Chapter 1

Pederasty: An Integration of Empirical, Historical, Sociological, Cross-Cultural, Cross-Species, and Evolutionary Evidence and Perspectives

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Introduction

Pederasty, defined as sexual relations between men and adolescent boys, is severely condemned in our society. It is generally seen as just another type of child sexual abuse with equivalent effects. In particular, it is widely assumed to be a highly dysfunctional interaction between a youth and a man, intrinsically traumatizing and damaging for the former, and a reflection of severe pathology and dangerousness in the case of the latter. This thinking is strongly emotionally held and culturally entrenched, and to challenge it is to invite disbelief and attack. Yet, from a scholarly and scientific point of view, there is substantial basis for such challenge. In many other cultures across time and place, pederasty was viewed as functional, youths' successful development was attributed to the practice, and men's disposition for the behavior was considered normal and even noble. In our own society, substantial empirical evidence shows that positive response on the part of the youth does occur and is not uncommon. Finally, cross-species evidence suggests that pederasty has an evolved basis, because it is common in primates and a variety of subprimate species.

In 2005, in an invited article written for the *Journal of Homosexuality,* I provided a brief sketch discussing these points. The article was attacked by a right-wing website, whereupon the publisher quickly censored the article before it was put into print. But the censoring came, as well, from pressure exerted by left-leaning personnel connected with other scholarly or scientific journals, which the publisher also published. Attacks from like-thinking colleagues in my own department at the university followed, in which the article was described as "beyond the pale," even while "academic freedom" was reaffirmed as a sacred value. As anticensorship counterattacks by other scholars mounted, the publisher eventually agreed to publish a revised, more detailed article by me. When the article was completed in 2009, the new publisher of the *Journal of Homosexuality*

refused to publish it, declining to say why, despite repeated requests, except to assert that its decision was one of "judgment," not censorship.

The politically charged atmosphere surrounding the censoring of these articles is a blot on the scientific enterprise and on scientific publishing. The articles were descriptive and explanatory, not prescriptive. They were scholarly, drawing upon widely diverse academic sources, including many articles in previous volumes of the *Journal of Homosexuality*. The current chapter was devised not merely to publish the suppressed evidence and conclusions, but to oppose censorship that stems from panic or political correctness. Such censorship corrupts any science topic it touches.

Caveats

The study presented in this chapter, as well as the previous two versions, deals with functional explanations for pederasty. This approach follows not only the evidence but previous scholarship, where such explanations have already been introduced. Offering functional explanations for pederasty can prompt people to write them off as advocacy for the behavior, rather than valid science. This is what happened in response to the first version of the current study. It is important to emphasize, however, that functional explanation falls in the domain of science, advocacy falls in the domain of politics, and the two are distinct and have no necessary connection. For example, Zeitzen (2008) reviewed polygamy from a cross-cultural perspective and documented that its frequent practice in many other cultures was functional under the circumstances of those cultures. Gat (2006) reviewed war from zoological, historical, anthropological, and evolutionary perspectives and concluded that, in humans, it has an evolved adaptive function. Neither author was advocating the behavior for our society, but each was offering a functional explanation for an age-old phenomenon to improve scientific understanding relative to earlier explanations that were inadequate, in part, because they were explicitly or implicitly tied to prevailing values and morals. The same applies to functional explanations for pederasty. It is an age-old phenomenon. Much evidence indicates that it has been functional within particular cultural settings, which suggests that function is an element of its nature. This conclusion takes us beyond moral discourse to improve our objective understanding of the behavior. But the conclusion is not an advocacy for the behavior in our society, whose cultural setting is very different.

To clarify these points further, it is useful to consider three fallacies discussed by Cardoso and Werner (2004). The *naturalist fallacy* is showing that a behavior occurs in other species and concluding that it is, therefore, moral for humans. The *relativistic fallacy* cites a behavior's occurrence in other cultures as morally acceptable and then concludes that it, therefore, should be moral in ours. The *moralistic fallacy* is the reverse of the naturalistic fallacy in that it derives what "is" from what "ought to be," but frequently in contradiction to what actually *is*. Accordingly,

it would be fallacious to show that pederasty is commonplace in other species and other cultures and to conclude that it should be seen as moral in our society (naturalistic and relativistic fallacies). On the other hand, it is no less fallacious to begin with the fact that pederasty is seen as immoral in our society and then to read into it all sorts of pathologies that may well not be objectively true (moralistic fallacy).

For practical purposes, our society is currently so vehemently opposed to pederasty that there is little chance that it could be influenced into changing its attitudes, values, or practices regarding this behavior by arguments committing the naturalistic or relativistic fallacies. On the other hand, the moralistic fallacy is a serious problem, because it has had a dominating, biasing impact on scientific understanding of pederasty (as discussed later), which is an important rationale for this study.

Methodology

How do we judge *scientifically* whether a particular class of sexual behaviors is normal or abnormal, healthy or pathological? In our society several centuries ago, this task was assigned to clerics, but with the advance of medicine, clinicians became the designated authorities. As Foucault (1978) and Szasz (1990) noted, however, when the clinician replaced the cleric in this role, he merely substituted sickness for sin and did little or nothing to bring science into the classifications. Similarly, Kinsey, Pomeroy, and Martin (1948), writing decades earlier, complained that clinicians' classification of normal and abnormal sexual behavior, still in the mid-twentieth century, too often was "little more than a rationalization of the mores masquerading under the guise of objective science" (p. 203). They sharply criticized clinicians for drawing upon morals coupled with anomalous clinical and legal case studies to deduce what constituted abnormal sexual behavior across the human species.

