

Baring Essentials: Science as Desire

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Abstract: Sexual expression is fixed in neither discourse nor time. Exploring that expression requires good theory and inventive research methodologies. Social science has been growing new approaches to investigating sexuality, bolstered by new theory from the humanities, and encouraged by a lack of success in traditional psychosocial and behavioral research in dealing with Western sexual politics since the 1960s and the HIV pandemic since the early 1980s. New theory and innovative methodologies have led to research that confounds the basic science/applied research divide, suggesting that, had this been done earlier, responses to HIV/AIDS might have been less hit-and-miss and grounded in a more sophisticated understanding of sexual life. New technologies are also re-shaping sexuality; their relevance to sex research is also explored in this paper to suggest possibilities for social research in the twenty-first century that offers both the certainty of basic science and enhances the impact of applied research.

Key words: desire; bodies; technology; theory; online; Internet; computer

Technologies of Desire

Uhura2 sits at the computer idly waiting for the reply from Gammon. Gammon has a slow Macintosh and the replies have that kind of delay that makes it hard to stay horny even with one hand off the keyboard. Uhura2 has been chasing Gammon for three weeks now, gently insinuating those sexual interests that keep Uhura2 up night after night, restlessly roaming chat rooms in search of the perfect encounter.

Gammon turned up quite recently and after some hesitation allowed Uhura2 to "pvt". The initial hesitation on Gammon's part was due to Uhura2's increasingly suggestive register in the main chat room. "Pvt" is always a risk, but Gammon was getting interested in this badinage about bodies. Anyway,

Gammon is back, asking Uhura2 to describe in detail the livecam site Uhura2 has running on the side

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Uhura2 is no novice at seducing newbies like Gammon and delights in capitalizing quickly on keying mistakes that look like Freudian slips, noting double entendre, and inserting randy smileys to up the ante on every occasion. Uhura2 has been doing this for a long time, starting with MUDsites in the early 1990s, and progressing to the full wonders of video streaming and livecam events as the budget allowed and the technology developed.² Now, daily downloading of images, sometimes pornographic, always erotic, provides an endless picture show as well as wallpaper for the computer. The nightly chat rooms allow for a more direct exploration of Uhura2's sexual desires, which are developing in new directions as diverse as the sex sites coming online each day.

^{1. &}quot;pvt" stands for going to a private chat room where two can 'talk' without the others in the large chat room seeing their conversation on the screens.

^{2.} MUD sites stands for multi-user dimension computer sites used for interactive communication, particularly games, also called multi-user dungeons.

of the screen. The website is Apartment 21, a New York City site featuring three young men who live naked in a Chelsea apartment fitted with multiple video cameras set up twenty-four hours a day to capture live-to-air their every mood, move, and making-out. Uhura2 has very catholic tastes in sex sites, visiting straight, gay, and even more bent as fancy takes off, and Gammon has not the credit card leeway to pay for such pleasures — sex costs nowadays. Uhura2 slowly keys in the description of an encounter on the floor of the kitchen between one Apartment 21 inhabitant and a pizza delivery boy. Gammon makes more mistakes in typing as the responses fly thick and fast through cyberspace. Uhura2 knows another score is close to hand.

Uhura2 has been here before, as have many others -quite a few reading this now, I imagine-but Gammon may not know that one consequence of cybersex is enhanced risk of sexually transmissible infection (STI). In 2000, Dawn MacKeen reported on a syphilis outbreak in the United States traced to an AOL chat room. She also reported from a San Francisco study (uncited) that 17% of STI clinic attendees met their partners online. In addition, she suggested that American gay men who met their partners online were more likely not to wear condoms during anal intercourse with those partners than with others met offline (MacKeen, 2000). Not all cybergeeks seek "real" offline sex with their communicants, and we know little about those who do or about those who do not. Understanding the risks involved that lead to the increased STI incidence MacKeen reports is still relatively new to science. That said, it seems that not all online sex results only in sticky keyboards or wet patches on ergonomic chairs!

It would certainly appear that we are seeing an explosion in sexual expression as a result of this new technology—and this is a major theme in this paper. The ubiquitous home computer has become yet another sex toy. No wonder Macintosh finally put it in sexy colors—you can now get your computer to match your vibrator or your butt plug. It cannot be long before it will come with studded leather speakers for the SM cybersluts. It has taken the manufacturers a short while to find out what their users quickly discovered—cyberspace is sexual space. That sexual space is

increasingly global space, for this is not merely a developed country experience. The November 2000 Asia-Pacific Economic Cooperation Heads of Government meeting in Brunei resolved to increase Internet access in the Asia-Pacific region dramatically over the next five years. With exploding HIV epidemics in the region and high levels of STIs in its poorer countries, the Internet and its patterns of use are bound to be factors in constructing the region's social and, maybe, sexual experience of the pandemic.

Part of the beauty of cyberspace is that, unless a "real" connection is pursued offline, no one actually knows the attributes of the persons with whom she or he is chatting. Online, Uhura2 cannot tell who Gammon is, and Gammon does not know whether Uhura2 is male, female, or transgender, or gay, straight, or ambisexual. That can be part of the appeal; social categories and conventions are denied at will. Uhura2 chose that name deliberately to invoke transgression. "Uhura" is a character from Star Trek, played by an African American actress Nichelle Nichols, whose very presence in this original, primetime, sci-fi TV series was an important, if unintended, moment in the fight for civil rights in the U.S. Her onscreen kiss with "Captain Kirk"-the first-ever, mixed-race kiss on a mainstream U.S. TV show-was a breakthrough in representations of desire.

