"Technology and Affect: HIV/AIDS Testing in Brazil" (João Biehl with Denise Coutinho and Ana Luzia Outeiro). *Culture, Medicine and Psychiatry*, 2001, 25(1): 87-129.

http://www.springerlink.com/content/p6512027862g14t4/

JOÃO BIEHL, with DENISE COUTINHO and ANA LUZIA OUTEIRO

TECHNOLOGY AND AFFECT: HIV/AIDS TESTING IN BRAZIL

ABSTRACT. Contemporary techno-scientific and medical developments are restructuring social interactions and the very processes by which individual subjectivity is formed. This essay elaborates on the experiential and ethical impact of such transformations from the perspective of people who, in ordinary and unexpected ways, act science and technology out. We carried out ethnographic research in an HIV/AIDS Testing and Counseling Center (CTA) in northeastern Brazil, combining participant observation with epidemiological analyses and clinical survey. We found a high demand for free testing by low-risk clients, largely working and middle class, experiencing anxiety and complaining of AIDS-like symptoms. Most of the clients were seronegative and many returned for a second and third testing. We understand this to be a new techno-cultural phenomenon and call it *imaginary AIDS*. Throughout this essay, we describe CTA's routine practices, place these practices in historical, political, economic and cross-cultural perspective, and analyze the subjective data we collected from the clients of our pilot study. We explore how clinical epidemiological expertise and HIV testing technology are integrated into new forms of biopolitics aimed at specific marketable and disease-free populations, and on the affective absorption of bio-technical truth and the engendering of a *technoneurosis* in this testing center.

TESTING AN IMAGINARY AIDS

"In case I am HIV positive," she said, "my husband will leave me, perhaps even kill me." Sky¹ looked scared and was afraid to get tested, "but I cannot endure not knowing my true condition," the 25-year-old woman, a shop attendant by profession, told Ana Outeiro, psychologist and counselor at the Bahian CTA (Center for HIV Testing and Counseling) in October 1996.² The Bahian CTA was created in October 1994 as a sub-division of the state's Epidemiological Surveillance Service.³ CTA offers voluntary and confidential HIV testing accompanied by pre and post-test counseling.

Since 1993, with changes in the Brazilian STD/AIDS Program and money available from a World Bank loan, there has been a dramatic increase in Centers for HIV Counseling and Testing Centers throughout the country (Biehl 1999). As of 1997, there were already more than a hundred testing centers, established as partnerships between the national Program, states, cities, and universities. Overall, CTA units are encouraged to develop contacts with public health services, non-governmental organizations and schools, which then direct asymptomatic persons to free counseling and testing sites. Most CTA clients follow this itinerary and set of procedures: they fill out an epidemiological questionnaire; hear a lecture

on the scientific and clinical aspects of HIV and AIDS; undergo pre-test individual counseling and blood collection for HIV testing; and return for the results and final counseling. Clients are also allowed twelve free condoms per month. Usually, CTA centers work as surveillance systems that predict local tendencies of the AIDS epidemic and orient the planning of health services. The potential benefits of such service for the individual include "improved health status through good nutritional advice and earlier access to care and treatment/prevention for HIV-related illness; emotional support; better ability to cope with HIV-related anxiety; awareness of safer options for reproduction and infant feeding; and motivation to initiate or maintain safer sexual and drug-related behaviors. Other benefits include safer blood donation" (UNAIDS 2000).

Sky did not mention any high-risk behavior during her pre-test counseling session. It was not clear to the counselor why she needed to be tested, but she was allowed to be tested anyway, with negative results. A few months later the counselor met Sky in the street. She said that after getting the results of the test she finally had the courage to leave her husband.

Bear is a 35-year-old accountant. He reported swollen lymph nodes and frequent diarrhea, "It can only be AIDS." Bear told Ana that he had been in a stable safe-sex relationship with a woman for two years. "Trust put me at risk . . . One day I was drunk, and we had sex without a condom." Only recently, after they broke up, Bear has learned "the whole truth" about his partner's past: "She was bad. She slept with other men while she was with me. I suspect that one was an intravenous drug user." Bear was "sure" that his ex-girlfriend had infected him. Bear's test turned out negative. In the following months he returned several times to CTA to get free condoms.

Sky and Bear did not procure treatment for their malaise and symptoms in psychotherapy or in medical services. Rather they went to CTA where they demanded and found a new truth of themselves – a truth extracted from their blood – that at least temporarily settled their dramas. Through this negative biotechnical truth, Sky freed herself from a conjugal tie that she perceived to be 'killing' her. By having his symptoms defined as non-AIDS-related, Bear disconnected himself from a 'bad' relationship.

Ana Outeiro, the counselor, psychoanalyst Denise Coutinho and I carried out ethnographic research at the Bahian CTA from October 1996 to March 1997.⁴ In our initial participant observation we reported a high demand for free testing by low-risk clients, largely working and middle class, experiencing identity crises, depression, phobic tendencies, and complaining of AIDS-like symptoms.⁵ Like Sky and Bear, the great majority of the clients were not so much interested in receiving prevention information as they were in staging HIV-related anxiety, in being tested, and in knowing their 'truth.' Most of the clients were seronegative and returned for second and third testing. We understand this as a new technocultural phenomenon and call it *imaginary AIDS*.

In order to better understand how such a phenomenon takes form at this governmental site, we developed a pilot research project. Ana asked clients who were assigned to her, either for pretest or posttest counseling, if they wanted to participate in our study. Thirty-seven clients agreed to participate. Ana registered the accounts of these clients and her own observations following the counseling session. We reviewed the clients' individual risk assessment questionnaires and the counselor's remarks on the clients' files that included plans and suggestions for behavioral change. We also verified the laboratory results of the clients' HIV tests. Epi-Info version 6.3 was used for data entry, data checking, and statistical analysis of the questionnaires. Afterwards, we discussed the collected accounts – we were startled by their repetitive quality. And as we tried to disentangle the counselor's impressions from the clients' narratives, we also began to recognize the inductive property of the counseling and testing act in recasting symptoms, fantasies, and self-understandings.⁶

In this essay, we describe CTA's routine practices, place these practices in historical, political, economic and cross-cultural perspective, and analyze the subjective data we collected from the clients of

our pilot project. We are interested in how clinical epidemiological expertise and HIV testing technology are readily made available to specific marketable populations, and in the ways concepts of a rational-technical management of health and of a biologically based identity that are inherent to this expertise and technology are reified and absorbed. As Michael M.J. Fischer notes: "We are embedded, ethically, as well existentially and materially, in technologies and technological prostheses. [Our] technological prostheses are also taking us into models of ethics with which our older moral traditions have little experience or guidance to offer, [...] we are again thrown [...] to ungrounded ways of acting, to new forms of social life" (1999: 467).

We argue that at CTA psychodynamic processes are bio-technically tinkered with and that these experiments are effecting automated forms of governmentality and subjectivity. As we elaborate on the access, reification and affective absorption of bio-technical truth and the engendering of a *technoneurosis* in this testing center, we also critically engage with Michel Foucault's work on bio-power, Sigmund Freud's and Theodor Adorno's work on group psychology and authoritarianism, and Jacques Lacan's work on science, truth production and *jouissance*. Thus, this essay is also intended to be an ethnographic contribution to a contemporary theory of the subjectivity of science and technology from the perspective of those people who in ordinary and unexpected ways act science and technology out.

RISK F/ACTOR

CTA Bahia is located in downtown Salvador, near the central campus of the Bahian Federal University. The Workers Health Center and the Center for Therapy and Studies on Drug Abuse are adjacent. The University Hospital is within walking distance (the state's best AIDS unit is based there). CTA has six counselors (three social workers, two psychologists, and one social scientist) and two staff assistants – all of whom are women. The service functions jointly with a Center for Prevention and Control of Sexually Transmitted Diseases. The services have different working routines and separate personnel, but are jointly administered by Dr. Mirta Nogueira. Dr. Mirta promotes exchange between CTA counselors and health professionals, "to update everyone on the latest AIDS scientific developments." Both services share a common laboratory run by two biochemists and four laboratory assistants. The blood collected for the HIV test is analyzed at LACEN, the Bahian Central Laboratory.

Mulata is a 20-year-old high school student; she also works part time as an office assistant. Mulata told the counselor that she needed to do the test because her boyfriend had already showed her his negative HIV result, and "I should also show it to him." She was very nervous and said that she couldn't sleep. Until now the couple had been using condoms. So what did she want to show and hide from her loved one? She admitted that she had had only one prior sexual encounter where she lost her virginity. "I told that man about my fear of getting contaminated, but he assured me that he was not infected, that he had already done exams and so on. He also told me that he would only have sex without a condom because I was a family girl and because I was disease-free." The young woman started to weep, and said that she trusted that man because he was about the same age "as my father."

Mulata received a negative test result. Relieved, she said, "Now I can close the past." Arguably, Mulata's testing experience was successful inasmuch as it engendered the following: 1) the client found an anonymous and cathartic site where she could 'deposit' her secret and leave behind suggestions of incest; 2) she acquired a new truth (biology) that rendered past risk behavior void and that was meant to work as an identification for present ties; 3) she crystallized a new affect – the testing experience actually impacted both the increase and decrease of her anxiety.

At the front desk, CTA's clients are asked to choose a pseudonym and receive a coded number for identification (their pseudonyms are maintained in this essay). The next step is to complete an

epidemiological questionnaire. The questionnaire tests the individual's knowledge of modes of HIV transmission and AIDS related diseases, and asks him/her to report patterns of risk behavior. According to Rita, social worker and coordinator of the counseling team, "It is a way of starting to figure out who they are, so that we can identify which category of risk exposure they belong to." After completing the questionnaire, the client participates in a group educational activity. The counselors discuss topics related to modes of HIV transmission, natural history of HIV infection, means of prevention, testing and diagnostic technologies.

Personal contact with a counselor follows. In a private session the counselors ascertain the client's motives to be tested: "What are the reasons? It is a moment of reflection and recollection; the person will decide if she really wants to take the test or not, and why," says counselor Rita. At this moment, client and counselor locate the time of the potentially morbid act that motivated the person to come to the Center and translate that act into a risk factor. A combination of fear and of staging ensues, as counselor Marlene sees it: "The person generally does not want to selfidentify. It is very difficult to put desire and social values into risk exposure categories." When asked why they exposed themselves to risk, the answers are, according to her, "always very empty, such as 'at that moment I did not think, I had no condom, it did not work, I forgot.' I tell them that I want concrete answers . . . that at that moment they chose to get contaminated, because prevention was not important to them."

Counselor and client then formulate an individually-oriented epidemiological plan which is aimed at building a different grammar about that risk f/actor, educating instincts and formatting safety-conscious behavior. CTA counselors also assess the psychosocial implications of disclosing a potential seropositivity, and devise strategies to insure clients will return to get the test result. "It is not just a matter of taking the test and then it is done; we prepare the person to come back," states Rita. The client is alerted to the fact that he/she is only entitled to three free testings. Blood samples are then drawn at the laboratory next door. The client is asked to call back in a few weeks to schedule a post-test interview.

THE WINDOW PERIOD

Love is a 23-year-old clerk, self-identified as heterosexual. He came to CTA for his second testing in 1996. "This past year I only had one sexual partner." Why then did he return? "I think she is cheating on me." While getting his negative result, he "confessed," says Ana, that he had had unprotected sex with his partner three months prior to be being tested. "We forgot the condom," he told the counselor. Thus, since he had an "open window," his second test was "annulled." Ana told Love he "would have to repeat the testing." In order to repeat the testing, he would have to go into a risk-free regime (using condoms or abstaining from sex) – let's call it a substitute reality.