Kinsey et al.'s (1948) remedy was to expand the database with large numbers of individuals from widely divergent segments of the general population, individuals who did not have problems by definition, as clinical patients do. Ford and Beach (1951) then argued that the scope needed even further broadening because culture so profoundly affects sexual behavior. To determine whether a pattern obtained for a particular type of sexual behavior, they conducted an extensive cross-cultural review. To determine whether observed human sexual behavior patterns were reinvented from one culture to the next or had deeper biological roots, they argued for and then conducted an extensive cross-species analysis. Bullough (1976) added that historical analysis is also essential, because it can help correct for the all-too-common bias in both lay persons and professionals of assuming that dominant sexual behavior patterns in present-day society, as well as personal preferences, are not only natural but inevitable whereas other variations are abnormal, when historical perspective may show otherwise.

The broader perspectives and approaches of Kinsey et al. (1948), Ford and Beach (1951), and Bullough (1976) contradicted clinical theorizing on abnormal sexual behavior in many areas (e.g., masturbation, homosexuality, sexual behavior among immature individuals). The broad perspective is more compatible with valid science, because it directly deals with issues of external validity (i.e., generalizability) and improves internal validity (i.e., causation) by taking into account multiple relevant factors that can influence sexual behavior patterns. Additionally, the broad perspective understands that morals are culturally constructed[1] and therefore does not conflate morality with normalcy, as the narrow clinical approach too often has done (Foucault, 1978; Szasz, 1990).

To illustrate the shortcomings of the clinical approach, consider the case of homosexuality. Half a century ago, both lay persons and professionals generally reacted to homosexual behavior in adulthood with "disgust, anger, and hostility" (Hooker, 1957, p. 18), reactions deeply rooted in antihomosexual sentiments indoctrinated through centuries of Christian moral teachings (Crompton, 2003). The mainstream clinical view was that this behavior represented a "severe emotional disorder," which clinicians claimed to have verified through examinations of homosexuals obtained almost entirely from clinical, forensic, and prison settings (Hooker, 1957, p. 18). As Kinsey et al. (1948) did, Hooker argued for the need to study homosexuals outside these settings, where they were not maladjusted by definition. She recruited a convenience sample of homosexuals who had not had clinical or legal dealings, along with a matched sample of heterosexuals, and administered to them a battery of tests of psychological adjustment. She found that her homosexual subjects were as well adjusted as her heterosexual controls. She acknowledged straightforwardly that her homosexual sample was highly selected, but noted that this posed no problem, because her goal was to test the repeated claim of clinicians that *all* homosexuals were maladjusted. Citing Ford and Beach's (1951) cross-cultural and cross-species survey, she speculated that homosexuality may be a sexual deviation that is "within the normal range" (p. 30), and she criticized clinicians for being unable to consider or accept this possibility.

Notably, Hooker's thesis came to be more and more supported, and clinicians' pronouncements of pathology more and more discredited, as research on homosexual behavior greatly expanded after gay liberation four decades ago. This research came from nonclinical empirical, sociological, historical, cross-cultural, cross-species, and evolutionary perspectives, and its emergence was enabled by the new cultural attitude that researchers were no longer expected or obligated to verify pathology regarding homosexual behavior and to support the intervention engine of the state. That is, researchers were freed from reliance on clinical-forensic samples, where conclusions of pathology were preordained. Some of the more significant examples of this research include Dover's (1978) study of ancient Greek homosexuality, Bell, Weinberg, and Hammersmith's

(1981) large-scale nonclinical empirical study critically assessing a multitude of causal explanations for homosexuality, Herdt's (1984) survey of ritualized homosexuality in Melanesia, Greenberg's (1988) historical, anthropological, and sociological review of homosexuality, Bagemihl's (1999) zoological review of homosexual behavior in hundreds of species of mammals and birds, Crompton's (2003) historical review of homosexual behavior in high civilizations, and Sommer and Vasey's (2006) collection of zoological studies accompanied by evolutionary analyses.

The studies and reviews by Hooker (1957), Kinsey et al. (1948), Ford and Beach (1951), and Bullough (1976), as well as the multitude of post–gay liberation research just discussed, offer several important lessons for examining any form of sexual behavior, even and especially those disapproved of today. First, it is erroneous to extrapolate from clinical samples to the general population (i.e., the *clinical fallacy*). Second, when a form of sexual behavior is shrouded in disgust stemming from moral disapproval, before assuming that disgust is a primary reaction, that the behavior is a primary pathology, and that negative correlates associated with the behavior constitute primary damage, it is important to examine other cultures with different sexual moralities and practices. Third, the broader the perspective and the empirical database are, the better the scientific judgment will be regarding the pathological or non-pathological nature of a particular sexual behavior pattern. Fourth, understanding human sexual behavior patterns can be improved through cross-species comparisons, especially with primates, particularly when there is continuity or overlap in these patterns.[2] And fifth, the last point leads directly to evolutionary considerations in examining dysfunction, function, or neutrality in particular types of sexual behavior (cf. Wakefield, 1992).

Finally, it is important to emphasize that, in light of cross-cultural research on male homosexuality in societies tolerating or encouraging this behavior, and in view of the radically changed environment of widespread tolerance in our society today regarding this behavior, in which homosexual persons are often normal in adjustment or untroubled by their sexuality, it becomes clear that homosexual patients' difficulties with their sexuality in the past were not the primary effects of their homosexuality but interaction effects with a culture that severely stigmatized and disadvantaged them. For currently disapproved sexualities, it is important to take into account and distinguish between primary and interaction negative effects.

The "Harmful Dysfunction Approach" to Mental Disorder

In addition to the preceding discussion regarding the evaluation of sexual pathology, another approach, which is relevant to the fifth point previously mentioned on evolutionary considerations, and which will be useful for the current study, is that developed by Wakefield (1992, 1999, 2007). Wakefield has significantly sharpened conceptual approaches to

understanding abnormal behavior and mental disorders, including those of a sexual nature, by adding an evolutionary psychological framework. He argues that the "pure values approach" to disorder, which has dominated the mental health field and which holds that behaviors at odds with important norms and morals are disordered, is flawed, because if valid, then runaway slaves in the antebellum South really did suffer from drapetomania,[3] and Soviet political dissidents really were in need of confinement and treatment, because these persons violated the dominant values of their society.