Transgressing the sexual/racial divide then pertaining in the U.S. was not the only feature of that show's ongoing contribution to destabilizing the world. Skirts featured on men in early episodes of the sequel, Star Trek-The Next Generation, and a female Captain Catherine Janeway split the infamous infinitive ("to boldly go") with Shakespearean inflections and desire burning in her eyes in series 3, Star Trek-Voyager. The next series, Deep Space 9, saw an increase in the variety of humanoid forms involved, including some who inhabited bodies of different sexes at various times in their life cycles or over multiple life times. This added considerable gender and sexual uncertainty to a number of on-screen romances. In all the films and series growing from the original Star Trek, some ambiguous sexual interests in various characters have been offered, and quite a few bodies have been exposed or variously positioned as desirable, including that very

fetching young man, the tightly clad "Wesley Crusher" and the pneumatic "Seven of Nine."

The sexual ambiguities so deftly exploited in the Star Trek series, with their phenomenal, enduring, world-wide popularity, have had unknown social effects. Science should know more about these effects and those of classic science fiction writing by authors such as Ursula Le Guin, Isaac Asimov, Robert Heinlein, Phillip K. Dick, Samuel R. Delaney, James Tiptree Jr., and others. This genre has long provided possibilities beyond the merely spatial into the sexual unknown, and most of them long before computers and Internet links appeared in homes. Yet, Uhura2 and Gammon are actually unknowable: the very impossibility of knowing whom you are engaging and what their real sexual interests are is part of the allure in chat rooms and cybersex. This is a significant shift in representation. Straight women can be men and seduce other women (who might also be men); gay men can be women and engage that all-time sexual fantasy that no man is really straight after all-and succeed. Everyone can be young and beautiful. In the privacy of one's own room, one can be seduced, watch people on livecam have sex, masturbate with a complete stranger doing the same somewhere else, and still never be certain who or what you are. More importantly, you do not want to know the very characteristics that choreograph sex, such as touch, are significant merely in their absence.

This shift is not just a cyber-variety of that identity/practice dissonance widely acknowledged in HIV/AIDS prevention the world over. In that dissonance, the body is read as behavior and the mind as identity-as if the mind is elsewhere than the bodyand behavior is mere consequence. In other words, the body is regarded as something "natural"-its behaviors can be understood objectively without reference to the social or cultural. In this way, behavior is reified. The mind becomes the repository of the social-in this case, as "identity"-and the respondent comes to embody a conceptual dilemma and his/her unity is read as dissonance, as false disunity. The very inseparability of minds and bodies must warn of danger in this formulation. Cybersex challenges the very divisibility of identity and practice that sex research has relied upon to explain its paradoxical behavioral findings. We have

yet to reckon seriously with Judith Butler's thirteenyear old refusal to divide identity from practice in sex research, and our explanatory power is weakened as a result (Butler, 1990).

However, as that STI report indicates, cybersex does not always remain virtual. Livecam allows direct visual real-time connections, and notions of personal privacy are rendered asunder by hidden cameras and live webcasting of individuals' private lives at home to anyone who wants to watch, and this phenomenon has even hit mainstream television in "reality" programs like Big Brother (Dowsett, 2003a). A key issue here is how this technology offers new avenues for sexual relations, new ways of meeting sex partners, for voyeurism and exhibitionism, and new forms of virtual foreplay that may or may not end in the real thing. And what we do not know is how the virtual translates into the real: do the sexual fantasies of the Internet change the possibilities for "real" sex? Are we permitted to explore sexual possibilities in ways different from those that sex researchers catalogue and explore in behavioral inventories and experimental studies? Finding out about these new sexual formations is going to be difficult. Given the capacity for the virtual to confound the "real" scientific categories that dominate research design (i.e., sex, gender, age, race, sexuality, other social characteristics), our classic independent variables are rendered meaningless, and I suspect the randomized control trial, for example, will not prove adequate to the task.

The transgressive possibilities of the Internet are not simply new forms of letter writing, updating the nineteenth century's romantic proclivities facilitated by the technology of the post. Global sexual connection, enlivened by the Internet, is an emerging reality—people line up liaisons before leaving home—and sexual tourism, or just playing a little wilder while traveling, is now a greatly enhanced possibility. We have long understood, if poorly, the part played by widespread global travel in disease transmission, even if only through the fantasized "Patient Zero" of Randy Shilts (1988). Since then, however, the quantum shifts in the technologies of communication and their rapid sexualization have rarely been factored into our research at either the conceptual or the methodological

levels.

The phenomenon of sexualization is worth exploring a little more here; for even in seemingly disparate sites common themes occur, particularly in relation to technological advances and an increasing public acceptance (indeed, a de-privatization) of the sexual. At the 2000 Olympic Games in Sydney, as we mighty Aussies swam the pants off the American men's relay team, there was much more concern about the new body suits increasingly dominating that sport. At the Australian research center I was then working for, which specializes in sex and health issues and has fairly frank discussions on sexual matters, it is not surprising to learn that we were against these suits because they covered up the swimmers' bodies and we could no longer perve on them. (Do all English-speaking countries use the word "perve"? In Australian English, it means "to look desirously at something, particularly something definitively sexual." So a teenager might say to a mate while looking at a picture of a near-naked person in a magazine, "Hey, have a perve at this!")