The window period refers to the HIV-1 seroconversion lag (Alcabes et al. 1993). It encompasses the time from acquisition (infection) to seroconversion, i.e., until HIV-1-specific anti-body is detectable in the serum. The period that extends from the point of seroconversion to onset of acquired immunodeficiency syndrome (AIDS) is generally known as 'incubation period.' The true date of HIV-1 infection is rarely known, the lag period from infection to seroconversion is usually approximated.⁸ On average, this window period is much shorter than the incubation period and appears to be 2 weeks to 3 months in length (Cooper et al. 1985; Neisson-Vernant et al. 1986), rarely lasting more than 7 months (Horsburgh et al. 1989; Longini et al. 1989). Even though few cases of lag period of up to 42 months have been reported (Ranki et al. 1987), their exceptional existence raises doubt with respect to the scientific validity of HIV-1 test results. Testing centers routinely adopt a standard 3-to-6-month window period (from the subjects' last risk exposure/situation) as a quasi-scientific reference for assessing the subject's 'true' seronegativity, and for timing the original morbid act to be reassessed as risk factor.⁹

HIV infection is commonly diagnosed by detection of antibodies (antiHIV) by Enzyme-like Immunosorbent Assay (ELISA), or agglutination. ELISA was licensed in 1985 and first used in screening blood supply, permitting positive or reactive units of blood "to be discarded or put aside to be used for research purposes" (words of one researcher of the Center for Disease Control and Prevention, in Rugg et al. 1991). Reactive results are confirmed by western blot (immunoblot) or further specific tests such as competitive ELISA, which, when evaluated quantitatively, allow for the differentiation of HIV types and subtypes (Gurtler 1996).

A parallel can be drawn between public health measures and social control in the era of HIV/ AIDS and those of early modern epidemics. In his book Discipline and Punish, Michel Foucault (1979) elaborates on the new forms of populational and individual control that emerged from the management of death and its menace during the plague in seventeenth century Europe. During the quarantine, for example, each individual was located, examined, and distributed among the living, the sick, and the dead in a specific way. There was a strict partitioning of the plagued town, each quarter was governed by a supervisor, each street surveyed by an inspector. No one was allowed to leave the town, stray animals were slaughtered, families had to make use of their own provisions. New sanitary policies required the daily compulsory appearance of each living individual at the window of his house. Called by the authorities, the individual showed himself and reported on the state of things inside the house. In noting how the sick and the dead were counted, Foucault wrote: "Everyone locked up in his cage, everyone at his window, answering to his name and showing himself when asked – it is the great review of the living and the dead" (196 – my emphasis). These strategies and actions gave form to a nosopolitics: "The relation of each individual to his disease and to his death passes through the representatives of power, the registration they make of it, the decisions they take on it" (197). A new and automatic functioning of power was coming into existence, inducing a state of conscious and permanent 'interior' visibility and bodily control.

Ian Hacking (1990, 1999) builds upon Michel Foucault's notion that in modern societies there are two poles around which the organization of power over life is deployed. One pole is the individual body, and the other is the biological processes of populations. Modern government has become increasingly concerned with men and women in their relations, their links, their imbrications with things such as epidemics and accidents, wealth, resources, means of subsistence, and other things such as habits, ways of thinking and acting (Foucault 1991: 93). The polarity between human anatomics and the biopolitics of populations is linked together by *intermediary relations*. Hacking has identified scientific and technical dynamics that intermediate processes by which "people are made up" (1990: 3, 1999). His "dynamic nominalism" states that categories (such as 'homosexuals') and counting define new classes of people, normalize their ways of being in the world, and also have "consequences for the ways in which we conceive of others and think of our own possibilities and potentialities" (1990: 6).

CTA is an everyday site where new scientific rationalities and institutions of government intervene in the course of biological *and* psychodynamic processes. Here the question of when to appear at the window and to be counted by the state is both an external and internal negotiation that has to do with truth production – in this case, a biotechnical truth. Individuals have the window opened upon themselves so to speak, and freely appear at CTA for risk assessment and the education of the instincts integrated in HIV anti-body testing. If Hacking examines categories and statistics as making up people, we are concerned with how unconscious processes become the new material and medium through which contemporary technoscientific mechanisms of governance are made up and with the ways human affects are engendered by these processes.

Consider Lion, a 39-year-old small businessman who said he had already been tested for HIV in the United States. However, he reasoned "since I was still in a window period, I am uncertain about the

validity of that result." Lion said he needed another "AIDS test." He had been in psychoanalysis for five years, with no improvement. "I am always anxious." He has had three sexual partners in the last six months but insisted that he had not been in a risk situation – "only a broken condom twice." Lion was tested.

Ana told us that as soon as Lion got his second negative result, he pulled the cellular phone out of its case, and told the good news to his mother, to his former wife, and to someone else. After his public airing, he recalled that one of his partners "had sex with others without condoms." *He reverted to his initial configuration: tested but again with an open window*. Lion was also asked to return for another testing after his current window would be closed. Before leaving, however, Lion declared that he was going to produce another situation of risk, real or imaginary: "At an unconscious level there are forces that lead the person to risk and this is linked to a lack of self-love and self-esteem. Besides, considering the physical factor, contact without condom is much better; the heat of the vagina is irreplaceable."

The stories of Love and Lion show that the window period is successfully 'tooled' by both counselors and clients. The quasi-scientific temporality of the window period is used by counselors to annul the results of previous tests, to place clients in a kind of safe-sex quarantine, and to induce them to return for another testing. Thus, CTA's apparatus and experience provide clients the possibility of organizing unconscious ideas into scenarios that are technoscientifically legitimated and to which instincts become prosthetically 'affixed' (if only in that space and time). As the window period is integrated in the clients' fantasies, it also frames, in complex ways, the repetition of low-risk situations.

GOVERNING THROUGH THE UNCONSCIOUS

The issues addressed in this study pass through, but are not reducible to individual psychology, "the paths by which [man] seeks to find satisfaction in his instinctual impulses" or to a Freudian group psychology whose "social instinct" can be traced to family origins (Freud 1959: 1). In the essay *Group Psychology and the Analysis of the Ego*, Freud wrote that a psychology of the masses investigates "the influencing of an individual by a large number of people simultaneously, people with whom he is connected by something, though otherwise they may in many respects be strangers to him" (1959: 2). In accordance with general psychoanalytical theory, the ties that bind individuals together are of a libidinal nature – a group is forged by the re-channeling of libidinal ties (33). Thus, according to Freud, masses are marked not so much by new qualities, but by the manifestation of old ones, usually hidden.

For Freud, man is a "horde animal," a primitive in a horde led by a chief (55): "he prevented his sons from satisfying their directly sexual impulsions; he forced them into abstinence and consequently into the emotional ties within and with one another which could arise out of those of their impulsions that were inhibited in their sexual aim. He forced them, so to speak, into group psychology" (56). A primary group of this kind, writes Freud, "is a number of individuals who have put one and the same object in the place of their ego-ideal and have consequently identified themselves with one another in their ego" (48). Mechanisms of identification, "insufficiently known processes and hard to describe" are responsible for this new configuration of instinctual ties (36). A process of mutual suggestion holds groups such as the church and the army together and against outsiders (31).

Freud did not study contemporaneous social developments directly, but one can argue that his choice of this subject, the psychology of the masses and the analysis of the ego, points to changes in the guiding concepts and practices of society in the post-First World War period. In fact, Theodor Adorno used Freud's *Group Psychology* as an explanatory model in his attempt to understand how fascist regimes were legitimated and supported by common citizenry: "According to Freud, the problem of mass psychology is closely related to the new type of psychological affliction so characteristic of the era which

for socio-economic reasons witnesses the decline of the individual and his subsequent weakness" (1982: 120).

For Freud, experiences of fanaticism, hypnosis, and love are three cases in which an external object (the chief, the hypnotizer, and the loved one) occupies the place of the 'ideal ego' at the very point where the subject projects its 'ego-ideal.' Freud coined these two terms in his 1914 text *On Narcissism: An Introduction*. As J. Laplanche and J. B. Pontalis explain, "the process of idealisation whereby the subject sets out to recover the supposedly omnipotent state of infantile narcissism is placed at the start of the development of the personality's ideal agencies" (1973: 202). As always where the libido is concerned, adds Serge Leclaire, "man has here again shown himself incapable of giving up a satisfaction he had once enjoyed . . . this ideal ego is now the target of the self-love which was enjoyed in childhood by the true ego . . . He is not willing to forgo the narcissistic perfection of his childhood and [. . .] he seeks to recover it in the new form of an ego-ideal" (cited in Lacan 1991: 133). In other words, dynamics of fantasy mark subjectivity – representations or imaginary arguments transform perception and recollection and put a disguised desire into the scene. In the mise-en-scène of desire "what is prohibited is always present in the actual formation of the wish" (Laplanche and Pontalis 1973: 318).¹¹

Some of these insights get a new and literal relevance in the context of CTA. The testing apparatus is aimed at unearthing fantasies and at inducing a new configuration of drives. Here individuals do not belong to a group or to masses but to a technical procedure – the individual and group subject are technically the same. Two dynamics have to be anthropologically charted: the ways in which material technologies such as clinical epidemiological knowledge and HIV anti-body testing are combined with confessional procedures and are then re-contextualized as new social technologies; and the mediating (identificatory) role of this technoscientific experience in formatting ideal agency and in recasting these clients' instinctual and moral economies. Risk sciences, pastoral dictates and screening technologies are meant to turn anonymous instincts, inconsistent narratives and blood into a new form of biological self-perception on the part of the client. This self-perception works as a 'truthful' ideal of the ego: it has to be constantly brought into consciousness and turned into new life values to be incorporated into their sexual practices. Counselor Marlene put it straightforwardly: "I ask them: 'Was your desire for pleasure, to be satisfied, stronger than your right to continue to live?'"

Adorno (1982) opened a novel site in the social sciences for inquiring into the complex interplay of political power and individual unconscious processes. His reflections on group psychology provide some guiding concepts for the investigation of how scientifically informed political mechanisms rechannel, reorganize, and reproduce psychological motivations. Adorno takes modern man and woman's rational-technical formation as the starting point of his critical analysis, politicizing Freud's model. Those who become submerged in the masses are not primitive men and women, so to speak, "but display primitive attitudes contradictory to their normal rational behavior." What is so peculiar of modern authoritarian ties, says Adorno, is not simply the reoccurrence of the primitive and the past "but its reproduction in and by civilization itself" (122 – my emphasis). In this sense, subjectivity is malleable, formed by a certain number of technically and politically engineered conditions. 13

Adorno argues that fascist forms of government were able to insure the dependence of individuals by technically expropriating unconscious processes (through biological criteria, for example), making it socially impossible for them to be present otherwise. Thus, in authoritarian collectivities, "psychological processes, though they still persist in each individual, have ceased to appear as the determining forces of the social process" (137). 'Post-psychological social atoms' were conceived as performative and temporary citizens of 'hypnotic' regimes. People, says Adorno, do not really identify with the chief but stage this identification, perform their own enthusiasm and thus participate in the leader's performance: "It is through this performance that they strike a balance between their continuously mobilized instinctual

urges and the historical stage of enlightenment they have reached, and which cannot be revoked arbitrarily" (137). This 'socialized hypnosis' generates an all too convenient daydreaming-like moral consciousness for those "who keep their eyes shut though they are no longer asleep" (137). 14

In the formal logic of CTA's prevention machinery, the unconscious field of disjunctive knowledge and the dynamics of fantasy are not ignored by the discourses of science and by techniques of governance. It would be misleading here to refer to the unconscious as "a world of prelinguistic and pretheoretical phenomena" *vis-à-vis* socio-political and material effects as Evelyn Fox Keller does in her attempts to understand the subject of science *qua* scientist (1992: 3, 9). In this context, rather than trying to get rid of the subjective dynamics of endless truth production and fantasy, science is coextensive with them (we will return to this question in more detail later). If on one hand, as Lion suggested earlier, the unconscious seems to impose itself on science in the form of an action that disrupts objectification, on the other hand, CTA's conflation of confessional and bioscientific know-how successfully integrates unconscious dynamics into manageable categories that are part of experimental forms of self-governance.

Science, technology and medicine are integral to contemporary reorderings of power relations and meaning-making (Cohen 1998; Fischer 1999; B. Good 1994; M.J. Good 1995; Kleinman and Becker 1998; Martin 1994; Petryna and Biehl 1997; Rabinow 1996; Rapp 1999). In *The Human Condition*, Arendt argued that in our post-war era, political action has been primarily focused on the control of natural life and on the fabrication of automatons. The *homo faber* gave way to the *homo laborans*, the beings involved in mass production and concerned foremost with physiological existence: "the loss of human experience involved in this development is extraordinarily striking" (1958: 321). The process which, as we saw, invaded the natural sciences through the experiment, "through the attempt to imitate under artificial conditions the process of 'making' by which a natural thing came into existence," argues Arendt, "serves as well or even better as the principle for doing in the realm of human affairs" (299). Moreover, in this process inner life processes are tooled and become "the standards and rules for the creation of the 'automatic' life of that 'artificial man'" (idem).