Wakefield noted that natural selection has produced many physical mechanisms that perform needed functions for the body. When a physical mechanism breaks down and can no longer perform its function, it is called a *dysfunction* and may be harmful to the individual. When a dysfunction is harmful, it is called a *disorder.* Drawing upon evolutionary psychology, he noted that the same applies to mental mechanisms. Natural selection has also produced many mental mechanisms, designed to perform particular functions, and they become dysfunctions when they break down, which can be harmful to the individual. When a mental mechanism does break down, causing harm to the individual, it is a *harmful dysfunction,* which properly defines the concept of *mental disorder,* he argued.

What constitutes harm is a value judgment in a particular society, Wakefield argued. His definition of mental disorder is a hybrid, consisting of an objective component (i.e., is it a dysfunction?) and a value component (i.e., is it harmful?). Importantly, mechanisms were naturally selected in distantly past environments, referred to as the environments of evolutionary adaptedness, to serve functions useful in those environments. In a novel environment, a mechanism that is still performing its designed function may actually be harmful rather than helpful to the individual. A moth's white-color-producing mechanism may be functioning as designed, but if the moth finds itself in a changed, black-sooted environment, this healthy functioning mechanism may well be harmful for the moth, because it will be more likely to be preyed upon. The mechanism has become mismatched with the current environment, and so is an *evolutionary mismatch.* As Wakefield emphasized, an evolutionary mismatch is not a disorder, because it is functioning as designed. The individual is not disordered, just "unlucky," he argued.

For present purposes, sexual desires or behaviors that were naturally selected in distantly past environments to perform useful functions in those environments, but which are mismatched with the current environment, in which they are judged immoral or criminal because of values peculiar to this environment, are not objective disorders. If they cause harm for the individuals or their partners, they are of social and professional concern, but they are not pathologies or sexual disorders, because they are not dysfunctions; they are functioning as designed, but in an incompatible environment.

Plan for the Current Review on Pederasty

Because the goal of this chapter is to study pederasty scientifically, the foregoing points will structure the approach to follow. First, it is important to discuss the relevant clinical data. The clinical reports that have come out over the last three decades presenting cases of men who reacted negatively to or were traumatized by boyhood sexual events with older males, and felt or were judged to have been damaged long term as a result, are taken here as no more than suggestions for what may obtain in the general population, rather than as evidence for what actually does occur throughout this population. As discussed previously, unsupported extrapolation from clinical case studies to the entire population constitutes the clinical fallacy. When homosexual patients half a century ago evidenced disturbance over their sexuality, was this a primary reaction independent of other factors or secondary in nature, such as: (a) a response to intense social hostility and discrimination, (b) an internalized, harm-producing belief about being diseased as a result of dominant social views (i.e., nocebo reaction), or (c) the same kind of belief, but clinically rather than socially induced (i.e., iatrogenic harm)? The same questions can be raised in clinical cases of pederasty, which has been highly problematized in our society, especially since the rise of sexual victimology in the 1970s, which successfully instated among the lay public and professionals alike strong expectations that all instances of adult-minor sex are highly injurious, setting up the conditions for problems such as nocebo reactions and iatrogenic harm. In short, recent clinical reports of negative effects of pederasty are not probative with respect to the effects in the general male population. Hence, what is needed is an examination of nonclinical samples, which forms the first part of this review.

Previously in discussing homosexuality, some of the more significant examples of historical, sociological, anthropological, zoological, and evolutionary approaches to understanding it were mentioned (i.e., Bagemihl, 1999; Crompton, 2003; Dover, 1978; Greenberg, 1988; Herdt, 1984; Sommer & Vasey, 2006). Most, if not all, of these works were undertaken to understand *homosexuality*—that is, understood to mean the gay pattern in the modern West. But in each of these works, pederasty or pederastic-like behavior was prominent or even predominant (which is the general rule in such research). Given this copious source of relevant, broad-based evidence, along with the general guidelines discussed previously emphasizing the importance of using such evidence for assessing sexual behavior, the current study will examine evidence from each of these broader disciplines after the nonclinical empirical review.

Definitions

Before proceeding, it is important to establish a precise working definition of pederasty. Although popular definitions have tended to define

pederasty as "unnatural" anal intercourse, generally between a man and a boy of any age (e.g., *The Compact Edition of the Oxford English Dictionary,* 1971; *West's Encyclopedia of American Law,* 2008), scholarly sources have tended to define it as an erotic relationship between a man and an adolescent boy, regardless of whether actual sex occurs, taking into account nonsexual interpersonal and cultural aspects in addition to the erotic elements. Examples of such definitions include sexual relations of some duration between men aged 18 or more and boys from puberty through age 15 (Tindall, 1978), the erotic attraction of men aged 18 and over to boys from puberty to age 16 (Rossman, 1976), an erotic relationship between an adult male and a boy, generally between ages 12 and 17 (Bullough, 2004), the love between a man and youth 12 to 18 years of age (Thorstad, 1998), and age-graded homosexual relations with younger partners not fully mature, most commonly from puberty up to age 18, but sometimes somewhat younger or older (Menasco, 2000). In these definitions, the beginning and ending ages of the boys differ somewhat, as do the criteria for the involvement (e.g., attraction, sexual contact, love). But the definitions have in common adolescence (both emerging and unfolding) as a focal point for the interests and behaviors. For this reason, they essentially conform, whereas popular definitions do not, to the original meaning and usage of the term in ancient Greece, where *paiderastia* literally meant "boy love," from *pais* (boy) and *eros* (love, of a sexual nature). Greek pederasty involved a relationship that, though with *eros* at its core, went far beyond sex and was not tied to any particular sex act (Fone, 2000), and which involved boys generally from ages 12 to 17 (Lear & Cantarella, 2008).