Well, Australians, as a sporting nation of some standing, perve openly on our athletes. And these wretched suits are getting in the way, just when the Speedo swimming brief was getting so small it could have easily disappeared into-well, it doesn't matter where! What are the swimming powers-that-be doing? Do they not realize that perving on young people, particularly healthy, fit, gorgeous ones with the bodies of gods, is a national ritual, an art form; possibly even a global one. As a result of mass media exposure to vast audiences, today's swimming stars serve as objects of lust on a scale unprecedented in history. For example, the then seventeen year-old Australian gold medalist Ian Thorpe, with his size seventeen feet promising talent of enormous proportions, recorded 5.5 million hits on his web site by half way through the 2000 Sydney Games. The transformation in sexual iconography wrought by swimmers and by other athletes challenges the hegemony of the supermodels and film stars who have dominated our vision in the West since World War II, just as these supplanted the opera divas and poets a generation before. This has been made possible by the rapid technological advances such as the invention of video and the digitization of mass communications, and its increasing

accessibility. Millions can now see close-up what was once the preserve only of those privileged to attend such events in person.

It is clear many athletes understand more and more the public erotics of sport. Olympic medalist sprinters like the U.S.'s Marian Jones or Australia's Cathy Freeman now often wear just bikinis and makeup, and the men are renowned for gold chains flapping around their necks to distract our attention from those other floppy bits that their Lycra one-piece running suits so inexpertly confine. Gymnasts too are getting bold. During the post-competition gymnastics exhibition of the 1996 Atlanta Olympic Games, the very cute, redheaded, Russian, gold medal winner, Alexi Nemov, knew exactly what he was doing when, just before he mounted the pommel horse, he stripped off his shirt and on close-up television watched by millions of people globally proceeded to display his bare-chested wares to the roaring cheers of the onlookers in the stadium.

This might at first seem a random event from a canny youngster; but members of the Australian Olympic teams for both the Atlanta and Sydney Games posed naked for shiny, expensive, coffee-table books that were sell-out successes, in deliberate and surefooted efforts to raise interest in the teams. This action would not have been conceivable at the 1956 Olympics in Melbourne. Times have changed. Even in that most manly of sports in Australia-football-we annually have calendars of professional players posing naked or almost so in tasteful shots to raise money for charity. That is something that British soccer clubs or American gridiron footballers are still unlikely to do. But the insidious sports clothing manufacturers know exactly what they produce in their third world sweatshops when they tap into our desire for, or to be, Ian Thorpe or Marian Jones. They even know that some of us want to be both Ian Thorpe and Marian Jones!

This collapse of what was once often regarded as separate domains—sex and sport—warns us to think carefully of just how "social" sex is. By that I mean that sexuality is not just socially constructed (surely this is not a controversial theory nowadays, even in the growing light of the relative contribution of biology), but that social life is capable of endlessly reinscribed

eroticization. This interest in youthful beauty, prowess, and what they promise may not be entirely new—think of the naked youths who so fascinated the citizens of Ancient Greece and of the sexual culture built on that ethic; but the contemporary focus on men as sex objects, particularly near-naked men, on increasingly worldwide scale is relatively new. It renders men as the desired and passive objects of a sexual gaze once reserved largely for women and boys (Dowsett, 1998)-a gaze even more obviously sexualized than in the Renaissance. In addition, women have now shifted from being the passive objects of desire to aggressively active achievers. Cathy Freeman and Marion Jones are internationally lauded mostly for their endurance, courage, and speed. These are phallic women!

These sexual shifts are not merely cosmetic or temporary. They mark profound changes in the West, documented best in feminist scholarship and the burgeoning field of Critical Masculinity Studies (see, for example, Connell, 2000). Those shifts in expectations of sexual life and what is expected of men and women in today's world are also affecting the developing world, particularly its young people. Research for the World Health Organization's then Global Programme on AIDS and the Joint United Nations Programme on HIV/AIDS has documented significant changes in the sexual lives of young people in seven developing countries in three continental regions (Dowsett et al., 1998). The availability to those young people of images of the Olympic athletes through global television coverage and the broadening footprint of MTV in the developing world-to name just two examples-are contributing to changes in sexual cultures in ways we barely understand.

These global shifts in sexual interest and their technological drivers were marvelously exemplified at the Sydney Olympics. Even if some shy away from the idea that sport is not sexy, the athletes clearly do not. Consider this: the Sydney Olympic Organizing Committee initially supplied 100,000 condoms in a variety of sizes, colors, and formats, all in tasteful gold fish bowls in the athletes' rooms. They had to provide an additional 40,000 before the Games ended. You can do the sums: with 10,000 athletes, given that it takes at

least two to tango, this averages a possible twenty-eight sexual encounters per athlete over the two-week period of the Games! Even if those condoms were not all used for sex during the Games, it is distinctly possible that there were some Olympian performances happening off the field as well!

The issue here is that, while the sexual attraction we all feel for these gorgeous young people may not be reciprocated, it also cannot be reduced to some old rope about the natural and universal beauty of youth. Concepts of youthfulness and the sexual attractions and activities of young people have been quite varied throughout history and within various cultures. Providing condoms in an Olympic Village was unthinkable a few games ago. Note also the extreme differences in ages of onset of sexual activity in which the onset of puberty is often only marginally related to starting sex (Cleland & Ferry, 1995). Today, any search for fundamental biological universals in sex must accommodate not only such cultural and historical contingency but also, as in our athletes, the highly transformed bodies that we now perve on.