Anthropologist Joseph Dumit (1997), for example, investigates the development of PET scanning, a brain imaging technique, and the selffashioning and 'virtual communities' articulated around this technoscientific commodity. Given the unevenness of scientific knowledge and our growing dependence on its authority for self-knowledge, local mutations in categories of personhood take place daily, argues Dumit. He calls this dynamic notion of the category of the person our "objective selffashioning": "testing and circulation of bioscientific evidence helps to form and reform human possibilities and probabilities" (1997: 84, 85). Scientific research and interpretation, engineering, patient-family interest groups, and the courtroom are mutually implicated in this technology and its solid biological fact-making.

As we learned at CTA, technoscience, government and client come together in engendering a perception and understanding of the person as a patient in potential – an automated administrator of state-of-the-art rationalities. Indeed, late modern man and woman's measure of him and herself is to be found in an imaginary pathos and literally so. As we mentioned earlier, the psychology of the masses is being transformed amid such developments. At stake is no longer the influence (suggestion) of others, a large number of people, upon the individual, but the work of each individual upon him or herself via a testing technology that works as a new ideal of the ego, and his or her 'group participation' in epidemiological profiles (anonymous and epistemic populations). The AIDS that exists in CTA's routine is in its imaginary and contained form a new social experience. This experience has a fantasy quality that is rationally and technically legitimated.¹⁵

In what follows, we detail how techniques of government 'match' with psychodynamic processes at CTA, and what the effects and affects of the instrumentalization of these techniques by the testing

subjects are. We were attentive to the social and cultural processes involved in the clients' decisions to undergo HIV testing, but that was not the major focus of this study. Our primary goals were: 1) to identify how unconscious excesses/remainders are put to use and manipulated at CTA during the counseling and testing experience, and which forms of subjectivity are being forged *in loco*; 2) to problematize this manipulation and forms as new practices of governmentality in Brazil's current neo-liberalization, particularly in the public health milieu. In this process, a different local AIDS reality is generated. As counselor Marlene states, without acknowledging herself as a vector of it: "All this that is happening . . . I think that in a few years we will have a very different history, something very characteristic of these times."

WHAT IS SOCIALLY VISIBLE IS AN IMAGINED AIDS

Data from Bahia's Central Laboratory, Lacen, show that there has been an impressive increase in demand for HIV testing since CTA made free testing available to the general population in 1994 (Figure 1). During the first years of the epidemic, persons who were suspected of having AIDS were tested at the state's Blood Bank. Since 1988, the Central Laboratory had performed the double task of offering HIV testing for the patients already diagnosed with AIDS in the state's AIDS services, and for the general asymptomatic population. The University Hospital has its own laboratory, and does HIV testing for those patients who need an AIDS diagnostic in order to begin specialized treatment. Professionals at the Laboratory emphasize that initially "people who came to do the testing were mostly from risk groups and people with AIDS." 16

The Central Laboratory's data show that the prevalence of seropositivity diminished between 1990 and 1996 (from 19.5% to 10.3%). One can argue that the increased availability of free HIV testing at CTA led to a higher demand for testing by seronegative individuals (Table I). The data do not represent the general population's seroprevalence or individuals' risk of HIV infection, but instead reflect a specific and novel AIDS population, the population of what we call an *imaginary AIDS*.

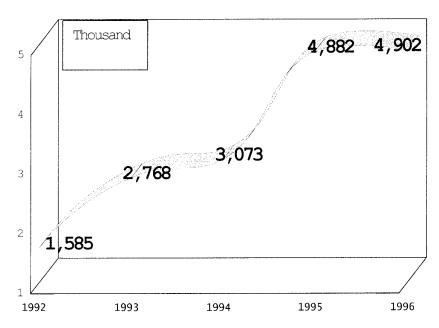


Figure 1. Number of individuals tested for HIV infection at the Central Laboratory, Lacen, 1992–1996.¹⁷

TABLE I
Number of HIV testings and percentage of seropositive exams
Central Laboratory, Lacen, 1990–1996

Year	HIV testings	Seropositive (%)
1990	962	19.5
1991	1014	17.1
1992	1585	17.0
1993	2768	11.2
1994	3073	14.3
1995	4882	13.4
1996	4902	10.3

CTA's clients do not need a referral to be serviced. "The demand is spontaneous," states the director, Dr. Mirta. This assertion of a spontaneous demand however ignores CTA's initial aggressive strategies of advertisement and recruitment. Counselor Rita recalls the beginnings. At first, most clients said that they heard of CTA in the media or were sent there by public health services, "but now the majority comes here recommended by friends, family members, by someone who already passed through our service. Now publicity is mouth-to-mouth. The demand has increased dramatically. We don't have enough space." Supply generates demand.

Dr. Mirta refers to CTA's testing constituency as persons without symptoms of "actual AIDS." The staff made this demarcation explicit. As Rita says, "In the beginning, public health services sent us persons who already had AIDS related symptoms. Then we contacted these services and told them that this was not our objective." The ideal logic is that: "People who have AIDS symptoms look for the state's AIDS Referral Unit. There they are registered, get tested, and undergo follow-up treatment. Our clientele experienced risk, they are full of doubts, and want to know if they got contaminated or not; many are just curious and want some information. *They want to change their values*." Rita concedes that "quite often,

there are people who are already experiencing things like skin rashes, diarrhea, wasting without being infected." Assistant Zenaide also says she sees many people in despair: "For example, if a girl begins having sex, she immediately loses weight . . . The other day a woman was eight months pregnant and the husband started to feel many things. He was getting crazy thinking that the child was infected."

Both the director and the counselors agree that, generally speaking, this 'population full of doubts' has at least a minimum income and some form of social stability. Dog is a 25-year-old medical student. He said that he came to CTA because a professor suggested it and also "out of curiosity." He has had only one sexual partner in the past six months: "We have been together for three years." They don't use condoms because of a "mutual trust." The testing will ratify that trust: "I really need to know her serology." According to Rita, "the demand for testing by people living in marginality is much lower. CETAD [Center for Therapy and Studies on Drug Abuse] sends us some cases of intravenous drug-users, but there are not too many. We predominantly serve people with high school and college degrees." In this case, the low risk behaviors of this specific population facilitate a change in 'values.'

Gilles Deleuze has noted that we are no longer part of strict disciplinary societies, in which power both amasses and individuates (1995: 179). "We are in the midst of a general breakdown of all sites of confinement – prisons, hospitals, factories, schools, the family. The family is an 'interior' that's breaking down like all other interiors – education, professional, and so on" (178). In control societies, argues Deleuze, the key thing is no longer the subject's signature or number, but a code, passwords: "individuals become 'dividuals,' and masses become samples, data, markets, or 'banks'" (180). Mutations in capitalism are informing different ways of administering everyday life. Capitalism is no longer directed towards production but towards products, sales or markets. Factories are giving way to business. "Family, school, army, and factory are no longer so many analogous but different sites converging in an owner, whether the state or some private power, but transmutable or transformable coded configurations of a single business where the only people left are administrators" (181). In this context, one is no longer "a man in confinement," but "a man in debt," continuously and unboundedly so (ibid.).

Robert Castel (1991) also agrees that in our neo-liberal societies (with an increasingly reduced social welfare apparatus) the administration of population and individual life has gone beyond the problematic of discipline, treatment, and normalization. "We are situated in a perspective of automated management of populations conducted on the basis of differential profiles of those populations established by means of medico-psychological diagnoses which function as pure expertise" (291). Multifarious sciences, expertises, and apparatuses of risk assessment and prevention are invested in the pragmatic mutation of dangerous and morbid acts into predictable risk facts (Castiel 1998; Barata 1996; Beck 1997). Castel concludes that this scientific evaluation and management of life is, in its extreme form "a myth whose logic is already at work" (296).

Tedania is a biologist. She is 50 years old and divorced. She came to get her negative result: "it took me two months to have the courage to come back." Tedania was content with the result, but immediately asked to be retested: "I might have an open window." She talked compulsively about her exposure to risk (no condom use), about the "non-sexual life" of her son who is in Europe, and about the instrumentality of fear: "I think that condom use is a cultural question. It is like fear of the soul that one learned from childhood. The pressure of sex is enormous. Things do not change from one day to the other. It is a process. Perhaps spirituality is a way to develop risk free practices. The younger ones have more fear of AIDS. My son is 18 years old and has not yet had sex. He is still virgin because of fear."

For Tedania life without sex "is miserable." While keeping her desire pulsing, she is trying to get adjusted to the new AIDS reality, "a disease which shatters emotions, it changed the world." In this process, old Oedipal structures reappear in new scenarios: "Now I like to go out with younger men,

because they use condoms. The older ones have not gotten used to condoms, they were not educated in that way."

In the periphery of Salvador where more fieldwork was carried out, inhabitants demonstrated a general knowledge of HIV/AIDS prevention measures (Biehl with Franco and Alencar 1996). They also indicated both a lack of information about the availability of the anonymous HIV testing at CTA and a lack of desire to undergo free testing. Many times I heard the expression, "I don't want to be discriminated against." For some people, HIV testing was seen as a threat inasmuch as it could reveal secrets (sexual and drug-related) to families and neighbors; they knew how to keep those secret practices functioning within a certain everyday routine. Many people were legitimately afraid that news or gossip about being seropositive would scare away clients of their informal economy or jeopardize their possibilities of being employed at all. At stake was also an unwillingness to submit to new behavioral controls inherent to 'successful' AIDS prevention. Moreover, slum dwellers made it clear that they knew other persons (relatives, acquaintances, neighbors) who had either died of AIDS or were living with AIDS without undergoing laboratory screenings or public clinical assistance. They suggested that this proximity of real AIDS scared them – "it's horrible" – and therefore they preferred, as one informant said, "to go on with living without knowing it. I don't want to die in life."

Between October 1994 and July 1995, approximately 2,000 persons used CTA's services. Sérgio Cunha et al. (1996) analyzed the admission questionnaires filled by 744 of these clients (randomly chosen), and produced a profile of 40% of CTA's population during the first year of operation. Cunha identified a population that was young, urban, employed and literate, the majority self-reported as heterosexual, and by and large seronegative. The official rate of seropositivity was about 5%, approximately half of Central Laboratory's rate of seroposivity.

Cunha's study shows that 55.4% of the clients were male, and 44.6% were female. Regarding sexual practices, 75.9% of these clients reported to be heterosexual, 7.4% to be bisexual, and 8.5% to be homosexual. 91.5% of the clients came from Salvador. Most of them had some level of formal education: 35.3% finished elementary school, 38% finished high-school, and 15.5% had college degrees; only 2.4% of the clients were illiterate. Consider that Salvador has a 25% rate of illiteracy among its adult population, and that only 16% of the Bahian population studied beyond the elementary school. 72% of these clients were regularly employed – in 1990, 49% of the Bahian population was unemployed or had only seasonal jobs (Secretaria da Saúde do Estado da Bahia 1996: 15–18).

Our research pilot project was carried out with 37 clients sequentially selected. In their admission questionnaires, 23 clients mentioned that they learned of CTA's services by word of mouth, i.e., from relatives or friends; six clients learned of CTA through the media; four through public health services; and four through AIDS NGOs. Thirty-two clients answered that the main reason that brought them to CTA was "the desire to be tested;" four clients answered that they "needed AIDS information."

The profile of our cohort group is very similar to the profile found by Cunha et al.: 21 are male and 16 are female. This is a very young cohort: 22 clients are 16 to 25 years old; eight clients are 26 to 35 years old; seven clients are 36 to 53 years old. Thirty-three of these individuals are single.

Data on occupation and income reveals that 27 clients are employed and that ten clients are high school students. No client ever referred to himself/herself as unemployed. Some of the professions mentioned include: clerk, hair dresser, vendor, biologist, cook, radio talk host, secretary, security officer, accountant, health worker, maid, teacher, carpenter, businessman, government clerk. Data on formal education shows that the cohort has a high level of schooling. No client is illiterate; eight clients finished elementary school; 21 clients have finished or are in the process of finishing high school; eight clients have finished or are in the process of finishing college.

