



Project
MUSE[®]

Scholarly journals online

THE EVOLUTION OF A SOCIAL CONSTRUCTION

the case of male homosexuality

PIETER R. ADRIAENS* AND ANDREAS DE BLOCK*†

ABSTRACT Male homosexuality has been viewed by evolutionary psychologists as a Darwinian paradox, and by other social scientists as a social construction. We argue that it is better understood as an evolutionary social construction. Male homosexuality as we now know it is an 18th-century invention, but nonexclusive same-sex sexual behavior has a long evolutionary history. According to the alliance-formation hypothesis, same-sex sexuality evolved by natural selection because it created or strengthened male-male alliances and allowed low-status males to reposition themselves in the group hierarchy and thereby increase their reproductive success. This hypothesis makes sense of some odd findings about male homosexuality and helps to explain the rise in exclusive male homosexuality in the 18th century. The sociohistorical conditions around 1700 may have resulted in an increase in same-sex sexual behavior. Cultural responses to same-sex sexuality led to the spread of exclusive homosexual behavior and to the creation of a homosexual identity. Understanding male homosexuality as an evolutionary social construction can help us move beyond the traditionally polarized debate between evolutionary psychologists and social constructionists.

*Institute of Philosophy, University of Leuven, Belgium.

†Faculty of Philosophy, Radboud University, Nijmegen, The Netherlands.

Correspondence: Pieter R. Adriaens, Institute of Philosophy, University of Leuven, Kardinaal Mercierplein 2, B-3000 Leuven, Belgium.

E-mail: Pieter.Adriaens@hiw.kuleuven.be.

The authors thank Siegfried Dewitte, David Sloan Wilson, and an anonymous referee for their helpful and inspiring comments. This work was supported by the Research Foundation-Flanders (FWO-Vlaanderen; P.A.) and the Dutch Organisation for Scientific Research (NWO; A. De B.)

Perspectives in Biology and Medicine, volume 49, number 4 (autumn 2006):570–85

© 2006 by The Johns Hopkins University Press

MANY SOCIAL SCIENTISTS BELIEVE that homosexuality is a social construction. They contend that homosexuality is not a biological given (a “natural kind”) but rather the contingent product of social and psychological interactions—a product that may have been designed to fulfill certain ideological needs. Most evolutionary psychologists, on the other hand, hold that homosexuality is a naturally selected adaptation, or at least a trade-off for such an adaptation. These views seem to be diametrically opposed.

Of course, the dispute between social constructivism and evolutionary psychology is not limited to the issue of homosexuality. Social constructivists have criticized evolutionary psychology on many other grounds as well. Conversely, evolutionary biologists and evolutionary psychologists have been less than sympathetic to social constructivism, which they generally regard as a fickle ideology lacking scientific standards and, worse, priding itself in its almost nonsensical vocabulary (Kruger 2002). As Richard Dawkins (1995) quipped: “Show me a cultural relativist at thirty thousand feet and I’ll show you a hypocrite” (pp. 31–32).

Only a small minority of scientists and philosophers seems to realize that such a polarization is not inevitable. David Sloan Wilson (2005) has argued in favor of an “evolutionary social constructivism,” claiming that the universality of human nature and the contingency of human culture need not be in conflict. According to Wilson, the potential for change—behavioral plasticity—is an essential part of our nature. Such exercises in bridge building are surely praiseworthy. Still, the value of evolutionary social constructivism depends on the extent to which it can fruitfully be applied to concrete phenomena, that is, on its ability to provide better explanations of specific phenomena than either traditional evolutionary or social constructivist approaches. Short of that, evolutionary social constructivism will amount to no more than a not-so-fancy name for the old multifactor model of human behavior (nature/genes *and* nurture/culture, instead of nature/genes versus nurture/culture). In order for evolutionary social constructivism to be viewed as a viable alternative to existing theories, it must show why and how human nature and human discourses interact the way they do.

Human male homosexuality is an ideal test case for evolutionary social constructivism. Both sides have produced an equally vast amount of literature about it. The founding father of evolutionary psychology, E. O. Wilson (1975), devoted several pages of *Sociobiology: The New Synthesis* to homosexual behavior in humans. Ever since the publication of *Sociobiology*, it is nearly impossible to find a book on evolutionary psychology or behavioral ecology in which the author does not feel obliged at least to touch upon the theme of homosexuality. On the other hand, Michel Foucault (1978), generally regarded as the founder of social constructivism, has argued repeatedly for the profoundly constructivist origin of male homosexuality. The idea that there might be some truth in both options, evolutionary theory and social constructivism, is rarely entertained (Shakespeare and Erickson 2001). We believe, however, that both evolutionary theory *and*

social constructivism have provided valuable insights into homosexuality, and that evolutionary social constructivism provides a framework for integrating them. This paper attempts just such an integration.