These bodies are not simply products of culture and history, as the social constructionist view might make them. Gay men, for example, in their endless transformation of masculinity have for quite some time now refined desire in aestheticized bodies that mediate the relationship between form and function. David Halperin (1995) has noted that gay men's new masculine bodies are not merely aping traditional men's bodies. The function of the new gay bodies is form! The shaping and molding of gay men's bodies is geared to maximizing sexual attraction to other men and publicly declaring the sexual desirability of gay men (Dowsett, 1998) in a way that subverts men's usual active desiring of others. It becomes publicly permissible for men to be passively gazed upon and desired. Consequently, this can apply to all men, and that historic achievement is a dangerous and destabilizing shift in Western sexual formations, for it blurs the generally accepted gender distinctions between men and women, and generates uncertainty as to what appropriately constitutes the masculine and the feminine. In this way, sexual desirability is revealed as a product of active processes of social change, rather than of the "laws of nature."

Obviously, we could analyze the modern Olympic Games ideal and its century-long struggle with challenges such as war, achievement, and ever better performances to discern its effects on repositioning young people as desirable, in addition to those effects on re-aligning social class, sexuality, gender, race, and nationalism. However, the glorious Olympic bodies are actually products of such change in a deliberate engagement between the biological and technological. Like gay men, athletes' bodies are no longer natural bodies; they are manufactured with the aid of sophisticated machines and chemicals. Mindful muscles are asked to jump higher, run faster, endure longer and be stronger than has ever been needed to perform the daily tasks of any culture we see before us. We actually do not really ever need these feats to be performed. They serve no function other than their very possibility and what they can make of themselves.

Beyond the enlarged and engorged muscles themselves, technology has developed even more inventive recalibrations. We now see prostheses extending, strapped to, re-forming, or wrapped around the bodies of athletes. The swimsuits are but one example. Look at Cathy Freeman's sleek top-to-toe running skin, or examine the shoes Nike designers made especially for Marian Jones, formed from clear flexible plastic with no heel—they are a magical Cinderella's slipper of speed. Add the eyepieces of shooters, the shaved cyclists in their birdlike helmets, the various belts, gloves, trusses, and paraphernalia, and the various desiring designers who amplified these bodies, and we begin to realize that these epitomes of the natural body at its best are now supranatural.

What is so different about our personal computers and cybersex? Or even a condom for that matter? The body clearly does not stop at the tips of your fingers and toes, and to regard sexuality as something that resides only in the natural body is risible. The variability available within these rapid technological shifts in desire provides many opportunities to experiment beyond choosing the sex of your sex partner and only using bodies. More importantly, the transformation of bodies is a decidedly ambiguous one. One consequence of these technologies of desire is that as sexual beings we may no longer need to be comforted by rigid social categories or particular types

of sexual and relational practice. Sexual attractiveness and attraction are not clearly divided along the increasingly unstable, historically recent, Western sexual delineation between heterosexual homosexual. Who constituted the target audience for Alexi Nemov's topless routine at Atlanta? He could not shut out the male gaze upon his body even if he thought he was performing only for women in the global audience. Considering that the majority of Australian football fans are men, to whom are the nude football calendars in Australia marketed? In other words, the insertion of transformed bodies into ambiguous desire is increasing and will confound our understanding of sexuality in ways with which sex researchers have yet to grapple effectively.

The other Sydney Olympics story was undoubtedly the need for 7,000 needle and syringe disposal bins, far more than the organizers realized would be needed. For over seventeen years now, Australia has had free, nationally available, needle and syringe provision as a major public health measure to prevent HIV infection. The country has been remarkably successful in restricting HIV/AIDS among injecting drug users to 4.4% of cumulative national HIV infections (National Centre in HIV Epidemiology and Clinical Research, 2002, p. 11). So, providing such disposal bins offered no real political or public health controversy. But, it was the level of injecting at the Olympics that gave cause for concern. The injecting occurring at the Olympics may have been related to legal, illegal, or performance-enhancing drugs-will we ever know? This phenomenon reveals that injecting itself is becoming a very widely used and available technology for drug use of many kinds. For those among us who find injections bring back memories of terrifying mass immunization programs at school, the notion of injecting for pleasure seems a little distant to say the least.

Yet, in recent research on gay men in Melbourne who inject recreational drugs, the act of injection was reported to be a distinct pleasure over and above the properties of the drug itself (Wain et al., 2000). Users spoke of the "feel of steel" and of injecting or being injected by someone else as an act of "penetration." Some men use injectible drugs specifically to enhance sexual experience. Others find sex difficult when using certain drugs, but still find the injecting event erotic,

sealing the moment with a kiss between injector and injected. Post-amphetamine hypersexuality produces unequaled desire—dangerous desire at times—particularly when poor erections lead men to wanting to be fucked a lot. Other drugs deny desire by dampening the emotions associated with unwanted sexual activity, for example, during sex work. Such desire enacted but denied is rarely the object of research, and such sexual activity is meaningless when only considered as individual behaviors.