Thirty-two clients affirmed that they are heterosexual; three clients said that they are homosexuals; and two clients said that they are bisexual. Thirty clients say that they are involved in stable relationships, and only two clients confirmed illegal substance abuse. Data collected on risk practices shows that these clients' practices are in fact 'minimally risky.' The most commonly alleged risk factors are: inconsistent use of condoms (26 clients) and, primarily, doubt about the serostatus of current or former partner (30 clients).

Nine clients said that their last exposure to risk had been more than a year ago; 28 clients said they were exposed to risk during that year; 14 clients said they had been exposed to risk in the last six months (potentially in the window period); five clients of this cohort had already been tested for HIV before. The counselor asked 14 clients to return for a second or third testing. All the 37 clients of this cohort were confirmed HIV negative.

While producing an ethnography of the Bahian AIDS services, I often heard public health officials referring to CTA as an "exemplary service." In a state-sponsored AIDS conference, an officer praised CTA for having an efficient management, for being freely available to the general population, and for providing "precious" epidemiological information to the state's Health Division. In fact, the evaluation and distribution of the data produced by CTA is one of Dr. Mirta's main goals: "We are training people and bringing epidemiologists in to help us to analyze this epidemiological data, so that we can maximize notification to the surveillance service and state's AIDS coordination. I tell my people that you do not live without a history." In the meantime, CTA has not succeeded in bringing seropositive clients into regular clinical monitoring. For example, from October 1994 to June 1996, only 22 of CTA's seropositive clients were actually treated by a public health service.

As I have shown elsewhere (1999), the Bahian measurement and management of AIDS is limited to and aimed at a very select group of 'self-reported' individuals with AIDS. Specialized health care is provided to those who dare to identify themselves as AIDS cases in an early stage of infection at a public institution, and who autonomously search (they literally have to fight for their place in the overcrowded services) for treatment (see also Scheper-Hughes 1994). This specific demand is the reality that appears in the optimistic epidemiological reports showing a decrease of AIDS incidence in Bahia, and that guides limited health interventions. I also documented an AIDS epidemic in 'apparent invisibility' among marginal and poor groups. These 'non-citizens' only become visible in the precarious public health system when they are dying; they are socially blamed for having caused their own death through drug use and medical non-compliance; after death, the majority of the marginal and poor do not even appear in public records (Biehl 2000).

CTA's services are part and emblematic of this public health machinery that generates a very reduced representation of the complex factuality of AIDS in Bahia. One can argue that there is a correlation between the AIDS sufferers who serve their function by their exclusion from AIDS statistics and the subjects of this imaginary AIDS who in their absence of disease have easy access to services and are statistically included – both realities are somewhat technically generated (Biehl 2000). The HIV/AIDS prevention policies that CTA stands for are directed to 'market-able' individuals, not necessarily at high risk of infection and 'spontaneously' searching for testing. Poor and marginal people suspected to be HIV infected remain mostly absent at CTA. The omnipresence of AIDS in the media, in massive prevention campaigns, the introduction of the condom in relationships, and the confluence of all this with the real AIDS deaths that people face in their extended networks, have created a new anxiety. CTA is the place where this AIDS anxiety is acted out and repeatedly tested as negative. CTA ends up serving a specific segment of the population, and this demand to be served is produced by the service itself. CTA's reality is part of a fictitiously contained and technically controlled local AIDS. In this case, the AIDS that is socially visible is an imagined AIDS.

Only in rare cases, CTA is also a site for the desperate purging of the daily misery of being an anonymously poor woman and at high risk of HIV infection. Most commonly this daily misery eludes CTA. Star is a 21year-old woman who first came to CTA in January 1996 to have her blood drawn. It took her exactly a year to come back and get the negative result of that testing. "Very skinny, worn out," reads the protocol.

Star lives in the interior. She completed elementary school and works as a maid. She wanted to be re-tested. In the past six months, Star has had two sexual partners and at least one might have put her at risk of infection. She then confided that "three months ago I had a sexual relationship with a truck driver." She opened a window by not using a condom: "because I wanted to have a child." If she could, she said, she would have "a child every year."

Yet, Star experiences another destiny. Distressed, she told the counselor that that morning "after peeing, I washed myself and introduced a water hose in the vagina to clean the inside, I hurt myself. I bled, and saw two pieces of flesh on the ground. It happened today." Most probably, Star used the HIV testing service to check if she was pregnant; and that same day she herself wanted to make sure that that was not the case by attempting an abortion through a technique common among poor prostitutes. As the session ended, the issue of prevention was reinforced, and Star was sent to get a second test.

HIV TESTING DEVELOPMENT

What happens in CTA Bahia is part of larger national and international developments with respect to HIV/AIDS (Biehl 1999; Patton 1996; Treichler 1999; Epstein 1996). These developments testify to the ongoing interactive dynamics between the production of technoscientific commodities and imaginaries, public policy, new forms of governmentality and personal-psychological reconfigurations. Following commercial licensing of the ELISA in 1985 and its usage for blood screening, the U.S. Centers for Disease Control (CDC) recommended that persons in high-risk groups should be given "the opportunity to know" their HIV serostatus as a means of enhancing risk-reduction efforts (in Valdisseri et al. 1993). A U.S. nationwide Alternate Test Site (ATS) Program was initiated by the local states, with guidance from the CDC, and with state and federal support basically aimed at preventing infected individuals from infecting others.

As the program grew, U.S. state legislatures passed laws to require mandatory reporting of persons found to be HIV positive, and a civil liberties controversy developed over the purpose and value of the testing. In response, the CDC and other organizations began to emphasize the importance of a counseling service that included HIV risk-reduction education preceding the HIV antibody test. The ATS were renamed HIV Counseling and Testing Sites (CTS), and the testing service became increasingly a preventive strategy under the banner of 'information dissemination on risk reduction and behavioral change' for both uninfected and infected clients. This intervention was based on a rational decision-making model, in which knowledge of the potential negative consequences of a person's behavior was seen as sufficient to influence his/her behavior. By the end of 1989, with the introduction of antiviral agents such as AZT, the focus of the service changed (at least officially) once again: now to early detection and referral of infected individuals to therapeutic intervention and medical monitoring.

By September 1989, HIV counseling and testing was provided in more than 5,000 U.S. cities nationwide. By the end of 1990, CDC was spending nearly \$100 million per year to provide this service, and more than 2.6 million tests had been performed at publicly funded testing sites. In 1991 alone more than 2 million HIV antibody tests were performed at publicly funded sites, of which approximately 2.8% were positive (Farnham et al. 1996). In 1993, Guidelines of the CDC were published in the *Journal of the American Medical Association* (CDC 1993) emphasizing that HIV pretest counseling should include a

personalized client-risk assessment. If at first counselors were called upon to explain to those being tested the meaning of HIV test results, including the possibility of false positive or false negative results, now they were asked to develop a 'client-centered' managerial plan of instinct control and risk-behavior change based on a potential HIV positive result.

In 1991, Donna Higgins et al. published a review of 50 studies worldwide (mostly in the U.S. and in Europe) on the effects of HIV counseling and testing on risk behaviors. The authors reviewed 17 studies on homosexual and/or bisexual men, 12 on intravenous drug users, 11 on pregnant women, and 10 on other heterosexuals at high risk of HIV infection. Based on all these studies, the authors concluded that overall HIV testing and counseling "does not have a direct impact on reducing risk behavior" (1991: 2427). Jeannete Ickovics et al. also reported on the very limited consequences of HIV testing and counseling for seronegative women in the U.S. in terms of altering sexual behavior and improving psychological outcomes (1994: 443). Dawson et al. (1991) found little evidence that having an HIV test played a substantial role in reducing risky homosexual behavior in England. Interestingly, these authors reported but did not elaborate on the fact that in many cases the rates of risk behavior actually increased after clients received their negative results.

In all of the above mentioned studies the impact of the HIV testing and counseling technology has been measured in terms of its efficacy or not in reducing high-risk behavior. The studies fail to address the cultural fact that the availability of HIV testing and counseling has been appropriated by the clients and has had other kinds of impacts such as the repetition of risk exposure. Also, there has been an increasing demand for testing and re-testing by 'low-risk individuals,' and new categories of 'highrisk individuals' increasingly excluded themselves from these services or used the test to various other ends. In 1993, CDC researchers publicly acknowledged that individuals of potential high risk for HIV infection such as "adolescents, blacks, and clients served in family-planning and STD clinics" have "lower return rates for HIV posttest counseling" (CDC 1993). Thus, as we have suggested earlier, it seems that the project of creating collective risk-free subjectivities finds a correlation in the absence of socially marginal groups from these new forms of technogovernmentality.

Deborah Lupton et al. (1995) produced a qualitative study in Australia on why 'low risk' individuals decided to undergo HIV testing. The authors argue that the test has become a form of 'social currency' and 'ritual' in that society: "some people may not feel personally at high risk of infection from HIV, but have a test for reasons other than advocated in official policy statements. The people in the study drew upon reasons which included pressure from parents or lovers, the desire to give up condom use, the need to display mutuality, as a symbolic closure or commencement of a sexual relationship and values concerning responsibility." Lupton et al. concluded that the costs of testing for HIV antibodies will continue to escalate "as long as the test is being used in these ways" (179). Thus the insightful and sensitive ethnography is put in service of a cost-effectiveness critique that ends up constructing a dualism between an ideal service and a deviant, if creative, user of it. The implication seems to be to control the behavior post-hoc. This perspective loses sight of processes of mutual determination at work between services and clients.¹⁸

In spite of all these side effects and affects – or, is it because of them? – HIV counseling and testing continues to be one of the keystones of national AIDS prevention in the United States, Europe, and Australia (Phillips and Coates 1995). They have been widely exported as prevention models (through development aid packages) to poor countries beginning very late in the game to massively organize their public health AIDS services. Let's turn back to Brazil, bearing in mind these questions: What are the biopolitical rationalities of such a transnational form of health management? How are sexual practices and psychodynamic processes of low-risk individuals entangled with these rationalities and policies?

Which forms of governance, experience and sensibility take shape through such a technoscientific intervention?

PSYCHOLOGICAL PROPHYLAXIS

The first Brazilian CTA unit was created in 1989 in southern Porto Alegre. According to one of the coordinators of the National CTA project, "the model was inspired by the testing centers functioning in San Francisco, and was basically aimed at guaranteeing the secrecy and anonymity of the individuals who wanted to know their HIV status." In 1992, the Brazilian STD/AIDS Program was redesigned (Parker et al. 1994; Galvão 2000; Biehl 1999). Around that time the Health Ministry, the Ministry of Economics and the World Bank approved an unusual budget of 250 million dollars for the creation of new national AIDS policies. These initiatives officially ended an almost decade-long policy of AIDS negligence and procrastination. The new international and national funds, epistemes and techniques were to reverse the fate of the so called 'africanization of AIDS' in Brazil (Biehl with Blatt 1995; Coordenação Nacional de DST e AIDS 1996, 1998).

The 1998 Budget Report of National STD/AIDS Program showed that 53% of the World Bank funds were going into prevention, 21% were going into institutional development, 19% were going into assistance, and 7% were going into epidemiological surveillance. The founding of CTA units became a central feature of the new prevention strategies. After 1993, an average of more than 20 services were newly founded each year. As of March 1998, there were 102 CTA units functioning in Brazil, and 34 new ones were being set up. The installation of these services follows the geopolitics of official AIDS reporting in Brazil, having its epicenter in the Southeastern context of São Paulo and Rio de Janeiro (Saraceni 1996). It also follows the diverse regional modernization of public health services. For example, as of 1998 the state of São Paulo had the largest concentration of CTA units in the country (25 units and 9 were being installed) - in 1995, the state accounted for more than a half of the total AIDS cases in the country (Coordenação Nacional de DST e AIDS 1997: 145). As of 1998, the southern state of Paraná, which has one of the best public health systems in the country, had a very low accumulated AIDS incidence rate but had 11 CTA units functioning. Meanwhile, there were no HIV testing and counseling services provided in the northern states of Amazonas and Amapá or in the Bolivian frontiers of Acre and Rondônia, where AIDS surveillance is precarious and specific AIDS public health services are almost nonexistent.