We begin by explaining why evolutionary psychologists see homosexuality as a Darwinian paradox (or puzzle) and looking at how they have tried to solve this paradox. We then adopt a constructivist stance and argue that this so-called paradox is really not a paradox at all, because homosexuality *as we now know it* is not a natural kind but a social construction. Indeed, ethology and human history suggest that we should distinguish between *same-sex sexual behavior*, which has been displayed by numerous species throughout evolutionary history, and *homosexuality*, which refers to a relatively new, heterogeneous, and uniquely human complex of desires, behaviors, and identities. We discuss one particular Darwinian hypothesis, the alliance-formation hypothesis, that is able to reckon with this important distinction, and show how this hypothesis makes sense of some curious findings about both types of same-sex sexuality. Finally, we argue that the alliance-formation hypothesis can explain how a socially constructed homosexuality is embedded in our evolved nature.

INTRODUCING THE PARADOX

Homosexuality is usually considered to be a Darwinian paradox or an evolutionary puzzle, since if there were such thing as a “gay gene,” evolutionary theory predicts its removal from a species’ gene pool (Berman 2003; Camperio-Ciani, Corna, and Claudio 2004). After all, is it not obvious that the reproductive success of homosexuals is much lower than the reproductive success of heterosexuals? The question, in short, is how can a gay gene spread through a population if its carriers do not reproduce? Neo-Darwinism has, over time, constructed a number of models to account for this apparent paradox.

Most of the proposed solutions to this puzzle are based on inclusive fitness, or kin selection. Some authors, such as E. O. Wilson, have argued that homosexual behavior directly promotes the reproductive success of relatives: some men may “choose” to protect their close relatives, because these relatives share a significant number of genes with them. Inclusive fitness would thus enable the gay gene to proliferate through collateral lines of descent, even if its bearers did not reproduce at all. In this model, homosexuals would be “helpers at the nest.”

The main challenge of the kin-selection hypothesis is to explain why an individual’s homosexuality would contribute to his relatives’ fitness. Theoretically, this is far from evident. As Trivers (1985) has noted, one should expect the helpers at the nest to be asexual—like the workers in eusocial species, such as ants and naked mole rats—rather than homosexual. Second, data on the actual behavior of contemporary male homosexuals indicate that they are not as prone to protect their close genetic cohort as Wilson suggests—at least they are no more likely than heterosexual men to channel resources toward family members

(Bobrow and Bailey 2001). It may be premature to extrapolate this conclusion to homosexuals generally, or to assume that late 20th-century homosexuals are representative of men who have engaged in same-sex sexual behavior throughout history. However, premodern “homosexuals” probably did not spend their time assisting close kin either. Apart from some Siberian transvestite shaman-healers and perhaps a few other groups, there is no evidence that those preferring same-sex sexual activities have ever really enhanced their families’ reproductive fitness in a direct way (gifts, assistance, etc.; Murray 2000). Indeed, as we will argue below, most of them simply had their hands full with raising their own children. Wilson’s (1978) proposal, that the close relatives of homosexuals “would have more viable offspring as a result of their presence” (p. 144), is untenable.

Another hypothesis is that homosexuality has been preserved by natural selection as a trade-off for another, adaptive trait, one that is somehow biologically connected to the supposed gay gene. What trait? Well, Italian researchers have recently reported that “female maternal relatives of homosexuals have higher fecundity than female maternal relatives of heterosexuals” (Camperio-Ciani, Corna, and Claudio 2004, p. 2217). These researchers also found that there are more homosexuals among a homosexual’s male maternal relatives than there are among a homosexual’s male paternal relatives (while there are no differences among the relatives of heterosexuals). They speculate that homosexuality is a trade-off for the enhanced fecundity of female maternal relatives of homosexuals. This hypothesis would account for the persistence of homosexuality and would support the conviction of several geneticists that homosexuality is inherited matrilineally.

The finding about the enhanced fecundity of females in the maternal lines of homosexuals has not been confirmed, and the authors indicate that, if true, it would only account for a limited percentage of the genetic variance in male sexual orientation. Theoretically, though, the trade-off explanation of male homosexuality would still be attractive, provided we think of homosexuality as an evolutionary paradox. But is it, really?

WHAT PARADOX?

Nearly all evolutionary accounts of (human) homosexuality assume that homosexuals do not reproduce, or at least that they do so considerably less than heterosexuals. Despite their own frequent exhortations that one should not consider the behavioral patterns of current homosexuals to be the only possible kind of same-sex sexuality, few, if any, evolutionary theorists have actually reviewed the history of homosexuality. Instead, they have assumed that data about the reproduction of contemporary North American and European homosexuals are representative of the entire evolutionary history of homosexuality (Bell and Weinberg 1978; Hamer and Copeland 1994; Miller 2000). It may be true that *contemporary* homosexuals have only one fifth (up to one tenth) as many children

as contemporary heterosexuals, but there is no compelling reason to think that his has always been the case. One of the more surprising findings of recent historical and anthropological research on homosexuality is that most men who engaged in same-sex sexual practices were simultaneously married. Thus they had sexual relationships with men (mostly boys or adolescents) and with women (Berman 2003; Dewar 2003; Friedman and Downey 1994; Murray 2000).