Whatever the multiple pleasures of sex, either positive, negative, or simultaneously both, the presence of desire-in-injecting or of injecting-as-desire demands we consider the capacity for invention that sexuality provides. But even in the explosion in recreational drug-taking beyond injection in the West (led initially by gay men), the combination of drugs, bodies, sound, extraordinary spaces, and time-out-of-time events suffusing such drug-taking has produced a transformation in sexual possibilities beyond bodies and objects that supercedes any simplistic inventory of sexual behaviors. Consider the circuit parties now happening all across North America and their international analogues such as the Sydney Gay and Lesbian Mardi Gras-one to four day events attended by tens of thousands, pursuing desire with no known limits. And need one mention Viagra or its analogues and their additional recreational facility?

Is this enormous magnification of collectively acknowledged desire, endlessly transformed by high-level technologies beyond the limits of the imagination, so different from the magnification of desire that global television facilitated during the Olympics? The technological transformation of bodies and spectacle is not dissimilar, and the synergy of minds, bodies, and machines is stunning in its achievement. The technologies of desire are now so pervasive in their transformative power and so fast in their effect that the object of sex research—sex itself—can no longer be conceived of as a set of limited behaviors, known to us through standardized inventories in behavioral surveys or experiments, but as new, limitless, erotic forms being created/desired every moment.

Researching Sex as Risk

So far as I know, few sex researchers or HIV social scientists are investigating this transformation of gay men's sexual culture in a way that is producing really new knowledge. We know even less of how the globalization of "gay" as a hegemonic cultural variant of same-sex attraction and practice is affecting the developing world (see, however, Altman, 2001). The HIV prevention agenda is also in dire need of good quality empirical research on these issues, for the longstanding behavioral monitoring studies are telling us that the incidence of HIV infection and other STIs is increasing in some gay communities in the West, but the pattern is not predictable, explicable, or even clear (e.g., Bolding et al., 2000). One example from Australia exemplifies the research dilemma. Dean Murphy (2000), longstanding AIDS educator, noted the following in an article concerning the changes in behavior among Australian gay men:

Although the proportion of positive men reporting unprotected casual sex is greater than negative men, the recent increase in unprotected sex is not as evident among positive gay men, but it seems to be driven by negative men. This seems to indicate that more recently there have been real changes in negative men's behaviour rather than a universal increase in unprotected sex in casual situations. (p. 5)

What is the consequence of Murphy's insight? Counting the incidence of unprotected anal intercourse cannot explain what is happening. There is a real need for new basic research that investigates the dynamic changes in homosexual subcultures that are producing these behavioral changes. Behavioral monitoring that relies largely on self-report can never explain such shifts in sexual culture. Furthermore, measuring behavior change has never been directly helpful in designing effective HIV prevention education beyond offering targeting decisions. What is needed is a significantly enhanced basic research effort that investigates the rapid and fundamental changes in sexual cultures sweeping not just gay communities but also among others at risk. Behaviors themselves may not be the appropriate research object; we need to investigate behaviors embedded in context as changing

cultural formations. Indeed, the individual per se may also no longer be the appropriate unit of analysis; collectivities and cultural formations may be more important to investigate.

This is an argument Western scientists often find hard to see, but a visit to a non-Western culture can clear the vision. The Kothis of Bangladesh provide a good example of these dilemmas. These are young men who sell sex in the parks of Bangladeshi cities and towns, but do not regard themselves as "gay," nor are their partners, the Panthis. Indeed, they refuse to use the term "gay." The Kothis report usually being receptive in anal intercourse and condoms are rarely used. Lubricant is not readily available and is expensive, so either nothing or sometimes a patent antiseptic cream is used, thereby compounding problems of condom breakage and decreased awareness of rectal damage. Some of these young men take female contraceptives, cheap and easily available, to grow small breasts for their partner to hold during sex. Kothis also report frequent rape at the hands of thugs and sometimes police, and intrafamilial sex is not uncommon it seems (Dowsett, 2003b; Jenkins, 1998).

The Kothis are not the "homosexuals" of Bangladesh; nor are they the abject sexual "other" performing the clarifying effort needed to produce and heteronormativity. sustain These Western conceptualizations of sexuality do not apply here. Yet, the Kothis now have to engage "gay" understandings of HIV prevention and the technologies of the condom and lubrication, producing new practices. Behavioral research would probably align their sex lives with gay men under the myopic Western term "men-who-havesex-with-men," as if this superordinate category is science or truth. In using that term, we obliterate any social specificity that might assist in understanding the sexual culture that produces the Kothis and Panthis and that drives their sexual economy. The Kothis provide us with an example of the mutability, historicism, and cultural specificity of sexual lives. They exemplify the need for basic research on sexual culture in many countries where its forms do not take those of the West. In the example of researching HIV prevention among the Kothis, we see the need to reckon with technologies, culture, discourse, bodies, and a different understanding of what constitutes

knowledge in any research agenda. Consideration of these factors will demand quite different research methodologies and an engagement with new theories of sexuality beyond its equation with behaviors.