CTA units are established in the following way. Upon the demand of a state or city public health institution, the national STD/AIDS Program unleashes the financial and technical procedures involved in the creation of CTA services. Around 30,000 dollars are then immediately made available for renovation of buildings and for the acquisition of laboratory equipment, anti-HIV ELISA kits, educational material, and computers. Local governments are responsible for the daily maintenance of each unit. The National Program ensures the regular flow of new technical procedures and epidemiological data, and makes periodical evaluations of the services. The Bahian team, for example, was trained by technicians who flew in from Brasília. "We had to learn quickly how to minimally handle the complex demands of the service," says Rita. In practice, professionals with different backgrounds are administratively leveled out in the routine of the service (activities such as counseling and teaching are exercised by all of them alike). Counselors confided that they compete among themselves "not to be the one who tells a person a positive result." Why? "We have to open the envelope and read the 'bands.' The lab technicians should do that. And what if we did a wrong reading of the band?" The result is a true blurring of differentiation of competence among the social/psychological/pastoral and the laboratory professionals.

The creation of a CTA unit generally implies a technical upgrading of local laboratory services. In fact, the large scale HIV testing at CTA Bahia brought many benefits for Bahia's Central Laboratory (LACEN): acquisition of new technologies, improvement of the professionals' technical skills, new perspectives of scientific research. Dr. Carmen, LACEN's director, is straightforward: "AIDS helps us to get a more modernized infra-structure, both in terms of laboratory functioning and in terms of logistic support such as a van." The serological analysis done at the Central Laboratory follows the recommendations of the Ministry of Health, including two ELISA tests (recombinant ELISA, lysate ELISA) as part of a triage process, and then two immunofluorescence and/or Western Blot tests.

CTA's counselors mention they have to "wait too long" for the return of the exams done by the Central Laboratory. "This gives a lack of credibility to the service and generates revolt among the clients, not to mention the added anxiety, fear, and extended depression while they wait for the results."

According to Dr. Carmen, the delay in returning the results to CTA is directly linked with the high demand for the Central Laboratory's services statewide. "We do both clinical analysis and public health exams. The demand is immense. Sometimes we issue 1,200 exams per week. We are the only centralized public laboratory in Bahia." At the time of this research, it took about 30 to 40 days before test results were ready to be delivered in the post-test interview. When CTA first began offering the testing, the results were announced within 10 to 14 days or so. As one of the counselors mentions, "this delay induces the development of mental illness in persons who are already stressed." According to anthropologist Sean Patrick Larvie, the model that informs Brazil's new prevention programs "suggests that health – defined as the absence of illness - is a universal and invariant value as well as a powerful motivator of individual and collective action" (1997: 102). Larvie identified a main emphasis that he calls "psychological prophylaxis." This emphasis is part of a change in public health that locates "the nature of the problem as well as the possibilities for its solution, within the minds and instincts of individuals" (99, 100). The key idea is that risky behavior can be rationally and technically manipulated through correct and neutral information based on scientific principles. These prevention initiatives are representative of the circumscribed ways in which the new neo-liberalizing state fulfills its social contract. In this process, selective populations are reorganized and addressed, and 'the social' is increasingly reduced to a question of individual 'improvement' and to the care responses of a community so rarely in place (Biehl 1999). CTA's experiment is an element in the development of cost-effective forms of governance that are less clinical and bureaucratic and more preventive and automated.

Gemini is a 19-year-old high-school student. For her, the CTA experience is an instinctual literacy. Gemini's questionnaire reads that: "I have sex with only one partner and I have been using condoms." However, during the pretest counseling she disclosed that she has had unprotected sex. She blames her instincts. "I need to learn to control myself . . . We kiss and then things get hotter and hotter. When I realize I have already given myself away. When one likes the other person one thinks that he does not have any disease." Her literacy at CTA is caught between the disappearance of an old mode of relating face to face, and the vital necessity to decode appearances. "I must learn to see how appearances deceive." As if the testing experience could guarantee the end of a phantasmic rule. She seems to have rationalized CTA's lessons well: "It's an illusion to think that one lives in a good moment now, the consequences can come later. If a couple does not want to use condom, both must do the testing. Life is at stake."

Here we notice not simply the shift from medical encounter to the objective accumulation of facts (Castel 1991: 282), but a biotechnical tinkering with personal-psychological processes. Discourses and interventions of clinical epidemiology and bio-testings have already turned the concept of individual risk into a parallel practice (Haraway 1991; Petersen and Lupton 1996; Castiel 1999; Barata 1996). We are increasingly living in epistemic environments, argues Naomar de Almeida-Filho, "peopled with fictitious

beings, recognizable by their individual probabilities to acquire disease and die, non-subjective subjects, epidemiological profiles" (1992: 150). 19 CTA's rationality goes further: these individuals are educated to become administrators of their psychological structures, and have in the actual HIV antibody test the means to verify this bio-administration of themselves.

Meanwhile, the advertisement strategies of CTA Bahia have been successful in restricting the inflow of people suspected to be presenting symptoms related to real AIDS. In our cohort, there was only one person referred for testing by a local health service. Sun is 34 years old old, homosexual, and works as a cook. He said that he would not have come to CTA if the health worker had not "scared me." Sun then took his shirt off, and showed a large area of his body covered by herpes: "I get this urge to fuck, and then I forget this business of the disease. Pleasure makes me forget the risk to get infected. Now I am thinking more of risk, because I am watching prevention campaigns on television."

AUTO-BIO-ADMINISTRATION

What happens institutionally and in human terms at CTA cannot be fully understood through phenomenology, psychoanalysis or knowledge/power dynamics alone. As we have been showing, here self-fashioning brings together changing forms of knowledge, the unconscious and experience in an *auto-bio-administration*.²⁰ An encounter between Michel Foucault and Jacques Lacan that has by and large gone academically unnoticed sheds light on these interactions, their constraints and transformations.²¹ In 1969, before beginning his lecture *What is an Author?*, Foucault told his audience at the French Society of Philosophy that it was the neurotic's position that better qualified the openendedness of what he was going to present (n/d: 30). This comment was in line with the subtitle of the talk, "the return to a . . ." and the "a" was a direct reference to Lacan's work on the *objet a* (that stands for *autre*, other). For Lacan, *objet a* is the object cause of desire, that thing which is constantly remanaging its inscription in the body as it answers in the place of the truth of the neurotic – it corresponds to Freud's idea of a 'representative of the representation of the drive'. Feeling addressed by Foucault, Lacan attended the lecture – their exchange afterwards poses enduring questions on what constitutes the primary dependence of the subject: signifier or the field of discursivity or both.

Overall, Foucault argued that the "author's function" has been establishing the legitimacy and status of certain discourses within our cultures and societies, and has in its ideological production constrained the recomposition of fictions and the multi-proliferation of meanings. The coming into being of the notion of the author constituted "the privileged moment of individualization in the history of ideas, knowledge, literature, philosophy, and the sciences" (Foucault 1998: 205).²² Foucault treated the author function as a specific variation of the modern "subject function" - "For the moment, I want to deal solely with the relationship between text and author and with the manner in which the text points to this figure that, at least in appearance, is outside it and antecedes it" (ibid.). The founding act of a science, argued Foucault, "can always be reintroduced within the machinery of those transformations which derive from it" (218), whereas within the fields of discursivity derived from the ones founded by Marx and Freud, for example, there is an "inevitable necessity, within these fields [...] for a return to the origin. This return, which is part of the discursive field itself, never stops modifying it" (219). Thus, the return is not merely a historical supplement or an ornament, "on the contrary, it constitutes an effective and necessary task of transforming the discursive practice itself" (idem). The work of initiators of discursivity "is not situated in the space that science defines; rather, it is the science of discursivity which refers back to their work as primary coordinates" (ibid.).23

For Foucault, the subject is not dependent on the signifier or on an absence within discourse, but on the field of discursivity itself – that is, the subject is found in the materiality of epistemic shifts. He is

interested in the modes of circulation, valorization, attribution, and appropriation of discourses as they vary and are modified within each culture. An analysis of this kind necessarily reexamines "the privileges of the subject" and points to the subject's points of inception, modes of functioning, and systems of dependencies: "How, under what conditions, and in what forms can something like a subject appear in the order of discourse? What place can it occupy in each type of discourse, what functions can it assume, and by obeying what rules? In short, it is a matter of depriving the subject (or its substitute) of its role as originator, and of analyzing the subject as a variable and complex function of discourse" (1998: 221).

During the follow-up discussion, Lacan sided with Foucault and criticized those who were suggesting that Foucault's work was an investment in the "negation of man in general": "With or without structuralism it is not a question of the negation of the subject. It is a question of the dependence of the subject, and that is something completely different" (cited in Eribon 1996: 150). On several occasions, Foucault praised Lacan along with Bataille and Blanchot for pushing French thought to understand something other than phenomenology, the Cartesian subject, and the Hegelian dialectics. He noted the importance of Lacan's work on the idea/practice that the subject is not a fundamental and originary form, but "is formed by a certain number of processes": "The subject has a genesis, the subject is not originary. Well, who said that? Freud, certainly; but it was necessary for Lacan to show it clearly" (cited by Eribon 1996: 147).

Lacan mentioned the encounter with Foucault immediately thereafter in the *Seminar From the Other to the other* (n/d). Again, he admitted that Foucault appropriately valued the originality of a function internal to discourses and which comprises "an effect of splitting and of laceration that is proper to everyone" (n/d: 90)²⁴ – in other words, there is no autonomous self. Lacan has argued that contrary to science's ideals and practices, psychoanalysis shows that in the human subject there is something "which knowingly lies, and without the contribution of consciousness" (1991: 194). What is functioning at the level of the unconscious is "the return to a": "there is a knowledge which says 'somewhere there is a truth which does not know itself'" (n/d: 90). Paradoxically, psychoanalytic praxis implies no other subject than that of science: "We no longer have anything with which to join knowledge and truth together but the subject of science" (1989: 17). Modern individuals, says Lacan, love truth and deploy knowledge to proliferate their symptoms, furthering *jouissance* (enjoyment). "There is no discourse that is not of *jouissance*, at least when one expects from it the work of truth" (1994: 74). At this point Lacan speaks of truth as labor – and this machinery of producing 'surplus knowledge' is what uniquely characterizes Cartesian and capitalist forms of subjectivity (Lacan created the term *surplus jouissance* as an analogy to Marx's concept of *surplus value* [Marx 1983: 407–409; Zizek 1997: 325–327, 1999].

What emerges from *jouissance*? More knowledge? No, confusion, says Lacan. And confusion has to do with the limits of systems of knowledge and with the possibility of leaving these systems behind. "A system does not have any necessity. But we, beings of fragility have the necessity of meaning . . . this is a meaning" (1994: 13). Perhaps it is not the true meaning, says Lacan: "and that is exactly the dimension of the truth. The reoccurrence of the experience that 'perhaps it is not the true one', its insistence, points to the proper dimension of the workings of truth in the subject" (ibid.).

We moderns are not without a relationship to changing forms of truth. "The fact is that science, if one looks at it closely, has no memory," argues Lacan. "Once constituted, it forgets the circuitous path by which it came into being; otherwise stated, it forgets the dimension of truth that psychoanalysis seriously puts to work" (1989: 18). In psychoanalysis, however, says Lacan, knowledge is deprived of its absolute position in the subject: "What do we call a subject? Quite precisely, what in the development of objectification, is outside of the object . . . The ego acquires the status of a mirage, as the residue, it is only one element in the objectal relations of the subject" (1991: 194). Or, in Lacan's rewriting of Freud's motto "Wo es war, soll Ich werden" – "where it was, there must I, as subject, come to be" (1989: 12).

Consider what Eyeglasses says and does. He is a 42-year-old single man, bisexual, and known among the counselors as the one who "wears thick glasses." He has a college degree and works as a government clerk. Eyeglasses mentioned that he had two male sexual partners during the last six months. He considers both to be of "some risk," even though he did not have anal sex. He came to the post-testing counseling extremely anxious. He complained of stomachaches and diarrhea: "it must be related to the disease. I keep searching for symptoms in me. I am scared, I exposed myself a lot." He confided that "last week, an acquaintance of mine died of AIDS." The moral of the story was: "When we see people dying with AIDS, we start to take better care of ourselves."