In the present study, the definition of pederasty is based not just on the ancient Greek tradition and scholarly usage, but on the broader historical and cross-cultural record, as well as newer, improved understandings of puberty. Among the numerous societies to be reviewed later in this study, in which these relations were commonplace, data regarding typical beginning and ending ages of the boys involved were averaged, producing means of 10.72 and 16.35, and medians of 12 and 17, respectively.[4] These empirical findings support using the age range of 12 to 17 in the definition of pederasty, but suggest allowing for some variability at the extremes, especially the lower end. Regarding the lower boundary, the designation of the onset of puberty (i.e., appearance of pubic hair in boys) has been used in definitions of pederasty (e.g., Rossman, 1976; Tindall, 1978), but is problematic in view of research evidence showing that puberty is not a sudden event but a continuous process preceding the appearance of secondary sex characteristics by several years, during which sexual maturation (e.g., emergence of sexual attractions) under the influence of increased hormones is already occurring (Herdt & Boxer, 1993; McClintock & Herdt, 1996). Consequently, in the present study, pederasty is defined as erotic attractions, behaviors, or relationships

involving older males and boys or youths in their second decade of life, mainly from 12 to 17 (cf. Bullough, 2004), but up to two years below and above this range (cf. Menasco, 2000).

What is important in this definition of pederasty is its central focus on emerging and unfolding adolescence in males, which distinguishes it from pedophilia, which centers on attractions to prepubescent persons, who can be either male or female, and which tends to end abruptly with the visible onset of adolescence.

Empirical Review

Finkelhor (1979) discussed two camps of professionals as of the late 1970s, with very different views on the effects of adult-minor sex. The first camp, consisting of researchers tending to infer from nonclinical cases and data (e.g., Kinsey et al., 1953), believed that such contacts are generally "innocuous" or only a "minor hazard" (p. 29). The second camp, consisting of therapists inferring from the severe consequences of the rape of women (e.g., Burgess & Holmstrom, 1974) or the fact that incest was in the background of so many of their patients (e.g., Herman & Hirschman, 1977), believed adult-minor sex causes trauma and leaves permanent scars. Though Finkelhor sided ideologically with the latter camp—he was one of the chief architects of sexual victimology—he discussed weaknesses in their inferences. Because of this, he remained agnostic on the issue, remarking that "Many comments have been and will be made about this controversy before it is settled" (p. 32). Contrary to this forecast predicting protracted scholarly debate, the issue was virtually settled by 1981 or so, when nearly the whole field came to side with the therapists. As Jenkins (1998) later observed, this shift in beliefs came about because of politics, not science; it occurred virtually overnight, far too quickly for the proper research to have been done. The idea of minors being seriously psychologically injured from sex with men is something that resonated with the times because of the new gender politics of the day (Angelides, 2004, 2005; Nathan & Snedeker, 1995).

The new belief of pervasive and intense harm from sex between men and their prepubescent daughters was soon generalized to sex between men and unrelated pubescent girls, and then to sex between men and both prepubescent and pubescent boys. Eventually the belief extended to sex between women and boys. Soon after the new belief was culturally instated in the early 1980s, moral panics broke out in more than one hundred day care centers across the United States, where staff were accused of satanic ritual and sexual abuse, and in the "recovered memories" of thousands of adult patients in psychotherapy, who believed they had just remembered long-repressed episodes of incestuous abuse in their childhood (Jenkins, 1998; Nathan & Snedeker, 1995). What is significant here is that these sensationalistic cases, later to be discredited during the 1990s, convinced a whole society of the extreme, inevitable harm of all

forms of adult-minor sex, a belief that stayed intact after the discrediting of these particular cases and which continues to the present day.

For present purposes, the goal is to examine whether the pederastic form reliably has these assumed effects. But because sexual victimology has succeeded in convincing society that even sexual relations between adolescent boys and women are psychologically destructive, it will be instructive to start there to test the general theory of sexual victimology. Are sexual relations between adolescent boys and women comparable to the rape and incest involving female victims just cited, which formed the basis for the general theory? Are these youths generally unwilling, coerced, and otherwise overpowered, and do they generally react traumatically at the time and suffer negative long-terms effects? The review that follows addresses these questions.

Boy-Women Sex: An Initial Test of Sexual Victimological Theory

For this analysis, nonclinical studies were sought that reported men's remembrances of their reactions to boyhood sexual encounters with women, as well as their perceptions of the effects of these encounters and their willingness to participate. Many studies to date have reported on boys' reactions to sex with adults, but few have separately reported responses by gender of the older participant. Table I presents a summary of nine studies where men's boyhood reactions, self-reported effects, or perceived consent specifically to sexual episodes with women could be extracted.

Based on $n = 325$ cases or experiences in the nine studies, for which reaction data were provided, boys' reactions to sexual episodes with women were most often positive (62%) and only occasionally negative (14%). Based on $n = 279$ cases or experiences, only a small minority (19%) felt harmed in some way by the episodes, whereas twice as many men felt benefited (41%). Based on $n = 357$ cases or experiences where relevant data were provided, boys' level of willingness or consent was quite high (87%), with only 13 percent reporting lack of consent.

Not displayed in the table, the studies also revealed the following. The sexual episodes often involved oral sex and vaginal intercourse, rather than superficial interactions. In general, experiences were less positive when the boys were prepubescent, but tended to be more positive and consenting as the boys were beginning adolescence (e.g., Coxell et al., 1999; Okami, 1991; Woods & Dean, 1984). Furthermore, the longer the duration, the greater the frequency, and the more intense the nature of the sexual contacts (e.g., intercourse as opposed to fondling), the more positive the boys' reactions tended to be (e.g., Okami, 1991; West & Woodhouse, 1993). Finally, men with consenting sexual relations as boys with women were as well adjusted as controls in measures of adult psychological functioning (Coxell et al., 1999; Fromuth & Burkhart, 1987, 1989; Okami, 1991; Sandfort, 1988, 1992).

Table 1: Reactions, Self-Reported Effects, and Consent in Sexual Relations Between Boys and Women.