Bodies and Science

South Africa is a troubled country. With a devastating HIV epidemic threatening its new-found democracy more than its history has done, that country bravely supplied the world with renewed vigor and commitment at the XIII International AIDS Conference held in Durban in 2000, and demonstrated great courage in the face of such daunting adversity. I certainly returned from Durban inspired by those wonderful people, so much so that I soon thereafter read a detailed history of South Africa to find out more about its troubled past. Like so much history written about wars, great men, slavery, and individual and commercial enterprise-even from historians of the Left-sex was woefully absent from the text. What was colonial South Africa doing sexually? As those hearty Boers and plucky Brits were planting grapes, mining gold, fighting each other, and endlessly marginalizing and massacring their fellow Africans, with whom were they fucking? There was a brief aside on the remarkable buttocks of the Hottentot Venus, who died of cold after being displayed naked like an artifact in Europe, and a few references to the various churches' missionary actions being devised to link "salvation, virtue, monogamy and trousers" (Welsh, 2000, p. 108). Yet, apart from some veiled references to the odd marriage between this race and that, and the categories that eventually described various mixed-race populations, I found out surprisingly little about desire and erotics in this South African history.

While reading this unsexy history, I noted in a newspaper report that gay activists in South Africa were calling for an investigation into medical practitioners who forced homosexual armed service personnel to undergo sex change operations during the worst of the apartheid excesses between 1971 and 1989 (O'Loughlin, 2000). Sexuality was clearly on the South African agenda even if "history" pays scant attention. It would appear that several hundred male soldiers were forcibly subjected to this surgery to "cure" them of their

homosexual interests. Moreover, it would now appear that many such surgical interventions were incomplete and often not accompanied by continuous hormone therapy after the subsequent and inevitable discharge. Tortuous aversion therapy was also reported by homosexual women and men in the armed services to achieve a change in sexual orientation. The notorious Voortrekkerhoogte military hospital was the site of this persecution in the name of sexual science and social conformity, and this incident must rate with other such momentous sexual torture inflicted by medical science such as Mengele's crimes for the Nazis, and Stalin's mental hospitals, to name just two.

This expose is but one of a number of tales now told of the persecution of the homosexually active, which, I would argue, uniquely marks European history as severely disturbed by its own sexual interests. This South African example is yet another moment in the exorcism of the erotic, particularly the homoerotic, which is one of the great driving forces behind European culture, and another moment when we can see something in process I have often argued, not just with irony: that the social is sexually constructed. I want to pursue this sexual construction of the social a little further to suggest that we need to do new research and have a different science in our studies of sex, sexuality, and sexual culture if we are to move forward in this era of increasing scientific conservatism and a surprising resurgence in positivism in sex research.

Ken Plummer, in a very thoughtful "Foreword" to the late William Simon's *Postmodern Sexualities* (1996) tries his hand at a definition of sex that pretty much tells it all and, at the same time, speaks of the dilemma in our pursuit of sexuality:

Sexual life thus gets framed as the machine that pumps or the disease that plagues us, as the beast within or the spiritual force without; as a biological drive, as an evolutionary force, as a tool of repression, as a liberatory act, as joyful lust, as romantic longing, as violence and hate, as natural or unnatural. Sex is, among many other things, an achievement, an act, an aggression, a boredom, a body, a chase, a commodity, a form of filth, an expression of love, a feeling, a game, a gender, a hormone, an identity, a hunt, a hobby, a medical problem, a microdot, a pathology, a play, a

performance, a perversion, a possession, a script, a scarred experience, a therapy, a mode of transgression, a form of violence, a kind of war. (Plummer, 1996, p. xi)

This is a very useful quotation because it focuses attention on a struggle to know sexuality that seems to be central to the human species. Plummer's is also an excellent summation of our scientific endeavors. Straight science would be pleased to hear of the biological drive, gender, the natural, even the evolutionary force. Some biologists will get ecstatic about hormones getting a mention. Others of a more clinical bent will be pleased at the disease that plagues us, the pathology, the medical problem, and possibly the therapy. The theologians will be pleased to hear about the spiritual force, the beast within, a possession, maybe even an expression of love. The psychologists will be relieved not to be left out in identity and script. The sexologists can find that machine that pumps, an act, maybe even unnatural ones. The social constructionists will be delighted to enjoin the hunt, the play, transgression, and a game. Postmodernists will be beatified by experience, possession, violence, and war. Cultural studies will wallow in romance, lust, and filth; while pornologists will be grateful for the body and its performance as commodity!

Well, is that all Plummer is saying: that our disciplinary differences are a menu of choices, merely perspectives or different ways of seeing? I suspect not. Embedded in this litany are subtle hints at the power of such definitions and descriptions. There are hegemonies here that assign legitimacy to this confounding and contradictory list in uneven ways. This is the power that Foucault (1978) ascribed to sexuality as he understood it- a knowledge system that is exercised through a tremendous meeting of the body and the social. As scientists, we are implicated directly in the enterprise of that knowledge system, its unfolding execution and the exercise of its power. In our daily contribution to power, knowing how we privilege certain scientific hegemonies must become a critical part of our scientific practice.

The South African example offers a classic illustration of medical science at its worst, not only because of the now obvious futility of the exercise to end homosexual interests and the cruelty of its

execution, but also because of its blind belief in the body as merely a knowable aggregation of bits and pieces, cells, processes, chemicals and energy—at once a given yet eminently mutable, but always reified. The assumption that surgical intervention or even a pill—i.e., a technological fix—is a solution to sexual interests and desires reveals a woeful denial not only of the body but also of the mind, which can only play in this game while watching from the sidelines. The social—for the sake of argument understood as culture, practice, and history—is not even in the arena.