Eyeglasses told the counselor about his problems with condoms, with controlling his drives adequately, and with trusting strangers: "I do not know why I do not use condoms all the time. It's a mistake. Man's head is a very serious business. I have to control myself. At the moment I must understand that I have to use condoms. I think that condoms hinder my type of sexual relations. I do not think that penetration is important. The preliminary things are much better, and if I keep using condoms I will have to have at least 3 to 5 condoms in one relation." Governmental AIDS prevention campaigns are generally ineffective, he says: "They must use the body, and incite fantasy."

Eyeglasses however agreed that the counseling and testing experience had a very important emotional effect on him: "Since I came here I am much more coherent with myself. I began to have love for my life. Counseling was very important, because I started to channel all the guilt." But the experience of blood drawing for the HIV test was the decisive moment. Eyeglasses described the experience as if it were a culmination and an end of the preliminary pleasure-giving practices he looks for in his sexual adventures. "The tension is overwhelming. In the end we have to give our blood, and then things are no longer at the level of hypothesis." In other words, with the blood drawing the rule of the phantasm seemed over, for a while, and there was jouissance in bio-technical truth producing. "The test helps me to understand that I might have it and might die. It is difficult, but the test reveals that. So, I prevent." Eyeglasses was asked to return for a second testing because he had an open window.

At CTA, the scientific process of objectification has succesfully moved from the scientist, the inaugural maker of a new system of knowledge, to the individual who acts the system out in such a way that everything subjective is reduced to an error and the human "to a determinate play of symbols encompassing all the interactions between objects" (Lacan 1991: 194). A 'progress' in forming subjectivity has been spurred: as the client's field of risk-free consciousness is enlarged, a biologically based selfunderstanding displaces his/her speech and keeps his/her desire for truth prosthetically in place, ideally foreclosing the subject of psychoanalysis as a mirage of the past.

It's worth pointing out that such reforming of human possibilities and entanglements with each other via technology are contemporaneous with what Sherry Turkle identifies as the movement from a psychoanalytical to a computer culture – "a new culture of simulation" (1997: 22, 1991), and of a growing biologization of intersubjectivity (Rabinow 1996; Haraway 1991; Young 1995; Luhrmann 2000). In a recent article on *Our tramatic neurosis and its brain*, Allan Young argues that the new taxonomies of mental disorders and the scientific and clinical apparatuses they are imbricated in are actually invested in deleting the term neurosis altogether from research and practice, "dropping it into the waste-bin of psychiatric history" (2000: 2). However, as Young insightfully shows, this process is linked to a purge of the psychosexual version of neurosis and to the transfiguring of traumatic neurosis into post-traumatic stress disorder, PTSD. Experts are "passionately interested in discovering biological features particular to the disorder and its defining process," such as hypocortisolism (5, 14). This experimental "remnant" or "epistemic thing" is to become a measure against which these subjects will be able to define their 'true' pathological status. Foucault's vision of an experimental mode of subjectivity at the end of *What is an Author?* seems to be well in the process of being realized: "I think that, as our society changes, the author

function will disappear, and in such a manner that fiction and its polysemous texts will once again function according to another mode, but still with a system of constraint – one that will no longer be the author but will have to be determined or, perhaps, *experimented with*" (1998: 222 – my emphasis and translation).

The testing of an imaginary death, a new truth and a surplus enjoyment derived from this technical experience is what ties subjects like Eyeglasses to CTA. While CTA's "epistemological drive" is machined, other interpretations that might concern the subject are condemned to a further obscurity or pain to be re-tested.

TRUTH, REPETITION, AND SEXUAL SERVITUDE

There is a continuous procession of tested subjects returning to CTA. In our pilot study group, the counselors asked 14 clients to return for a second or third testing, either because they were in the window period during the previous testing or because they exposed themselves to another (low) risk situation while waiting for the results. Rather than interpreting repeated testing as a sign of prevention failure, we see it as a productive outcome of the tie established between this testing apparatus and the client, and the client and him/herself through this apparatus and experience.

Artemisa is a 25-year-old man. He works as a radio talk-show host. On October 1995, he showed up at CTA complaining of "an incredible anxiety." He said that he had had unprotected sex with a woman of unknown serology and suspected that she might have been an intravenous drug-user. He did the HIV testing that same month, while still in the window period. In January 1996, he came to get his negative test result. He agreed to go into a safe-sex regime and to return in a few months for another test. Artemisa was re-tested in November 1996. During the second posttest counseling, Ana inquired about his sexual behavior. He confessed that he had actually risked once: "It is the business of the moment, a desire to fuck. She was someone that all of my office mates were lusting for; she gave me clues that she liked me." He recollected the risky act: "It happened in the bathroom of our company. I thought that water from the shower would go into the condom, therefore I did not use it. At the time I did not think about contamination. It only happened once." As he received his second negative test result, he plotted his next fantasy with the counselor: "Is there any possibility of getting infected if I have sex with a virgin, a younger woman, without using condom? She told me she has never had a blood transfusion." Artemisa was asked to return for his third testing.

A great number of heterosexual men use the HIV testing to experience an imaginary sexual liberation (by being technically 'zeroed'), resulting in a 'scientifically' legitimated subsequent reenactment of risk behavior. In this way, men use CTA's technoscientific order as a fantasy through which they are thrown back into the libidinal order where the ego is inscribed. Many men also use the testing as a way to have access again to sex without a condom, once 'normal' and now a rare and fetishized occasion. As if now, through CTA, there were the possibility of a 'true' sexual relationship – a fantasy that is plotted out in the exchange between the client and the representative of the testing institution. In this process, matrices of sexual domination and deadly practices towards the other are newly inscribed.

Snake is a 36-year-old married man. "I only have one mistress," he says. "I always use condoms with her. She lives with a guy, but she says that they don't have sex." Snake does not use condom with his wife, "because I trust her." Snake is a self-assured narcissistic male: "the two women only fuck with me." How could he then be contaminated? Did his wife contaminate him? Or, is he looking for a proof that the second partner is betraying him? Snake did not respond. The circuitous logic he presents at CTA is that as he betrays his wife he feels betrayed by the other; and as he is imaginarily betrayed by the other, he might

as well have been betrayed by his own wife. In this reasoning, the possibility of Snake infecting his wife is never considered. He was sent to a second testing.

Many women use their symptoms and the testing experience to deal with the sexual servitude to which they are condemned and which they socially condone. Highly oppressive relations are both reproduced and newly faced at CTA – recall the story of Sky in the beginning of this essay. There are several other women in our cohort experiencing similar impasses. Their voices are almost faint, lost in an orthopedics of 'right' answers and unspoken fears. They are filtered through Ana's zealous clinical-epidemiological framing. In the end, this framing leaves us with little more than glimpses of a dangerous social world.

Equator is 24 years old and works as a maid. She spoke little and in a confused manner. Equator is afraid that her current partner might harm her if she is found seropositive, "He already hit me hard once." They don't use condoms: "I never saw him with another woman." However, "it's true that I caught him once having sex with my sister-in-law." Equator authorized her partner to get the result in her name. In this case, the woman does the testing for the man.

Mango showed up for her posttest counseling in a profound depression. She is 49 years old, and works as a store attendant. In the pretest session, Mango mentioned that her partner had had sex with a woman "who apparently died of AIDS." She told the counselor "I trusted him. It is much more pleasurable without a condom . . . But I do not blame him, because if one gets contaminated, the only one responsible is the person herself." The testing experience and the long waiting for the result were integrated into a deepening of Mango's confusion and pain now expressed in skin lesions: "I got crazy waiting . . . Look at my legs, see these wounds . . . I am so afraid." She was content with her negative result, but then admitted that she had recently had unprotected sex with her partner again. Ana told her to close the window and then come back for a second testing. She agreed to use a condom for the next three months. She left with a narrative of purity: "Women are naive, they fuck without a condom because they think that the partner is as pure as they are."

CONCLUSION: TECHNONEUROSIS

Consider the outcome of Oxygen's experiences at CTA. She reports a pain that finds no rest, from test to test. Oxygen has returned for her fourth testing. All previous HIV tests were negative. She said that she has been extremely depressed. "I am very nervous, tired, I sweat a lot, and have insomnia. My eyes are yellow. My throat aches." She has been "happily married" for over ten years. The woman pointed to skin lesions in her face. "I have no strength left at all. My whole body aches." Then she told Ana what she had already said in other pre-testing sessions: "A year ago I was raped." The rapist supposedly told her he had AIDS. No police reports were ever filed. All the counselors who spoke to the woman at the (not so) Anonymous Testing Center agreed on an interpretation: "she jumped over the fence [committed adultery] and is dying of guilt."

Now even Oxygen's husband is showing AIDS symptoms, she says. The woman already saw two psychologists, but "I did not like it, the first said that she disagreed with me, that I had nothing; the second was too quiet, she did not say anything." The need of a test is entangled with the possibility of Oxygen's own word and seems to replace it. Ana told her that there was nothing else they could do for her at CTA. She had used her testing quota. "But I need another test." Later that day, Ana saw the woman next door, waiting to be examined at the Unit for Sexually Transmitted Diseases.

We want to mark a social and subjective swerve at CTA. The confused, symptomatic, painful experience of Oxygen is technically engineered. This testing apparatus in fact plays a determinant role in the production of a socially visible imaginary AIDS and of neurotic incorporations. The psychosexual

neurotic 'fate' of clients like Oxygen is not simply purged in clinical epidemiological frames and biotesting, but it is instrumentalized and co-produced as 'normal,' returning to social reality as *technoneurosis*.

CTA's testing mediation is aimed at 'zeroing' the client, i.e., finishing off the 'deadly' fixation to the object of his or her fantasy – all the while reframing instinctual urges within epidemiological risk assessment, a new truth and conversion to de-eroticized safe sex. During this testing experience which is both performatic and biologically verified (a *Bildungsroman* of sorts) the institution and the client produce a new discursive formula for him/her to handle with unconscious dynamics and patterns of risk exposure. This experience provides the client with a 'double' that has scientific voice and legitimacy (Freud 1955; Petryna and Biehl 1997; Cohen 1998: 269). CTA's rational-technical intervention guarantees the control of the sexual variants explicated by clients, validates their symptoms as 'untrue,' and paradoxically induces their literal return (risk subjects, fantasies and symptoms). This is a two-way street. As these new risk subjects are trained to overcome their morbid acts by new knowledge of themselves (now imaginarily emptied of death), they make more and more natural their neurotic allo-plastic capacity of reinventing afresh (now with science and technology) their subjectivity. In this process, a client like Oxygen develops a dependency on a secret significance that the HIV testing might carry, and might have foreclosed access to the singularity of her dramatic experience and to the formulation of desire. In this way, the CTA experience directly impacts the course of mental health.

We have also shown how the subjects of this imaginary AIDS interpellate and use the state that is made available to them, and use the testing experience to recycle power relations, sensibilities and ways of acting. Many of CTA's low-risk clients use the testing and counseling experience to handle intersubjective dramas (family and love relationships such as loss of virginity, adultery) in the void or vanishing of traditional social ties. Others use the service to publicly formulate or disguise new definitions of sexual orientation (e.g., to affirm or deny homosexuality), to move out of oppressive gender ties and to cope with shifting gender roles. Some simply exercise free access to a 'modern' and well infrastructured health service so rarely available to them. Overall, we saw CTA's clients de-ritualizing face-to-face relationships and actualizing programmatic fantasies of a supposed autonomy.

As our research indicates, some of the immediate effects of the supply and demand for biotechnical truth at CTA are the consolidation of a technoscientific *ethos* of governance, the strengthening of fantasy as a regulator of social reality, the new inscription of patterns of social and sexual domination, and the client's addictive self-tooling. As we saw in the story of Oxygen, the categorical imperative of science, 'to go on knowing' is what stays – and in this place there is no need for a real person to be there. How massive and socially a/effective this new form of governmentality is, remains to be seen – that's the nature of its experimental quality.