					Reaction (%)			*Effect (%)*			*Consent (%)*	
Study	*Sample*	*Country*	*Ages of Boys*	*n*	*pos*	*neut*	*neg*	*pos*	*neut*	*neg*	*yes*	*no*
Condy et al. (1987)	college, prison	US	mean, first contact = 12.5	144	65	22	14	43	36	21	88	12
Coxell et al. (1999)	general medical practice	GB	mean, first contact = 11 (non-consent), 14 (consent)	195							87	13
Fishman (1991)	college	US	<13 (60%), 13–16 (40%)	13	46	54	0	n/a	n/a	0		
Fromuth & Burkhart (1987)	college	US	<13 (62%), 13–16 (38%)	76	55	32	13	39	46	15		
Nelson & Oliver (1998)	college	US	<14 (54%), 14–15 (45%)	11							82	18
Okami (1991)	convenience	US	mean = 11.2 (pos cases), 9.7 (neg cases)	17	82	12	0					
Sandfort (1988, 1992)	community, convenience	NL	first contact: <12 (37%); 13-15 (63%)	7							86	14
West & Woodhouse (1993)	college	GB	<10 (39%), 11–15 (69%)	29	83	8	8					
Woods & Dean (1984)	convenience	US	mean = 11.4 (5 to 16)	46	50	20	30	38	38	24		
Totals/Means				**538**	**62**	**24**	**14**	**41**	**39**	**19**	**87**	**13**

Note. US = United States, GB = Great Britain, NL = The Netherlands. Pos = positive, neut = neutral, neg = negative. Sample size (*n*) is either number of persons or experiences. "n/a" indicates data not available. In bottom row, total *N* is given, followed by weighted mean percents for reactions, effects, and consent (i.e., weighted by sample size). Conservative estimates were made for positive and neutral reactions in Fromuth and Burkhart (1987) and neutral and negative reactions in West and Woodhouse (1993). Ages of boys refer to the whole set of experiences, which could include boy-woman and boy-man sex in some studies. Total Ns = 325 for reactions, 279 for effects, and 357 for consent.

Reinforcing these findings are the results from a recent analysis of the Kinsey data, in which males' reactions to first coitus after reaching puberty—often an especially significant life event—were assessed (Rind & Welter, 2012). Reactions to first coitus were very positive just as often when it occurred as an adolescent (10 to 17) with an adult woman (n = 548; 41%) as when it occurred as an adult (18 or over) with an adult woman (n = 2,546, 41%). The highest rate of positive reactions among all groups was among younger adolescent boys aged 10 to 14 with adult women (n = 116, 63%).[5]

The foregoing results dramatically contradict sexual victimological theory, specifically its strongly held assumptions that all minors are overpowered and traumatized by sex with much older persons. Notably, sexual victimologists have responded by arguing that boys who view their relations as consenting and positive have been deceptively indoctrinated and manipulated (see Rind et al., 2001, for discussion), implying that the natural, innate response *is* one of feeling exploited and traumatized. However, if we turn to nature (i.e., other species closely related to humans), we do not find evidence that such response is innate. In humans' closest relatives, bonobos and chimps, juvenile males frequently and preferentially solicit adult females and attempt to copulate with them. In most cases, they show sexual arousal with erections. Adult females are usually tolerant and even cooperative, but when they are not, the juvenile males frequently protest with whimpering or tantrums (Bagemihl, 1999; Hashimoto, 1997; Kano, 1980; Kollar, Beckwith, & Edgerton, 1968). Similar patterns have been observed in many other primate species (Bagemihl, 1999). Anderson and Bielert (1990) noted that "Among nonhuman primates ... sexual interaction between adult females and immature males is universal" (p. 192). It may be that primate patterns do not extend to humans, but the similarity of the observed human and primate patterns in juvenile male-adult female sex suggests a phylogenetic continuum (cf. Ford & Beach, 1951). The data are completely inconsistent with sexual victimological assumptions of innate exploitation and trauma.

In short, the above empirical results contradict the broad sweep of sexual victimological theory to such an extent as to expose the theory as ideological and scientifically defective, points that have been made conceptually by various critics (e.g., Angelides, 2004, 2005; Jenkins, 1998; Nathan & Snedeker, 1995). These results demonstrate that boys, especially in adolescence, are not *in essence* the sexually fragile beings that the sexual victimological models based on rape and incest involving females have been used to suggest. These findings do not imply the same for pederasty, the chief interest here, but they conceptually pave the way for a consideration of pederasty conducted without being tied down by the ideological assumptions of sexual victimology, which dominate current popular and professional views of pederasty.

Gay Boy-Man Sex: An Initial Examination of Pederastic Correlates

Despite sexual victimological influence, popular writers have long recognized that adolescent boys can be erotically drawn to adult women and often are not simply "passive victims" when sexual interactions occur (e.g., Heffernan, 2004; Hoffman, 1994; Macklin, 1997; Zernicke, 2005). But many gay writers have voiced the same idea with respect to gay adolescent boys' attractions to and relations with adult men (e.g., Kramer, 1981; Schulman, 2007; Tuller, 2002). Empirically speaking, is the gay boy-man dyad a good analog of the heterosexual boy-woman dyad? To examine this question, and as a first attempt to empirically evaluate beliefs that pederastic interactions are innately toxic, nonclinical studies were gathered that presented reaction and related data on gay and bisexual boys' sexual experiences with older males. Table II summarizes the eight studies obtained.