As strange as the idea of a homosexual marrying a woman may seem to some of us today, such marriages not only occurred frequently in many ancient societies, they continue to occur in many contemporary ones, including the United States (Bagley and Tremblay 1998). Two examples illustrate this point. In Japan today, marriageable women often read gay magazines because they contain personal ads from homosexuals whose families and employers are urging them to marry and beget children: "So long as those obligations [marriage and parenthood] are met, one's sexual activity is not anyone else's legitimate concern" (Murray 2000, p. 398). And in ancient Greece, Spartan boys (*eromenoi*) were drilled under the eagle's eye of their older lovers, the *erastai*, so as to become good warriors. Spartan soldiers are said to have sacrificed to Eros before entering the battlefield, in the belief that their fate was closely tied to the intimate relationship they had with their fellow warriors (Murray 2000, p. 40). Most of the boys married, however, which amounted to having intercourse with their wives at least once a month. The remaining nights they spent with their *erastes* (who often acted as the newlyweds' Maecenas for some time after the marriage) or with their own *eromenos*. Indeed, only the *eromenoi* who married and raised children were allowed to become *erastai* themselves: "Exclusive pederasty was negatively sanctioned, but pederasty was expected" (Murray 2000, p. 40).

In short, an abundance of historical and anthropological evidence suggests that male same-sex sexuality frequently involved, and still involves, married men. For the majority of men engaging in same-sex sexual activities, such activities have always been complementary to, and not a replacement of, marital sexuality. Only recently has homosexuality been redefined as *exclusive* sexual activity with others of the same sex, which necessarily forecloses the biological possibility of having children. Today, (some) male homosexuals have sex only with men, and never with women, but such exclusivity is by no means representative of the history of same-sex sexuality.

Homosexuality as we now know it is definitely a social construction. In Western Europe, the era of exclusive same-sex sexuality probably began in the early 18th century. Trumbach (1998), for example, has argued that before about 1700, many English men maintained sexual relationships with women as well as with younger boys: "homosexual activity occurred between most men and boys. . . . Sodomy was therefore so widespread as to be universal. But it was always structured by age" (p. 5). While the religious authorities disapproved of this custom, public opinion saw nothing wrong with it, provided the older lover played the active part. But around 1700, a major shift in sexual morays started to set in:

older men, who were called (and called themselves) *mollies* or *sodomites*, shifted roles and began playing the passive part that had, traditionally, been reserved for the adolescent (Crompton 2003; Murray 2000; Trumbach 1998). Moreover, some mollies and sodomites now desired *only* men: they neither married nor raised children. Such exclusive sexual preference, however, is just one of the characteristics of this “wholly new” kind of same-sex sexuality. Modern homosexual partners also lack significant status differences, and they identify themselves with a gender that combines characteristics of both femininity and masculinity. These three characteristics, exclusivity, equality, and self-identification—and certainly their combination—are quite new in the history of human same-sex sexuality.

Foucault (1978) has tried to explain the genesis of this exclusive kind of same-sex sexuality. According to him, historical changes in 18th-century politics, science, and philosophy led to the construction of a homosexual identity. Around 1700, authorities came to see the control of sexuality as an instrument with which to reach their goals of economic efficiency and political conservatism. The sciences developed “discourses” to control sexuality, and these in turn gave rise to the medicalization of sexuality in general and of homosexuality in particular. Sodomy was well known, but it had, until then, been a purely legal issue, much like adultery. From the 18th century on, homosexuality became not only illegal, but also “unnatural”: it became an illness. And that is just the beginning. Prior to this medicalization, homosexuality was not a matter of identity but a matter of preference. These preferences could change during an individual’s life, and they usually did not lead to exclusivity. The medicalization of same-sex sexual behavior changed all this. It transformed sexual preferences into decisive determinants of people’s identities. “I am a homosexual” suddenly became an acceptable answer to the question “What are you?” While the sodomite prior to 1700 had been at most an outlaw, from 1700 on the homosexual became a member of a kind, or even a species. People might change what they like, but it is much more difficult to change what they are.

The authorities invented “the homosexual” with the help of such seemingly objective sciences as sexology and psychiatry. This invention was also a creation. Once the homosexual identity had been constructed, most people tailored their behavior to one of the two “basic” categories, homosexual or heterosexual: they became exclusive homosexuals or exclusive heterosexuals. In other words, while these sciences pretended to explain a reality, they actually changed that reality: scientists shaped stories, and these stories shaped people. Talking about refugee women in Canada, for example, Hacking (1999) says that “in consequence of being so classified, individual women and their experiences of themselves are changed by being so classified” (p. 11). Exactly the same might be said about male homosexuals, whether in the 18th century or in contemporary societies. Hacking would say that both “refugee women” and “homosexuality” are interactive kinds, as opposed to natural kinds.