The development of technological interventions into sexuality is not new. Think of the chastity belt or the incarceration of hysterical women in Bedlam. Think of those notorious devices used to keep young boys' hands from masturbating-considered then by science as a dangerous practice-or the chemicals given homosexual men up to the 1980s and still to those regarded as sex criminals by this moment in history. Is social science any different or freer in investigating sexuality? Researchers, currently beginning a trial of male circumcision in East Africa to assist in preventing male-to-female HIV transmission, argue that this is merely a technical procedure, and "acceptability" is the only scientific concern. Will they never learn? Such a study is a major cultural intervention into the making of sexual meanings, body image, and masculinity. It may also undermine efforts to increase condom use among men who believe their circumcised penises provide protection from HIV infection and other STIs.

Apart from the known effects of circumcision on sexual pleasure for men and women, the intervention exemplifies the ignorance of these scientists in assuming that a technological fix is a universal scientific truth to be implemented anywhere without regard for the culturally specific social consequences. This intervention may have widespread cultural implications in a region where ritual circumcision is reviving as part of new nationalistic movements. Acceptability barely gestures toward this complexity. This so-called scientific intervention is nothing more than a willful and arrogant cultural imposition. Surely, we can do better in HIV prevention science than chopping off bits of bodies. And why stop at the tip? Removing a few more inches will solve many other problems: HPV infection and its implication in cervical cancer, other STIs, most forms of rape, and the dominance of vaginal intercourse in sex!

Irrespective of the acceptability of circumcision among some religious and cultural groups (which itself should be problematized by sexuality research), there is a growing movement within men's health to configure the "cut" as male genital mutilation, invoking thereby representations of the worldwide concern about female genital cutting. Surprisingly, there has been little outcry on this. It has been argued that circumcision is merely a technological intervention, making safe procedures that are still performed locally in unhygienic circumstances, and assisting in preventing HIV infections of some women to boot. I suspect that any such trial of a technological intervention to make safer the increasingly common virginity testing in young women in the same region (also done as a misguided HIV/AIDS prevention intervention) would be met with far more outrage precisely because of the shift in meanings in, and effects on, virginity that would accompany such attention. This should be true of such attempts to revive male circumcision also.

Similarly, the invention of sex re-assignment technologies allowed the creation of a new gender category, just as surgery to those born intersexed sought to provide certainty to a world nervous about difference. These interventions are characterized as corrections, but they are actually creations, both of technology and in discourse. The technological solution must always remain deeply social in its conception, not just in its consequences. The rise in anti-surgery politics among transgendered and intersexed persons represents not just a consumer backlash, but an engagement with power.

Note: I am not mounting an argument against sex surgery, gender re-assignment, or any other particular technology as such. I am arguing that we cannot disconnect these technological interventions from their social embeddedness—it is the attempt to disconnect science from history that I cannot support. In other words, all technological interventions are historically situated, social distillations. These technologies of sex are no different in some ways from the manufacture of the Olympians I referred to earlier, or the changes wrought by *Star Trek* and the Internet. These technologies do not amend desire. They play with

desire for various and powerful purposes. Maybe I should say that they create desire in different ways. Maybe desire invokes them?

Re-forming Research

How do we proceed from this discussion of culture, technology, power, bodies, and research? Clearly, the research agenda on sexuality must recognize that the traditional approaches of reified behavioral research are only marginally useful for grappling with contemporary problems in human sexuality. The methodological limitations of behavioral research have been obvious for some Standardized inventories of sex practices are by their very nature poor representations of human sexual experience, and they reveal more about the researcher than they assist the respondent in offering a sensible account of his or her sex life. Why do we always start our inventories with kissing, move through oral sex to intercourse, on to slightly marginal sex practices and end with fist fucking? In some casual encounters between gay men, in certain settings and depending on the circumstances, inserting a finger into another man's rectum might be the introductory maneuver! One can do different sexual things more readily in a bed than standing behind a tree. The frisson of sex may not be related to practices themselves, but to possibilities of surrender, observation, fetishism (a much under-researched area in these days of sexualized fashion), risk, changing meanings, settings, and drugtaking, to name a few influences. Asking respondents if they have had intercourse in the last week is a "meaning"-less question: it assumes that a practice is engaged in for itself without meaning, context, and fresh intent. This reliance on monitoring behaviors in social and epidemiological research is one reason why we are still unable to understand risk taking in sex. A report of unprotected sex reveals only "if" not "why." In cultural terms, such behaviors may not even be risky; indeed, in some cultures certain behaviors may not even be seen as sex. Need I mention the now-famous example of former U.S. President Clinton's understanding of fellatio?

These complexities are some of the reasons why developing a research response to sexual issues such as HIV/AIDS should start with investigations of the sexual cultures of those at risk. How can we stop increased STI transmission among cybersluts without good basic research on the new sexual subcultures that are emerging faster than our hard drives become superceded? What is driving this baffling and potentially heartbreaking rise in unprotected anal intercourse among gay men? If young people are developing new sexual cultures faster that the old ones are disappearing in their rapidly developing countries, how can we help them develop full and satisfying, disease-free sexual lives? How do we intervene in the sexual economy of the Kothis and Panthis, for example, without understanding the longstanding cultural traditions of a society for which male-to-male sex takes forms guite different from those in the West?

