to make choices. But, if we take seriously the contradictions built into the term *culture* from its earliest days, we can work more seriously with the dialectic that these contradictions offer. It is the contradictions that mark the pleasure and danger of cultural theory.