Foucault’s historical nominalism with regard to homosexuality is as baffling as

it is convincing (Llora 1989), but it harbors enormous critical potential for scientific approaches to sexuality, as it sheds a whole new light on biological theories of homosexuality. Whereas most evolutionary psychologists consider homosexuality to have some kind of natural essence, Foucault suggests it is actually an 18th-century social construction. Some radical social constructivists have even gone one step further and proclaimed that Foucault's account must jeopardize any so-called naturalistic account of homosexuality, but this radical conviction is rooted in the assumption that every scientific explanation is profoundly essentialist (Visker 1995), an assumption—as we will show—that is untenable. Homosexuality may be a relatively recent social construction, and thus an evolutionary oddity, but same-sex sexual behavior has been going on for millions of years, a fact suggested by the abundant evidence of instances of this behavior in the animal world.

UNNATURAL IDENTITIES AND NATURAL BEHAVIOR

Historical studies of human homosexuality often ignore the existence of same-sex sexuality in animals, even though animal and human sexual behavior share many common features. For one thing, despite a few exceptions, exclusive same-sex sexual behavior is perhaps as rare in the animal kingdom as it has been in the history of the human species. Approximately 6–10% of range-bred ram populations prefer to court and mate only with males, even if they have access to females (Roselli, Resko, and Stormshak 2002). Likewise, captive male chinstrap penguins have been reported to mate for life and to raise offspring if provided with a fertile egg. The behavioral repertoire of many animals contains same-sex as well as other-sex sexual activities, although the importance of same-sex sexual behavior is variable: in bonobos, same-sex sexual activity is almost as common as heterosexual activity, whereas leaf monkeys engage only very occasionally in same-sex sexual practices (Bagemihl 1999).

This sort of data, added to the realization that homosexuality as we now know it is a recent phenomenon, has led some researchers to the conclusion that evolutionary psychologists should focus on same-sex sexual *behavior* rather than on homosexuality and the homosexual *identity* (Kirkpatrick 2000; Muscarella 1999, 2000). They argue that same-sex sexual behavior in humans may have (or have had) the same function(s) as it has in other primates. Muscarella (1999, 2000) and Roes (1993), for example, argue that same-sex sexual behavior is an adaptation that has been preserved in the gene pool because it promotes reciprocal altruism. Same-sex alliances between marginalized males have been shown to have reproductive advantages in other animals, including primates, and there is no reason to believe that it would have been any different in our species—at least not in the so-called environment of evolutionary adaptedness. This hypothesis—the alliance-formation hypothesis—is in fact an old idea that dates back to the

beginning of the 20th century and is the basis of Freud's phylogenetic theory of homosexuality (De Block and Adriaens 2004; Freud 1987).

Now the question is this: how may same-sex sexual activities enhance the reproductive success of those who practice them? In polygynous species, the male sex has higher variance in reproductive success. While most females reproduce regardless of their status (and access to resources), males' reproductive success depends heavily on their position in the hierarchy. Males with high status mate with more females and have more viable offspring than do those lower in the hierarchy. Lower-status males usually do not compete directly with dominant males, because such direct competition can be very dangerous. To enhance their chances for reproduction and reduce the risks of intrasexual competition, they look for less confronting strategies. One such strategy is the formation of alliances with other males who face the same adaptive problem. Forming alliances can help lower-status males gain access to resources that were previously inaccessible to them. Moreover, allied males will assist each other in the competition with other, more dominant males. Of course, it is not only marginal(ized) males that use same-sex sexuality to establish or cement relationships. Higher-ranking males, who still want to move up or simply consolidate their position in the hierarchy, may also adopt this strategy.

Sex definitely plays a role in the formation of these alliances. Primates like bonobos and orangutans employ a variety of same-sex sexual activities to relax and to enjoy themselves, but also to establish friendships and to cement alliances (de Waal 1997; Dewar 2003; Fox 2001; Muscarella 2000). This does not mean that allying males *must* engage in same-sex sexual behavior. Certainly in humans, there are nonsexual bonding mechanisms, such as language, for instance (Muscarella 2000). Still, sexuality might be well suited to perform this function because it is a valid test of commitment. Because primates and their reproductive organs are especially vulnerable during sexual activities, the willingness to engage in those activities is an honest signal of trust and trustworthiness (Zahavi 1975). Words come a dime a dozen, while sex shows that one is genuinely interested in caring for one's partner: "Homosexual acts become powerful symbols of loyalty and affiliation" (Kirkpatrick 2000, p. 396).

While homosexuality as we now know it may be a recent social construction, the long evolutionary history of same-sex sexual behavior suggests that it is indeed part of our biological make-up. The question remains, however, as to why people want (or sometimes even prefer) to have sex with members of their own sex, even when access to members of the other sex is not a problem. According to the alliance-formation hypothesis, same-sex sexuality is a powerful means to establish and maintain alliances. Obviously, the validity of the alliance-formation hypothesis is at least partially dependent on its capacity to integrate our present knowledge of male same-sex sexuality into a coherent evolutionary framework. So, what do we know about it?