In formulating the appropriate research questions we can utilize the significant theoretical gains made in sexuality theory over the past thirty years. Second-wave feminism, gay, lesbian and queer theory, postmodern human geography, critical masculinity studies, poststructuralism, and advances in social science and cultural studies provide us with a large theoretical toolbox. The most important contribution is shifting the focus from the individual (who dominates behavioral research) to the social (which does not deny the individual person, but contextualizes him or her). This means looking at sexuality as the collective achievement of processes and practices that shape what we think, where we touch, how we understand, what we experience, what we refuse, whom we invite, where we seek, what we explore, and what we provide ourselves and others in terms of pleasure, meaning and pain, and in the never ending search for closure to the unknown in sex. Individual volition is less important than collective possibility in producing these sexual activities and interests.

In *Practicing Desire* (Dowsett, 1996), I argued that we need to consider sex as experiences in which bodies engage the social, and, particularly in sex, bodies can actively teach in "discursive silence." I argued that bodies-in-sex can confound discourse, and any analysis of sexual subjectivity that positions bodies as "done to" rather than "doing" privileges one view of the social, and thereby fails to understand sexuality's endless improvisation with the materials at hand.

Similarly, any view of sexuality that sees this engagement as merely the enactment of behaviors fails to register the creativity of that moment and the forces that constitute it. Just as one cannot imagine sadomasochism without the whip, one cannot separate the first bite of the whip on flesh from its unexpected, if anticipated, pleasure.

Yet, somehow, beyond the sex practices themselves, much of our research actually limits the social to the relational-whom you have sex withignoring both the body and the material world, which dramatically engage desire in practice within social forces now almost too large to conceptualize in our scientific endeavors. We need to conceive of sexuality as something we constantly and materially invent, mixing ingredients to an ever-new, never-repeatable recipe. This is not simply a re-statement of the argument for a social constructionist position that seeks to re-marry the social to the biological. They have never been separable. We cannot walk without putting our feet on the ground-we need feet and ground. The real issue is that the constructionist position to date has not been social enough!

Social construction theory has left us with the "individual" who is written on by the social. At best, that debate drove the social into the body, ensuring that the biological shrank to next-to-nothing as the embodied human being grew in its place. It left us unable to conceptualize the biological as other than remnant, unapproachable and immutable—the body remained inert. But, more importantly, when we then rendered the embodied human being as agentive, we failed to theorize the engagement with the social by maintaining the distance between the individual and the collective. Sexuality became individually learned. It may be more useful to position sexuality as a form of materiality whose origins lie not in hormones, cells, ideas, discourse, experiences, objects, or occasions, but in the endless and collective explosion of the possible.

The implication of any real engagement with new sexuality theory is a commitment to new kinds of research. It may suffice to call it basic research here, but the distinction between basic and applied in social research is somewhat specious. I would argue that it is precisely because social/behavioral research on sex has neglected to engage new sexuality theory that we are in

such confusion. If we were to embrace, for example, the idea that culture shapes practice and, consequently, risk-taking, we might seek to investigate the activities, meanings, sites, and circumstances that create sexual interest for a particular population. Sexuality would be conceived of as rapidly shifting sand rather than slow-moving glacier. This would most likely lead to qualitative methodologies, and we now have many tested and reliable methods available in qualitative research. It also might lead to new uses of quantitative methodologies, which would rely less on inventories of individual practice and more on description and determination of collective activities.

The fact of the matter is that sexuality is changing so fast that those of us interested in it and in sex research are being left behind by the very populations we investigate. Sexual cultures are changing rapidly in developing countries in uneven and unpredictable ways, and HIV/AIDS is both a product of, and a catalyst for, those changes. In the West, gay men and many urban young people in particular are developing sexual worlds that our old conceptual frameworks can no longer adequately encode. Their new sexual worlds are being commodified by industry and commerce, and transformed by technologies with barely a glance back to heteronormativity. I suspect that we researchers need theoretically and methodologically to don something akin to Ian Thorpe's slick new swimming suits if we are to catch up!

If you do not believe me, let me tell you about a giant Tommy Hilfiger billboard I saw in Times Square in New York City in November 2000, also featured in a double-page advertisement in the front matters of the November 2000 issue (U.S. edition) of *Men's Health* in itself an interesting moment. It featured a very fetching young man clad only in a pair of Tommy Yfronts, legs apart, semi-prone in the back seat of a red convertible looking invitingly and directly into the camera, which was positioned at standing height between the car's open front door and the entrance to the back seat. This near-naked body has spent a good deal of time in a gym (yes, this is not a natural body) and the technology of the Y-fronts (yes, it is a technology when you think about it), eroticized by the lack of other clothing, is amplified by the glimpse of the automobile (the ultimate American sex technology).

There is nothing natural about the billboard or the double-page spread either: the technologies behind their production are central to the existence of this exercise in desire. And size really does count in Times Square!

On whom is this young man waiting? You? Me? Admittedly, he is lying in the right-hand side of the rear car seat looking out toward the offside of the car. Could we read the viewer as a young woman about to join her young man in the back? Then, wouldn't he be lying on the left-hand side looking out toward the offside of this American car? Surely, no one assumes only young men drive nowadays? To this Australian gay man, though, he is there for me, because, like one third of the world, we drive on the left. It doesn't really matter. In fact, the ad is designed with deliberate ambiguity in mind. All that matters is that the viewer's desire is brought online. We want him. But we will probably settle for a pair of Tommy's Y-fronts at the next department store sale. •

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