ACKNOWLEDGEMENTS

Many people in Brazil and in the United States have helped to realize this research and writing. I am very thankful to Denise Coutinho and Ana Luzia Outeiro for their creative and generous participation from the beginning until now, and to CTA's coodinators, staff and clients for making this work possible in the first place. I am also grateful to Adriana Petryna, Joseph Dumit, Michael Fischer, and Paul Rabinow for carefully reading several drafts of this essay and for their invaluable critical contributions to it. Thank you also to André Patsalides, Arthur Kleinman, Byron Good, Carlos Passarelli, Clara Han, Kaushik Sunder Rajan, Lawrence Cohen, Levi Fuller, Michel Desjardins, Maria Inês Dourado, Mary-Jo Delvecchio Good, Martha Fuller, Nancy Scheper-Hughes, Naomar de Almeida-Filho, Robert Desjarlais, Robson de Freitas Pereira, Sérgio Cunha, Shigeyuki Eguchi, and Stefania Pandolfo for their engagement in one form or the

other with this work. I also want to acknowledge funding from the Brazilian Council of Science and Technology (CNPq) and the US National Institute of Mental Health (NIMH), as well as the institutional support from the Health Institute (ISC) at the Federal University of Bahia, and the Department of Social Medicine at Harvard Medical School. I am solely responsible for the interpretations expressed here.

NOTES

- 1. We maintained the confidentiality of CTA's clients and staff.
- 2. Bahia is the largest state in the Northeastern Region of Brazil, with a population of approximately 12.5 million. Salvador was the first capital of colonial Brazil, founded in 1549. It has some 2.3 million inhabitants and is a center of international and national tourism Salvador concentrates about 70% of the total AIDS cases of the state. The distribution of wealth in Bahia is among the most unequal in Brazil: 41% of the families can be classified as *indigentes*, and the richest 20% of the population hold 69.5% of the wealth (Secretaria da Saúde do Estado da Bahia 1996).
- 3. As of December 1996, there was only one CTA service in the whole state. Given the administrative success of this initiative and also the availability of federal funds, other CTA units have been created since.
- 4. A caveat must be made. Here we refer to an AIDS reality that we witnessed in 1996/1997. AIDS politics in Brazil is extremely dynamic and the local administration of the AIDS epidemic discussed in this essay is fluid, and also part of a process of change.
- 5. Elizabeth Miller has identified a similar phenomenon in Japan: "AIDS neurosis is an illness phenomenon in which the person suffering is convinced that he or she is HIV positive, despite negative test results, and a range of nonspecific physical symptoms and phobic and neurotic tendencies are manifested" (1998: 402). She begins her essay "The Uses of Culture in the Making of AIDS Neurosis in Japan," quoting an AIDS hotline counselor saying, "Japanese are at much greater risk for developing AIDS neurosis than they are of getting AIDS" (ibid.). Thus, Miller focuses her study on the social construction of this diagnostic category and on how cultural stereotypes and symbolic cosmologies are imbricated in the making of AIDS neurosis a 'uniquely Japanese phenomenon.' Her analysis fails to address how new forms of technoculture such as HIV testing and counseling and AIDS prevention campaigns actually inform and shape this widespread experience of AIDS neurosis.
- 6. See Lévi-Strauss' discussion on the 'effectiveness of symbols' (1963: 188); see also Petryna and Biehl 1997.
- 7. The following epidemiological biases (Rugg et al. 1991) are potentially at work here: 1) recall bias, when a respondent has difficulty remembering past events accurately; 2) social desirability bias, when a respondent provides answers he or she believes to be socially appropriate; 3) situational demand bias, when the respondent provides response based on the nature of the situation; 4) selection bias, owing to volunteerism or motivational differences, such as differences in individual motivation to alter risk.
- 8. Gurtler (1996: 303), "Whether the seroconversion lag differs between groups and how much of the interindividual variation in seroconversion lag can be accounted for by measurable factors such as age, size of inoculum, immune status of the host at the time of infection, or route of acquisition of infection remains unknown."
- 9. On research aimed at shortening the window period see S. Hashida, K. Hasinaka, I. Nishikata et al. (1996). On research about window period blood donations and on the potential effect of new screenings tests see D. Kitayaporn, J. Kaewkungwal, S. Bejrachandra et al. (1996); and E.M. Lackritz, G.A. Satten, Aberle-Grasse et al. (1995). On PCR's ability to detect the HIV virus during the window period see J.A. Barbara and J.A. Garson (1993).
- 10. Freud began writing the essay on Group Psychology in 1919 and finished it in 1921. During this period he also wrote "The Uncanny" (1919) and *Beyond the Pleasure Principle* (1920). These texts represent a shift in Freud's thought: the compulsion to repeat is shown as key to unconscious functionings, the death instinct is conceptualized as fundamental to mental processes and the driving force of living, and the problem of destructiveness which would later play an ever more prominent role in his theoretical work makes its first appearance.

- 11. Lacan calls these contemporary fantasies 'phantasms,' i.e., substitutes for reality. He likens the phantasm to a surface that protects the individual against the unspeakable Real, and at the same time maintains that individual in a relationship of imaginary servitude to the master signifier (n/d, 1977, 1994).
- 12. For a reading of Adorno's dialectic of technology, see Eric L. Krakauer (1998). See also Judith Butler's 'politicization of the unconscious' (1997).
- 13. See Homi Bhabha's discussion on contemporary theory-making outside of socially and culturally privileged sites and on the ambivalent structures of subjectivity and sociality in post-colonial contexts, "The Commitment to Theory" (1994). See also Gyan Prakash's discussion on how science and technology informs new forms of governmentality and experience (1999).
- 14. Philosophers such as Hannah Arendt (1958), Michel Foucault (1992), and Giorgio Agamben (1998) have argued that after the war, when the authoritarian 'performances' were over, these biologically focused and technically-induced strategies of self-government have in fact remained operative in our democratic societies.
- 15. On a critique of fantasy regulating social reality see Slavoj Zizek (1997).
- 16. For an epidemiologial analysis of the AIDS epidemic in Bahia and in the Northeast Region see Dourado, Noronha, Barbosa, and Lago, 1997; and Dourado, Barreto, Almeida-Filho, Biehl and Cunha, 1997. For an epidemiological analysis of the AIDS epidemic in Brazil see Castilho and Pedro Cherquer, 1996.
- 17. Sérgio Cunha prepared this figure.
- 18. Anthropologist Nicolas Sheon (1996) argues that the confessional quality of the HIV counseling and testing interaction leads to a misreckoning of risk behaviors and produces resistance to prevention messages: "Within the reformist logic of test counseling, the goal is for the client to lower their risk to the point that they do not need to get tested again. But for the client, knowledge of HIV risks meshes with the construction of sex as inherently dangerous, and this can lead to an exaggeration of risk and a psychological dependence on absolution by testing . . . Repeat testers and recidivists are addicted to the cathartic effect of confessional ritual, consciously indulging in risks and using testing as a periodic status check" (13, 19). For Sheon, the HIV counseling and testing apparatus would be aimed at sexual normalization and at a late modern renewal of confessional modes of self-control. By over-emphasizing the counseling and disciplinary dimension of this new public health apparatus, he reinforces a specific psychologizing view that the truth of the subject lies in sexuality. Our study focuses on the bioscientific novelty of this testing procedure and in how such expertise, technoscientific commodities, new experts and procedures give a scientific form to subjectivity.
- 19. According to Almeida-Filho (1992), clinical epidemiology replaces the clinic's technical role in the constitution of this cyborg-subject. For a critique of clinical epidemiology see pp. 78–89. Beyond a clinical epidemiology, Almeida-Filho suggests the workings of an "ethno-epidemiology" (p. 111).
- 20. From a conversation with Joseph Dumit.
- 21. This encounter is reported in the Portuguese edition of Foucault's lecture *O que é um Autor?* (n/d), and in Didier Eribon (1996).
- 22. See Mario Biagioli's (2000) discussion on how in the US the "discipline function" has taken over many dimensions of the "author function."
- 23. For there to be the possibility of a return, there must have been a forgetfulness that is itself part of the new discursivity: "It is necessary that this forgetfulness . . . be invested in precise operations, that can be situated, analyzed and reduced by the very return to the inaugural act . . . The locker of forgetfulness was not added from the outside, it is part of the discursivity in question, it is what gives it its laws: the inaugural discursivity so forgotten is simultaneously the reason of the locker's existence and the key which allows it to be opened in such a way that the mode of forgetting and the obstacle to the return can only be lifted by the return" (Foucault n/d: 64, 65).
- 24. This is ever more relevant, says Lacan, given the fact Foucault's lecture was delivered at "a sort of a bad place called Society of Philosophy." In fact, he continues, Foucault had confronted the very scientificity of that Society by highlighting and articulating the "Freud happening," i.e., the continuous movement at work in the positioning and placement of the subject (n/d: 90). As Lacan wrote, "One doesn't see oneself as one is, and even less so when one approaches oneself wearing philosophical masks" (1989: 15).

REFERENCES

Adorno, Theodor

1982 Freudian Theory and the Pattern of Fascist Propaganda. *In* The Essential Frankfurt School Reader. Andrew Arato and Eike Gebhardt, eds. New York: Continuum.

Agamben, Giorgio

1998 Homo Sacer: Sovereignty and Bare Life. Stanford: Stanford University Press.

Alcabes, P., A. Muñoz et al.

1993 Incubation Period of Human Immunodeficiency virus. Epidemiologic Reviews 15(2): 303-318.

Almeida-Filho, Naomar

1992 A Clínica e a Epidemiologia. Salvador/Rio de Janeiro: APCE/ABRASCO.

Arendt, Hannah

1958 The Human Condition. Chicago: The University of Chicago Press.

Barata, Rita

1996 Epidemiologia Clínica: Nova Ideologia Médica? Cadernos de Saúde Pública 12: 555-560.

Barbara, J.A. and J.A. Garson

1993 Polymerase Chain Reaction and Transfusion Microbiology. Vox Sanguinis 64(2): 73–81.

Beck Ulrich

1997 The Reinvention of Politics: Towards a Theory of Reflexive Modernization. *In* Reflexive Modernization. Beck, Giddens and Lash, eds. Great Britain: Polity Press.

Bhabha, Homi K.

1994 The Location of Culture. New York: Routledge.

Biagioli, Mario

2000 From Difference to Blackboxing: French Theory vs. Science Studies' Metaphysics of Presence. *In* French Theory in America. S. Cohen and S. Lotringer, eds. New York: Routledge.

Biehl, João Guilherme (with Jessica Blatt)

1995 Life on Paper: A Trip through AIDS in Brazil, Study Document. Rio de Janeiro: ISER.

Biehl, João Guilherme (with Anamélia Franco and Roselene de Alencar)

1996 Uma Avaliação Qualitativa das Práticas de Prevenção em AIDS na Cidade de Salvador, Report. Salvador: Secretaria Municipal da Saúde da Cidade de Salvador.

Biehl, João Guilherme

1999 Other Life: AIDS, Biopolitics, and Subjectivity in Brazil's Zones of Social Abandonment. Ann Harbor: UMI Dissertation Services.

2000 Biotechnology and the New Politics of Life and Death in Brazil. Unpublished Manuscript.

Butler, Judith

1997 The Psychic Life of Power: Theories in Subjection. Stanford: Stanford University Press.

Castel, Robert

1991 From Dangerousness to Risk. *In* The Foucault Effect: Studies in Governmentality. Graham Burchell, Colin Gordon, and Peter Miller, eds. Chicago: The University of Chicago Press.

Castiel, Luis David

1999 A Medida do Possível: Saúde, Risco e Tecnobiociências. Rio de Janeiro: Contra

Capa Livraria e Editora Fiocruz.

1998 The Next Millennium and Epidemiology: Searching for Information. Cadernos de Saúde Pública 14(4): 765-778.

Castilho, Euclides and Pedro Cherquer

1996 Epidemiologia da AIDS no Brasil. *In* Programa Nacional de Doenças Sexualmente Transmissíveis e AIDS, A Epidemia de AIDS no Brasil: Resumo (Versão Preliminar). Brasília: Minist ério da Saúde.

Centers for Disease Control and Prevention

1993 Journal of the American Medical Association 269(16): 2072–2075.

Cohen, Lawrence

1998 No Aging in India: Alzheimer's, the Bad Family and Other Modern Things. Berkeley: University of California Press. Cooper, D.A., J. Gold, P. MacLean et al.