We know, first of all, that, cross-culturally, bisexuality is far more common

than exclusive same-sex sexuality, an observation that fits well with the alliance-formation hypothesis (Kirkpatrick 2000). In 1948, Alfred Kinsey and his colleagues found that nearly half of their male interviewees were neither exclusively homosexual nor exclusively heterosexual, whereas only 4% of them were exclusive homosexuals (Kinsey, Pomeroy, and Martin 1948). Although recent studies have not substantiated that figure, they nevertheless indicate that at least 20% of male Americans have had, at some time since the age of 15, some same-sex sexual contact, or at least some same-sex sexual desire (Bagley and Tremblay 1998). Bagley and Tremblay also note that “recent demographic studies have been significantly underestimating the proportion of homosexual, and especially bisexual males, in North America” (p. 13). Long neglected by sexology, bisexuality is now slowly “coming out of the closet,” a fact shown by the host of recent books, journals, support groups, and television shows devoted to it.

Secondly, the alliance-formation hypothesis predicts that same-sex sexuality is not necessarily a fixed trait: when placed in the “right” conditions, a relatively large proportion of the human male population will exhibit same-sex sexual behavior. Indeed, bisexuals often “change the heterosexual and homosexual mix in their sexuality during their lives” (Weinberg, Williams, and Pryor 1994, p. 4). More specifically, the alliance-formation hypothesis predicts that same-sex sexuality will be especially common in environmental conditions where same-sex alliances are vital. Not surprisingly, the Greek type of pederasty flourished mostly in wartime conditions. In Plato’s *Symposium*, for instance, Apollodorus says that “a state or an army should be made up of lovers and their loves”—a notion that probably inspired the formation of the legendary Sacred Band of Thebes (Crompton 2003). A similar kind of wartime homosexual camaraderie also characterized Japanese Samurai culture. Originally, the Samurai formed a separate caste of warriors, and every warrior, although married and raising children, was supposed to initiate a young boy, a page, into the manly virtues of the Samurai—virtues such as loyalty, determination, and honor. A Samurai also provided his page with emotional and, if needed, financial support. Schalow notes: “As in marriage, sex was only one element of the man-boy relationship” (quoted in Murray 2000, p. 80). Although sex was but “one element,” it was one with a huge impact: Samurai warriors, like their counterparts in Sparta and Thebes, preferred the company of their sex-partners while fighting their enemies. For them, only a sexual bond between soldiers could vouch for the extreme loyalty needed in battle. Other examples of “wartime homosexuality” can be found among the Mamluks in medieval Egypt and among 19th-century Tibetan warrior-priests (Murray 2000).

The alliance-formation hypothesis can account for yet another surprising, though highly controversial, finding about same-sex sexuality, namely, its relation to birth order. According to Blanchard (1997), the number of older brothers seems to be a good predictor of future homosexual orientation in human males: “male homosexuality was positively correlated with the proband’s number of

older brothers, but not with older sisters, younger brothers, younger sisters, or parental age at the time of the proband's birth" (p. 30). However, Blanchard would be the first to admit that his observations, even if true, would only account for a minor part (probably not more than 10%) of the variance in male sexual orientation. Homosexuality as we now know it is indeed too heterogeneous a phenomenon to be captured in a simple etiological scheme.

Blanchard has speculated that some instances of male homosexuality may be due to a maternal immune reaction against a male antigen during the early months of pregnancy, which disrupts sexual differentiation in the fetal brain and causes later-born sons to have a slightly more "feminine" brain—and therefore be more likely to be attracted to other males—than their older brothers. In Blanchard's view, therefore, some cases of homosexuality may be seen as a trade-off for the mother's adaptive immunity.

Blanchard assumes that homosexuality is disadvantageous, but that its costs are compensated for by the benefits of adaptive immunity. We think, however, that homosexuality may not be a disadvantage for later-born boys, especially not in a family where all possible strategies to obtain parental resources have already been employed by their older brothers. Sulloway (1998) claims that later-borns do not identify with their parents as much as firstborns: they tend to be less self-confident, less responsible, and less achievement-oriented than their older brothers. But later-borns are also more inclined toward sociability. The hypothesis that later-borns are more socially successful and cooperative (according to Sulloway), while at the same time more likely to become homosexual (according to Blanchard), fits nicely with the alliance-formation hypothesis. Engaging in same-sex sexual behavior is indeed one way to establish and maintain alliances with other males, especially unrelated males. Same-sex sexual behavior may not be the trade-off that Blanchard proposes, but may rather be an adaptive response of later-born males who do not have the resources of their older brothers.

Finally, the alliance-formation hypothesis predicts that same-sex sexuality will occur more frequently between males with a relatively low social status, such as, for example, youngsters (Muscarella 2000). Same-sex sexuality may be a way of forming strong bonds between *unrelated* adolescents (Roes 1993). These adolescents can help each other and thus end up better off, with an improved social position in the male hierarchy. Moreover, if their sexual orientation is not a fixed trait, one can expect a decrease in homosexual behavior (and an increase in heterosexual behavior) once they reach an improved position. The problem with testing these predictions is that "a disproportionate minority of [contemporary] homosexual adolescents and young men may not be located through conventional sampling techniques, because they lead unstable lives on the street, or elsewhere" (Bagley and Tremblay 1998, p. 3). An additional and more general problem is that is difficult to know to what extent the results of studies (and certainly historical studies) about the psychology and behavior of "homosexuals" reflect their actual conduct.