Like their heterosexual counterparts reviewed in Table I, these sexual relations were often of an intensive nature, frequently involving some type of penetration (oral or anal). Mean positive, neutral or mixed, and negative reactions were, respectively, 56 percent, 19 percent, and 27 percent.[6] Reactions were most positive in the national recruitment studies, where volunteers provided details about their gay experiences, including boyhood sexual encounters, the Brazilian study, notable for being the only non-Anglophone and developing-nation study in this set, and in the Rind (2001) study, which summarized data obtained from Savin-Williams (1997) on middle- and upper-middle-class gay and bisexual men who had their sexual contacts with men between ages 12 and 17, where incest and use of force were absent.[7] Reactions were most negative in the one quasi-clinical study involving lower socioeconomic subjects, who most often had their age-gap sexual experiences before age 12, which often involved incest or force (Doll et al., 1992). Two of the studies contrasted non-abusive and abusive boyhood sexual experiences with older males—based on self-perceptions or definitional criteria—and found that boys having non-abusive experiences were older on average (*M*s = 10 and 11.6) than boys having abusive experiences (*M* = 8) (Dolezal & Carballo-Diéguez, 2002; Stanley et al., 2004).

In terms of psychological adjustment, men categorized as having had non-abusive sexual experiences with older males were as well adjusted as controls, whereas those categorized as having had abusive relations were slightly less well adjusted (Dolezal & Carballo-Diéguez, 2002; Stanley et al., 2004). The Rind (2001) study found that gay/bisexual men with boyhood pederastic experiences were as well adjusted as controls on some measures and better on others. Recently, Arreola et al. (2008) replicated this result in a multi-city community sample study of gay and bisexual men regarding consenting homosexual sex (peer and age-gap) under age 18—subjects not consenting to these contacts were slightly less well

Table II: Reactions in Sexual Relations Between Gay or Bisexual Boys and Older Males.

					Reaction (%)			
Study	*Sample*	*Country*	*Ages of Boys*	*n*	*pos*	*neut, mixed*	*neg*	*Study features*
Carballo-Diéguez, Balan, Dolezal, & Mello (2009)	convenience	BRAZIL	mean age of boy = 9, of partner = 19	155	57	29	14	Used respondent-driven sampling in Campinas, Brazil; obtained *n* = 517 (439 men, 78 transgenders); 30% had sex with older partner (almost all male).
Dolezal & Carballo-Diéguez (2002)	convenience	US	overall mean = 8.5; mean of self-perceived abused = 8, not abused = 10	100	32	33	34	Latino men of low SES. Cases (<13, 4+) were 91% with males, 34% incest, 39% force.
Doll et al. (1992)	quasi-clinical	US	mean = 10; <12 (61%); 12-15 (33%)	336	27	15	58	Subjects recruited at STD clinics, of lower SES. Cases (<19, older/more powerful) were 95% with males, 43% incest, 49% force.
Jay & Young (1977)	non-random national	US, CAN	5-10 (56%), 11 to 14 33%), 15 to 17 (11%)	18	83	5	11	Subjects recruited with ads across US and Canada. Authors presented cases they deemed typical. Cases (<18, 4+) were analyzed here.
NGLS (1993)	convenience	GB (50%)	9-14 (50%), 15–17	16	50	31	19	Subjects responded to request from national gay organization to describe early sexual experiences. Cases (<18, 4+) were analyzed here.
Rind (2001)	convenience	US	12-15 (42%), 16–17 (58%)	26	77	8	15	Mostly middle- to upper-middle class whites. Cases (<18, 5+ and >17) involved no incest or force.
Spada (1979)	non-random national	US	5-10 (33%), 11–14 (28%), 15–17 (39%)	18	67	11	22	Subjects recruited with ads across US. Author presented cases he deemed typical. Cases (<18, 4+) were analyzed here.
Stanley, Bartholomew, & Oram (2004)	community	CAN	overall mean = 10.10 (2 to 16); mean abusive sex = 8.17; mean non-abusive sex = 11.64	48	n/a	n/a	42	Community sample from Vancouver. Reactions to sex (<17, 5+) were classified as negative if any aspect was negative.
Totals/Means				**717**	**56**	**19**	**27**	

Note. US = United States, GB = Great Britain, CAN = Canada. Pos = positive, neut = neutral, neg = negative. Predominantly positive or negative reactions were classified as positive or negative, whereas reactions with a greater mix of positive and negative aspects were classed as neutral-mixed reactions. "n/a" indicates data were not available. In the bottom row, total *N* is given, followed by unweighted mean percents for reactions. (Unweighted means were used owing to the overweighting of the quasi-clinical sample.) In the study features column, age relations between the boys and their older partners are delined in parentheses. For example, (<18, 4+) means that the sex occurred when the subject was under 18 and the partner was four or more years older. SES = socioeconomic status.

adjusted. Bartholow et al. (1994) analyzed the Doll et al. (1992) data and found that boyhood homosexual experiences with older males were associated with poorer adjustment—but, only slightly so when converted to effect sizes.

Research into the gay male experience has often revealed boyhood sexual attractions and desires for much older males (e.g., McClintock & Herdt, 1996; Savin-Williams, 1997). Spada (1979) provided eighteen illustrative examples of the emergence of boyhood crushes for other males, which were directed at older males and men as opposed to peers by a margin of four to one. Jay and Young (1977) provided thirty-three illustrative examples, of which 61 percent were directed at men or much older youths and only 27 percent directed at male peers. In The National Lesbian and Gay Survey (1993), of the twenty-five illustrative examples of early boyhood crushes and erotic desires provided, 68 percent were directed at men. In a recent compilation of gay anecdotes concerning first boyhood erotic attractions, from the twenty cases providing enough information, 90 percent were directed at adult men (Trachtenberg, 2005). Anecdotally, gay commentators have frequently noted how common it has been in their experience to hear tales of gay friends and acquaintances who had boyhood crushes on, as well as positive sexual experiences with, adult males (e.g., Giovanni's Room Press Release, 1999; Kramer, 1981; Schulman, 2007; Tuller, 2002).

In sum, these results suggest that the gay boy-man dyad *is* an analog of the heterosexual boy-woman dyad, in which sexual orientation-consistent boyhood sexual encounters with much older persons are for the most part positively experienced. These results add force to the heterosexual data in undermining the sexual victimological theory that all adult-minor sexual contacts are inherently toxic. The data just reviewed demonstrate that reactions (negative or positive) are not innate, but depend on contextual factors. Negative reactions are associated with incest, use of force, lack of willingness, and younger ages of contact. That is, pederastic encounters, the focus of the present review, are likely to be positively experienced and not problematic in terms of later adjustment in this population if participated in willingly. Finally, the predominance of positive reactions is likely to be related to the tendency for early boyhood homosexual attractions to be preferentially directed at older, more mature males.