1985 Acute AIDS Retrovirus Infection: Definition of a Clinical Illness Associated with Seroconversion. Lancet 1: 537-540.

Coordenação Nacional de DST e AIDS

1996 Simpósio Sat élite: A Epidemia de AIDS no Brasil: Situação e Tendências, Document of the First Brazilian STD/AIDS Prevention Congress, Salvador.

1997 A Epidemia da AIDS no Brasil: Situação e Tendências. Brasília: Minist ério da Saúde.

1998 AIDS no Brasil: um esforço conjunto governo – sociedade. Brasília: Minist ério da Saúde.

Cunha, Sérgio et al.

1996 Atividade Prática: Disciplina MED 100 – Epidemiologia. Salvador: Faculdade de Medicina, Universidade Federal da Bahia. Manuscript.

Dawson, Jill, Ray Fitzpatrick et al.

1991 The HIV Test and Sexual Behavior in a Sample of Homosexually Active Men. Social Science and Medicine 32(6): 683–688

Deleuze, Gilles

1995 Negotiations, 1971-1990. New York: Columbia University Press.

Dourado, Maria Inês da Costa, Maurício Lima Barreto, Naomar de Almeida-Filho, João Guilherme Biehl, and Sérgio S. Cunha 1997 Região Nordeste. *In* Coordenação Nacional de DST e AIDS, A Epidemia da AIDS no Brasil: Situação e Tendências. Brasília: Minist ério da Saúde.

Dourado, Maria Inês da Costa, C. Noronha, A. Barbosa, and R. Lago

1997 Considerações sobre o Quadro da AIDS na Bahia. Boletim Epidemiológico do SUS. Brasília: Minist ério da Saúde.

Dumit, Joseph

1997 A Digital Image of the Category of the Person. *In* Cyborgs and Citadels: Anthropological Interventions in Emerging Sciences and Technologies. Gary Downey and Joseph Dumit, eds. Santa Fe: School of American Research Advanced Seminar Series.

Eribon, Didier

1996 Michel Foucault e seus contemporâneos. Rio de Janeiro: Jorge Zahar Editor.

Epstein, Steven

1996 Impure Science: AIDS, Activism, and the Politics of Knowledge. Berkeley: University of California Press.

Farnham, P., R. Gorsky, D. Holtgrave et al.

1996 Counseling and Testing for HIV Prevention: Costs, Effects, and Cost-Effectiveness of More Rapid Screening Tests. Public Health Reports 111(1): 44–53.

Fischer, Michael M.J.

1999 Emergent Forms of Life: Anthropologies of Late or Postmodernities. Annual Review of Anthropology 28: 455-478.

Foucault, Michel

n.d. O que é um autor? Lisboa: Passagens.

1979 Discipline and Punish: The Birth of the Prison. New York: Vintage Books.

1991 Governmentality. *In* The Foucault Effect: Studies in Governmentality. Graham Burchell, Colin Gordon, and Peter Miller, eds. Chicago: The Chicago University Press, pp. 87–104.

1992 Genealogia del Racismo. Buenos Aires: Editorial Altamira.

1998 Michel Foucault: Aesthetics, Method, and Epistemology. James Faubion, ed. New York: The New Press.

Freud, Sigmund

1955 The Uncanny. *In* The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume XVII. London: The Hogarth Press.

1959 Group Psychology and the Analysis of the Ego. New York: W. W. Norton & Company.

1961 Beyond the Pleasure Principle. New York: W.W. Norton & Company.

1963 The Loss of Reality in Neurosis and Psychosis. *In* General Psychological Theory: Papers on Metapsychology. New York: Collier Book.

Galvão, Jane

2000 AIDS no Brasil: A Agenda de Construção de uma Epidemia. São Paulo: Editora 34.

Good, Byron

1994 Medicine, Rationality, and Experience. Cambridge: Cambridge University Press.

Good, Mary-Jo Delvecchio

1995 Cultural Studies of Biomedicine: An Agenda for Research. Social Science and Medicine 41(4): 461-473.

Gurtler, L.

1996 Difficulties and Strategies of HIV Diagnosis. Lancet 348(9021): 176–179.

Hacking, Ian

1990 The Taming of Chance. Cambridge: The Cambridge University Press.

1999 Making Up People. In The Sciences Studies Reader. Mario Biagioli, ed. New York: Routledge.

Haraway, Donna

1991 The Biopolitics of Postmodern Bodies: Constitutions of Self in Immune System Discourse, in Simians, Cyborgs and Women: The Reinvention of Nature. New York: Routledge.

Hashida, S., K. Hasinaka, I. Nishikata et al.

1996 Shortening of the Window Period in Diagnosis of HIV-1 Infection by Simultaneous Detection of p24 Antigen and Antibody IgG to p17 and Reverse Transcriptase in Serum with Ultrasensitive Enzyme Immunoassay. Journal of Virological Methods 1(62): 43–53.

Higgins, Donna, Christine Galavoti et al.

1991 Evidence of the Effects of HIV Antibody Counseling and Testing on Risk Behaviors. Journal of the American Medical Association 266(17): 2427.

Horsburgh, C.R. Jr., C.Y. Ou, J. Jason et al.

1989 Duration of Human Immunodeficiency Virus Infection before Detection of Antibody. Lancet 2(8664): 637-640.

Ickovics, Jeanette R., Allison C. Morrill et al.

1994 Limited Effects of HIV Counseling and Testing for Women. Journal of American Medical Association 272(6): 443.

Keller, Evelyn Fox

1992 Secrets of Life, Secrets of Death: Essays on Language, Gender and Science. New York: Routledge.

Kitayaporn, D., J. Kaewkungwal, S. Bejrachandra et al.

1996 Estimated Rate of HIV-1-Infectious but Seronegative Blood Donations in Bangkok, Thailand. AIDS 10(10): 1157–1162.

Kleinman, Arthur and Anne Becker

1998 Editorial: 'Sociosomatics': The Contributions of Anthropology to Psychosomatic Medicine. Psychosomatic Medicine 60(4).

Krakauer, Eric L.

1998 The Disposition of the Subject. Evanston: Northwestern University Press.

Lacan, Jacques

1977 The Freudian Thing, In écrits: A Selection. New York: W.W. Norton & Company.

1980 O Mito Individual do Neurótico. Lisboa: Assírio e Alvim.

1989 Science and Truth. Newsletter of the Freudian Field 3: 4-29.

1991 The Seminar of Jacques Lacan: Book I - Freud's Papers on Technique, 1953-1954. New York: W.W. Norton.

1994 O Seminário: O Avesso da Psicanálise, Livro 17. Rio de Janeiro: Zahar.

n/d Seminario XVI: De un Otro al otro. Buenos Aires: Grupo Verbum (noncommercial edition).

Lackritz, E.M., G.A. Satten, Aberle-Grasse et al.

1995 Estimated Risk of Transmission of the Human Immunodeficiency Virus by Screened Blood in the United States. New England Journal of Medicine 332(26): 73–81.

Laplanche, J. and J.B. Pontalis

1973 The Language of Psycho-Analysis. New York: W.W. Norton.

Larvie, Sean Patrick

1997 Personal Improvement, National Development: Theories of AIDS Prevention in Rio de Janeiro, Brazil. *In* The Medical Anthropologies in Brazil. Annette Leibing, ed. Berlin: Verlag für Wissenschaft Und Bildung.

Lévi-Strauss, Claude

1963 Structural Anthropology. New York: Basic Books.

Longini, I.M., W.S. Clark, M. Haber et al.

1989 The States of HIV Infection: Waiting Times and Infection Transmission Prob- abilities. *In* Mathematical and Statistical Approaches to AIDS Epidemiology, Lecture Notes in Biomathematics, Vol. 83. C. Castillo-Chaves, ed. New York: Springer-Verlag.

Luhrmann, T.M.

2000 Of Two Minds: The Growing Disorder in American Psychiatry. New York: Alfred Knopf.

Lupton, Deborah, Sophie McCarthy, and Simon Chapman

1995 'Doing the Right Thing': The Symbolic Meanings and Experiences of Having an HIV Antibody Test. Social Science and Medicine 41(2): 173–180.

Martin, Emily

1994 Flexible Bodies: Tracking Immunity in American Culture from the Days of Polio to the Age of AIDS. Boston: Beacon Press.

Marx. Karl

1983 Production of Surplus Value. In The Portable Karl Marx, ed. Eugene Kameka. New York: Penguin Books.

Miller, Elizabeth

1998 The Uses of Culture in the Making of AIDS Neurosis in Japan. Psychosomatic Medicine 60: 402-409.

Neisson-Vernant, C., S. Arfi, S. Mathez et al.

1986 Needlestick HIV Seroconversion in a Nurse. Lancet 2(8510): 814.

Parker, Richard, Cristiana Bastos, Jane Galvão, and José Stálin Pedrosa, eds.

1994 A AIDS no Brasil. Rio de Janeiro: Relume Dumará, ABIA, IMS/UERJ.

Patton, Cindy

1996 Fatal Advice: How Safe-Sex Went Wrong. Durham: Duke University Press.

Petersen Alan and Deborah Lupton

1996 The New Public Health: Health and Self in the Age of Risk. St. Leonards: Allen & Unwin.

Petryna, Adriana and João Guilherme Biehl

1997 O Estádio Clínico: A Constituição de uma Criança Inválida. Revista da Associação Psicanalítica de Porto Alegre 7(13): 83–101.

Phillips, K. and T.J. Coates

1995 HIV Counseling and Testing: Research and Policy Issues. AIDS Care 7(2): 115-124.

Prakash, Gyan

1999 Another Reason: Science and the Imagination of Modern India. Princeton: Princeton University Press.

Rabinow, Paul

1996 Artificiality and Enlightenment: From Sociobiology to Biosociality. *In* Essays on the Anthropology of Reason. Princeton: Princeton University Press.

Rapp, Rayna

1999 Testing Women, Testing the Fetus: The Social Impact of Amniocentesis in America. New York: Routledge.

Ranki, A., S. Valle, M. Krohn et al.

1987 Long Latency Precedes Overt Seroconversion in Sexually Transmitted Human Immunodeficiency Virus Infection. Lancet 2(8559): 589–593.

Rugg, D., R. MacGowan, A. Katthleen et al.

1991 Evaluating the CDC Program for HIV Counseling and Testing. Public Health Reports 106(6): 708-713.

Saraceni, V., E. Souza, S. Passos et al.

1996 Importance of AIDS Anonymous Testing Site in Rio de Janeiro, Brazil. XI International Conference on AIDS, Abstractson-Disk.

Scheper-Hughes, Nancy

1994 An Assay: AIDS and the Social Body. Social Science and Medicine 39(7).

Secretaria da Saúde do Estado da Bahia

1996 Plano Estadual de Saúde 1996–1999. Salvador: Coordenação de Desenvolvimento de Recursos Humanos/Divisão de Comunicação e Documentação.

Sheon, Nicholas

1996 HIV Test Counseling, Confessional Ritual, and the Deployment of Safe Sexuality. Berkeley: Anthropology Department, University of California. Dissertation Prospectus.

Treichler, Paula

1999 How to Have Theory in an Epidemic: Cultural Chronicles of AIDS. Durham: Duke University Press.

Turkle, Sherry

1991 Psychoanalytic Politics: Jacques Lacan and Freud's French Revolution. New York: The Guilford Press.

1997 Life on the Screen: Identity in the Age of the Internet. New York: Simon and Schuster.

UNAIDS

2000 UNAIDS Policy on HIV Testing and Counseling. Geneva: UNAIDS. Document.

Valdiserri, R., M. Moore, R. Gerber et al.

1993 A Study of Clients Returning for Counseling After HIV Testing: Implications for Improving Rates of Return. Public Health Reports 108(1): 12–18.

Young, Allan

1995 The Harmony of Illusions. Princeton: Princeton University Press.

2000 Our Traumatic Neurosis and Its Brain. Unpublished manuscript.

Zizek, Slavoi

1997 How did Marx Invent the Symptom? In Mapping Ideology. New York: Verso.

1999 The Ticklish Subject: The Absent Centre of Political Ontology. New York: Verso.