**THE EVOLUTIONARY ORIGINS OF
EXCLUSIVE HOMOSEXUALITY**

Proponents of the alliance-formation hypothesis, such as Frank Muscarella and Craig Kirkpatrick, emphasize that Darwinian explanations will never be able to provide a fully satisfying account of human sexuality: one must always acknowledge the strong influence of social and historical factors on complex phenomena such as homosexuality. Thus they argue that evolutionary psychologists should explain same-sex sexual behavior, rather than exclusive homosexuality—thereby suggesting, much like Foucault and other social constructivists, that there is nothing “natural” about exclusive homosexuality.

We accept the heterogeneity of homosexuality and believe that the construction of a homosexual identity, along with its effects on same-sex sexual behavior and psychology, was definitely a sociocultural phenomenon. Unlike Muscarella and Kirkpatrick, however, we would argue that the dichotomy between evolutionary and social-constructivist explanations of same-sex sexuality is unnecessary. As we have discussed above, both explanations have their own legitimacy. More importantly, we believe that evolutionary explanations can add something to our understanding of the social and historical determinants of homosexual behavior.

How so? A particular moment in history, presumably around 1700, witnessed the appearance of a new sexual identity that completely reorganized the existing gender system: “Men no longer had sex with boys and women—they now had sex either with females or with males. They were now supposed to be either exclusively homosexual or heterosexual” (Trumbach 1998, p. 9). From an evolutionary point of view, this kind of same-sex sexuality—homosexuality—was a cultural novelty, triggered by very specific sociohistorical factors. Yet one could argue that the conditions created by these factors were not substantively different from the conditions that once led to the evolution of same-sex sexual behavior—conditions the alliance-formation hypothesis accounts for quite well. In the last section we want to review some peculiar findings about the rise of homosexuality, look at how Foucault and other social constructivists explained these findings, and consider how they might be understood in light of the alliance-formation hypothesis.

Homosexual Identity

The first thing that has to be explained is the 18th-century transition from a longstanding behavioral pattern—occasional same-sex sexual behavior—to a radically new invention, the homosexual identity. Whence this new identity? Foucault attributes the creation of the so-called “third gender” to the rise of new sciences such as psychiatry and sexology. To establish their own power and authority, psychiatrists, doctors, and sexologists joined in the social establishment’s wish to control sexuality and to turn it into something economically useful and politically conservative.

While Foucault is right in saying that these forces played a key role in the creation of the homosexual identity, other factors may also have been important. The 18th century heralded the industrial revolution, stimulating the expansion of big cities, where it became increasingly more difficult to maintain family alliances. The collapse of the traditional family was indeed one of the preconditions for the development and dissemination of a new, modern kind of homosexuality. Murray (2000) writes that it is “the availability of social insurance other than family support and of sufficient housing stock (at least some of which families do not control) that make possible the formation of a critical mass of those desiring and/or having same-sex relationships” (p. 421). As well, the increasing population density defined sharper hierarchies. These changes necessitated the formation of alliances with non-kin and may have triggered adaptive strategies such as same-sex sexual behavior. The lack of social coherence may have intensified this form of sexual behavior, which gradually paved the way for the formation of a more exclusive kind of same-sex sexuality—a transition that may have played an important role in the establishment’s anti-homosexual reaction. It is perhaps no wonder that, historically, the first real homosexual subcultures are to be found in big cities such as 18th-century London.

Homophobia

Homophobia is another issue that the alliance-formation hypothesis might help to elucidate. Foucault (1984) claims that homophobia is due to the decline of the *amicitia*, a particular, affective kind of friendship between males that often included same-sex sexual behavior: “Once friendship had disappeared as a culturally accepted relationship, the question was raised: ‘But what are these men doing together?’ At that moment, the problem [of homophobia] made its first appearance” (p. 29). Sexual contact between males was seen as some sort of plot, and the inability to understand it made the public at large fearful and caused them to repudiate it. To avert the fear, Foucault contends, these men were tagged with a new identity based on their sexual activities: the homosexual identity. Indeed, the construction of the homosexual identity resulted from the fact that same-sex sexual behavior was suddenly seen as subversive and repugnant. Same-sex sexuality simply did not fit in with the then prevailing Cartesian view of man and world, Foucault says, so people tried to control and oppress it by constructing a category for it.