Pederastic Sex More Generally: A Further Empirical Examination

As an initial evaluation of youths' reactions to pederastic sex more generally, data were extracted from the five nonclinical empirical studies in Table I, in which reactions to man-boy sex could be isolated. Reactions were estimated via unweighted means as 27 percent positive, 34 percent neutral, and 42 percent negative.[8] These estimates are crude with respect to pederastic experiences, because many pedophilic experiences were included. All of these studies were Anglophone (4 U.S., 1 British). In a

different society and cultural climate, when age-gap sex involving minors was temporarily more tolerated, Sandfort (1988, 1992) found that most of his Dutch male subjects with boyhood sexual experiences with older males were willing participants (69%), who reacted on average positively, in contrast to the unwilling participants (31%) who reacted on average negatively. Willing participants were as psychologically well adjusted as controls, and unwilling participants were slightly less well adjusted.

In two important forensic studies, conducted outside the sexual victimological framework, results were that harm and coercion were quite uncommon. Baurmann (1983), in a large-scale study conducted for the German government, found no evidence for psychological injury in his nearly one thousand cases of boys who had sexual encounters with men before age 14. He noted that use of force or coercion was rare in these cases, occurring instead mostly in heterosexual offences with female victims. Gebhard et al. (1965) examined ninety-one cases of boys aged 12 to 15 who had sexual encounters with men, and found that, according to the boys' official court accounts, they were encouraging in 70 percent of the cases, passive in 11 percent, and resistant in 16 percent. In these cases, they added, use of force or threat was quite rare. They attributed the youths' generally receptive response to libidos that are well activated in males by the early teens (which is in contrast to females). They remarked that if "twelve- to fifteen-year-old girls had as developed libidos as boys of the same age, our penal institutions would burst at the seams" (p. 299). They argued that a boy of this age is still flexible sexually, and if he can be persuaded, "he exhibits an intensity of response matching or frequently surpassing that of an adult" (p. 299).

In a number of interview studies based on convenience samples, positive reactions to pederastic encounters predominated (Bernard, 1981; Ingram, 1981; Leahy, 1992; Money & Weinrich, 1983; Sandfort, 1984; Sandfort & Everaerd, 1990; Tindall, 1978). In each of these studies, the boys were mainly in their preteens or early teens during the contacts, which occurred within friendship relationships of significant duration, in which the boys' positive responses were tied in part to willingness in participation and to their perception of attainment of important nonsexual benefits (e.g., a mature friend who listens to them). For example, Tindall (1978) followed nine cases of boys over three decades, who had sexual relations with men starting between the ages of 12 and 15, and found normal psychological development and adjustment in all cases, and negative signs (i.e., lingering guilt) in just one. He reported mentoring effects in more than half the cases, in which the youths' later direction (i.e., career choices) reflected their adult partner's profession and influence.

As with the heterosexual boy-woman and gay boy-man reviews, this review undercuts sexual victimological theory. Since its rise to dominance three decades ago, sexual victimology has succeeded in framing all adult-minor sex as necessarily coercive, which has heavily biased lay and

professional views since (Malón, 2011). The forensic and interview studies just reviewed, conducted outside the sexual victimological framework, consistently found coercion to be rare but encouraging participation to be common. This pattern was even more pronounced in the nonclinical interview studies, where most cases were pederastic and involved willing participation within durable friendships, in which the sexual contacts were generally intimate (e.g., oral sex) and the relationships yielded valuable nonsexual benefits. By contrast, in the studies extracted from Table I, which combined had a plurality of cases with negative reactions, sexual episodes frequently were pedophilic and often included one-time approaches or fondling, which were generally unwanted. In short, assumptions of coercion and trauma as properties of pederastic relations do not hold under empirical examination. Reactions to these events reflect the circumstances under which they occur, as other types of sexual relations do.

In the three reviews just presented, what needs to be emphasized is that all these relations occurred in a society that views them as having no worth or legitimacy and that is quite hostile toward them both attitudinally and legally—especially the pederastic relations because of their homosexual nature. It is reasonable to assume that if these relations had been socially sanctioned, invested with value, and encouraged—as they have been in numerous other cultures to be reviewed later—they would have been experienced even more positively on average. The rather high levels of positive reactions under the conditions of our culture, therefore, should be taken as a strong indication of not only the incorrectness of sexual victimological theory, but its wrongheadedness as well, because it has strongly biased the objective appraisal of these relations, clinical perceptions of them, and views more generally throughout our society. As per Bullough (1976) and Ford and Beach (1951), historical, cross-cultural, and cross-species considerations are indicated to remedy these biases.

Two Case Studies

Before considering the broader data beyond our culture, two case studies are presented next to illustrate what positive pederasty can look like, given that it does occur with some frequency, as per the review just presented. Putting a face on positive cases can be valuable, given their counterintuitive nature for a society whose main source for such anecdotes is the mainstream media, whose strong filter permits only presentation of negative cases, often of sensationalistic nature (West, 1998). Both cases concern men (one gay, one straight) of accomplishment, to which their boyhood pederastic experiences (based on friendship and mentoring) contributed.

Case 1

Gavin Lambert (1924–2005) was a screenwriter, novelist, and biographer, who came from an upper-middle-class home in England. At age 10, he

showed musical talent and won a scholarship to St. George's Preparatory School at Windsor Castle (Rapp, 2005). Toward the end of his long life, Lambert (2000) described his early homosexual unfolding and his pederastic relationship at the prep school.