Foucault’s argument assumes that whatever we do not understand only gains our fear and repudiation. However, the question remains why such repudiation—resulting, in this case, in homophobia—occurred so suddenly at the beginning of the 18th century. Foucault’s allegation that same-sex sexual behavior only became a problem in the 18th century is a gross historical error. Same-sex sexual behavior had by then been commonplace for hundreds of years, and that in spite of a fierce Inquisition that had first reared its head in the 13th century. Exclusive homosexuality may be an 18th-century social construction, but

homophobia is not. In fact it seems that (passive) homosexuals have never been accepted in Western culture. Pre-Christian Roman law stipulated that passivity in a same-sex sexual relationship should entail a loss of civic rights. And Biblical law was also not kindly disposed towards homosexuals, whether passive or active. Its contempt for the “sin of sodomy” resulted in a horrendous hunt for homosexuals throughout more than 14 centuries (Crompton 2003).

The question is not why there is such a sudden occurrence of homophobia around 1700, but rather why same-sex sexual behavior has so consistently, and with ever-increasing vehemence since the rise of Christianity, been regarded as subversive. The alliance-formation hypothesis provides a plausible, though speculative, explanation for homophobia in general, and for the sudden rise of homophobia around 1700. If same-sex sexual behavior is indeed an instrument used by marginalized individuals to (re)gain (more) power, as we contend, the powerful may be right in considering it to be a threat—not so much to their worldview as to their actual power—since allied males will assist each other in the competition with dominant males. The sudden rise of homophobia around 1700 is probably due to a feedback loop, which we explain in the next section.

A Feedback Loop

One of the puzzles surrounding Foucault’s historical nominalism is why individuals would adopt an identity that was created to keep them down. Why would one want to identify with a depreciated category? One possible reason to adopt a reviled identity, Foucault believes, is that individuals can exploit this adoption, for example to claim their rights. This might be the case for Hacking’s refugee women, too. Another answer is as straightforward but less satisfying: people adopt the homosexual identity because they are cultural beings, which means their identities are made up of the materials provided by their culture. These reasons may hold to some extent, but a mystery still remains: why is it that not every cultural identity is as easily adopted as homosexuality?

From the perspective of the alliance-formation hypothesis, adopting the homosexual identity is not a “queer” choice, so to speak, even if it may now, under the present circumstances, marginalize someone. Same-sex sexual behavior is a behavior designed by natural selection to overcome marginalization and ostracism. Not every fringe person displays such behavior: some do, others do not. The point is, however, that if those who do display same-sex sexual behavior are further marginalized (due to their adoption of a depreciated identity), one can expect this behavior to become ever more frequent and intense. That is how a feedback loop is generated. The fact that homosexuals are marginalized because they have same-sex sexual contacts is, at least from an evolutionary point of view, quite ironic.

CONCLUSION

Animal biology suggests that same-sex sexual behavior between males has a long evolutionary history. Recent findings in history and anthropology suggest that such behavior was common in many human cultures all over the world. Many of the men who engaged in same-sex sexual practices were married and had children. It is only at the beginning of the 18th century that these men come to feel obliged to commit themselves either to same-sex sexuality or heterosexuality—a choice that is then thought to be determinant of their identity. Be that as it may, these recent trends have not diminished the occurrence of occasional same-sex sexual behavior, as is evident from research in sexology ever since Kinsey. Therefore, one could say that homosexuality is not a Darwinian paradox at all—it is “just” a social construction with a long evolutionary history.

And yet the question remains: why is it that some males prefer to have sex with other males, even if they have access to females? The alliance-formation hypothesis claims that same-sex sexuality is just one way to establish or cement male-male alliances. Such alliances may allow males to reposition themselves in the group hierarchy, thus boosting their reproductive fitness.

Unlike many other evolutionary explanations, the alliance-formation hypothesis implies that same-sex sexuality need not be a fixed trait. Some kinds of same-sex sexuality may represent adaptive strategies designed to deal with a complicated social hierarchy, strategies only triggered in certain circumstances. We have argued that some sociohistorical conditions around 1700 may have quickened the transition from a mainly occasional kind of same-sex sexual contact to a full-blown, exclusive kind, which we now call “homosexuality.” As such, the alliance-formation hypothesis about male homosexuality is a good example of D. S. Wilson’s (2005) evolutionary social constructivism, i.e. a social constructivism firmly grounded in evolutionary theory.

However, the claim that same-sex sexuality need not be a fixed trait should not be confused with the unrestricted plasticity advocated by some social constructivists. Indeed, the alliance-formation hypothesis indicates the limits of such flexibility by defining the conditions that are generally conducive to the development of same-sex sexuality. Evolutionary social constructivism avoids the excesses of both evolutionary psychology and social constructivism.

REFERENCES

- Bagemihl, B. 1999. *Biological exuberance: Animal homosexuality and natural diversity*. New York: St. Martin’s.
- Bagley, C., and P. Tremblay. 1998. On the prevalence of homosexuality and bisexuality in a random community survey of 750 men aged 18 to 27. *J Homosexual* 36(2):1–18.
- Bell, A., and M. Weinberg. 1978. *Homosexualities: A study of diversity among men and women*. New York: Simon and Schuster.
- Berman, L. 2003. *The puzzle: Exploring the evolutionary puzzle of male homosexuality*. Wilmette, IL: Godot Press.

- Blanchard, R. 1997. Birth order and sibling sex ratio in homosexual versus heterosexual males and females. *Annu Rev Sex Res* 8:27–67.
- Bobrow, D., and M. Bailey. 2001. Is male homosexuality maintained via kin selection? *Evol Hum Behav* 22:361–68.
- Camperio-Ciani, A., F. Corna, and C. Claudio. 2004. Evidence for maternally inherited factors favouring male homosexuality and promoting female fecundity. *Proc RSoc Lond B Biol Sci* 271:2217–21.
- Crompton, L. 2003. *Homosexuality and civilization*. Cambridge: Harvard Univ. Press.
- Dawkins, R. 1995. *River out of Eden*. New York: Basic Books.
- De Block, A., and P. Adriaens. 2004. Darwinizing sexual ambivalence: A new evolutionary hypothesis of male homosexuality. *Philos Psychol* 17(1):59–76.
- de Waal, F. 1997. *Bonobo: The forgotten ape*. Berkeley: Univ. of California Press.
- Dewar, C. 2003. An association between male homosexuality and reproductive success. *Med Hypotheses* 60(2):225–32.
- Foucault, M. 1978. *The history of sexuality: An introduction*. (trans. R. Hurley). Harmondsworth: Penguin.
- Foucault, M. 1984. Michel Foucault, an interview: Sex, power and the politics of identity. *Advocate* 400:26–30.
- Fox, E. 2001. Homosexual behavior in wild Sumatran orangutans (*Pongo pygmaeus abelii*). *Am J Primatol* 55:177–81.
- Freud, S. 1915. *A phylogenetic phantasy. Overview of the transference neuroses*. Cambridge: Harvard Univ. Press, 1987.
- Friedman, R., and J. Downey. 1994. Homosexuality. *N Engl J Med* 331(14):923–30.
- Hacking, I. 1999. *The social construction of what?* Cambridge: Harvard Univ. Press.
- Hamer, D., and P. Copeland. 1994. *The science of desire*. New York: Simon and Schuster.
- Kinsey, A., W. Pomeroy, and C. Martin. 1948. *Sexual behavior in the human male*. Philadelphia: W. B. Saunders.
- Kirkpatrick, R. 2000. The evolution of human homosexual behavior. *Curr Anthropol* 41(3):385–414.
- Kitcher, P. 1985. *Vaulting ambition: Sociobiology and the quest for human nature*. Cambridge: MIT Press.
- Kruger, D. 2002. The deconstruction of constructivism. *Am Psychol* 57:456–57.
- Llora, M. 1989. Foucault and historical nominalism. In *Phenomenology and beyond: The self and its languages*, ed. H. Durfee and D. Rodier, 134–47. Dordrecht: Kluwer.
- Miller, E. 2000. Homosexuality, birth order, and evolution: Toward an equilibrium reproductive economics of homosexuality. *Arch Sex Behav* 29(1):1–34.
- Murray, S. 2000. *Homosexualities*. Chicago: Univ. of Chicago Press.
- Muscarella, F. 1999. The homoerotic behavior that never evolved. *J Homosexual* 37:1–18.
- Muscarella, F. 2000. The evolution of homoerotic behavior in humans. *J Homosexual* 40: 51–77.
- Roes, F. 1993. An explanation of human male homosexuality. *Hum Ethol Newsletter* 8(3).
- Roselli, C., J. Resko, and F. Stormshak. 2002. Hormonal influences on sexual partner preference in rams. *Arch Sex Behav* 31:43–49.
- Shakespeare, T., and M. Erickson. 2001. Different strokes: Beyond biological determinism and social constructionism. In *Alas poor Darwin*, ed. H. Rose and S. Rose, 190–206. London: Vintage.

- Sulloway, F. 1996. *Born to rebel*. New York: Pantheon Books.
- Trivers, R. 1985. *Social evolution*. Menlo Park: Benjamin/Cummings.
- Trumbach, R. 1998. *Sex and the gender revolution. Vol. 1. Heterosexuality and the third gender in Enlightenment London*. Chicago: Univ. of Chicago Press.
- Visker, R. 1995. *Genealogy as critique*. London: Verso.
- Weinberg, M., C. Williams, and D. Pryor. 1994. *Dual attraction: Understanding bisexuality*. New York: Oxford Univ. Press.
- Wilson, D. S. 2005. Evolutionary social constructivism. In *The literary animal: Evolution and the nature of narrative*, ed. J. Gottschall and D. S. Wilson, 20–37. Evanston: Northwestern Univ. Press.
- Wilson, E. O. 1975. *Sociobiology: The new synthesis*. Cambridge: Harvard Univ. Press.
- Wilson, E. O. 1978. *On human nature*. Cambridge: Harvard Univ. Press.
- Zahavi, A. 1975. Mate selection: A selection for a handicap. *J Theor Biol* 53:205–13.