After entering St. George's, Lambert developed a friendship with another boy named Rammelkamp who was also "already adjusted to a homosexual future" (p. 13). Lambert commented on the positive nature of each of their sexual initiations with adult men:

> We once compared notes on our sexual initiations, Rammelkamp's at the age of ten with a workman when he was on summer holiday with his parents in Cornwall, mine at the age of eleven with a [music] teacher at my preparatory school [St. George's], and agreed that we'd felt no shame or fear, only gratitude. (p. 13)

Lambert provided a lengthy description of his own initiation. He noted that, before entering the boarding school and meeting the teacher at age 11, he already knew his homosexual orientation "and never questioned it" (p. 28). He recalled that his "teacher-lover" made what happened between them seem completely natural, telling him that "they understood in ancient Greece" (p. 29). Lambert wrote that the sexual relationship "not only made me feel superior to the people who wouldn't or couldn't understand. Having to sneak out the dormitory to my teacher's bedroom was exciting, and made him even more attractive" (p. 29).

He added that "soon after falling in love with him, I fell in love with the movies" (p. 29). The teacher gratified his new appetite for the movies by taking him to one every Thursday afternoon, which constituted the beginnings of his eventual career as a screenwriter. The affair continued for the next eighteen months. Then, when returning from Christmas holidays, he found his teacher-lover gone—the new headmaster fired him and several other teachers thought to be sexually involved with pupils. The headmaster interrogated young Lambert, who "lied with a clear conscience" about whether he was sexually involved with the teacher and who felt "violated when [the headmaster] spoke of 'violation'" (p. 30). Initially afterward, he felt abandoned by his teacher-lover, who was by then far more important to him emotionally than his parents were. But he didn't feel betrayed, just disappointed not to have at least received a letter—until one of the other abandoned boys explained that that would have been too risky. Lambert summed up his feelings at the time and more than sixty years later:

> For several years I had fantasies of a passionate reunion when we met again by chance. It never happened. Perhaps he was killed in the war. Just possibly he has survived to read this after turning ninety. In any case he is still remembered, an unfaded photograph in the mind's eye, as my first love and the first love I lost. (p. 31)

Some years later, he read Plato's *Symposium* and was especially moved by Agathon's praise of Love, whom Agathon described as the most blessed of all gods, who empties us of all unneighborliness, fills us with intimacy, in wreck is a pilot, in time of dread is a shipmate, is the best of drinking companions, and is the noblest champion in debate. Upon reading this passage, Lambert recalled that it "brought to mind my music teacher, and made me realize exactly what he meant by saying 'They understood in ancient Greece.'" (p. 44)

Case 2

Heinz Kohut (1913–1981) was a leading theorist and practitioner of psychoanalysis, known for his work on narcissism and the self, as well as his writings on his patient "Mr. Z," who was actually Kohut himself (Strozier, 2001). In his biography of Kohut, Strozier (2001) discussed young Kohut's pederastic experience in a chapter entitled "The Tutor." Kohut grew up in Vienna in the 1920s. When he was age 11, his parents' marriage was deteriorating, but he "survived the fragmentation of the family quite well, in no small part due to the lucky presence of a warm-hearted tutor named Ernst Morawetz, who entered his life just as his mother left it" (Strozier, 2001, p. 23). His mother hired Morawetz, a university student in his early 20s, to be young Kohut's companion and provide him with intellectual stimulation. Most afternoons after school, Morawetz took Kohut to a museum, an art gallery, or the opera, or they simply read together and talked about interesting subjects. As Kohut later put it:

> I had this private tutor, who was a very important person in my life. He would take me to museums and swimming and concerts and we had endless intellectual conversations and played complicated intellectual games and played chess together. I was an only child. So it was in some ways psychologically life-saving for me. I was very fond of the fellow. (p. 24)

Kohut found in Morawetz companionship, connection, and deep empathy. He later described those years with his tutor as extremely happy ones, perhaps the happiest years of his life. He idealized his tutor, who was a "'spiritual leader,' able to share his 'almost religious' love for nature, as well as teach him about literature, art, and music" (p. 24), thereby making him appreciate nature and culture far ahead of his age or his peers. The relationship became sexual, at first kissing and hugging, then tender mutual fondling, and mutual oral sex. Kohut put his relationship with Morawetz into the context of the ancient Greeks, about whom he was beginning to read in depth. In retrospect, he felt that the sexual aspect had no effect on his own sexual identity, which was firmly heterosexual. What was important was the emotional connection. This experience formed the basis for his later theorizing, in which he contradicted Freud,

who had said that the self is constructed by vagaries in development of the sex instinct. Kohut reversed this, saying that the need for emotional connection precedes sex. Sexuality just symbolizes and concretizes our deepest needs.

Summary

These cases represent the opposite end of the spectrum from clinical and media reports. Both men's experiences fit the ancient Greek model of mentoring to be discussed later. Importantly, each man interpreted his experience in this way, not through the lens of the incest and rape models, which only permit perception of victimization. For Lambert, the relationship launched his career in movies; for Kohut, it built his intellect and underlay some of his later theorizing. For each, it was a source of deepest friendship. For the gay boy, the man was his first love; for the heterosexual boy, the man was his spiritual hero. Lambert felt only gratitude toward the man for the sexual initiation and remembered him decades later in lofty poetic terms; Kohut was unconcerned about the homosexual aspect, considering the emotional connection all that mattered. Though sexual victimologists and others may reject these cases and others like them as "cognitive distortions," such cases are just as real as the negative cases uniformly accepted without question. The scientific study of pederasty needs to include these cases, too, or else it is a pseudoscience.

Historical and Cross-Cultural Perspectives

In the previous section, pederasty was examined within the Western (mainly Anglophone) culture, with focus on assessing the clinical assumption of intrinsic pathology by studying nonclinical evidence. Not only was this evidence contradictory, it indicated that sometimes pederasty could be functional (i.e., useful or beneficial to the youth), as exemplified in the Lambert and Kohut cases. This finding segues with the present section, which examines pederasty from historical and cross-cultural perspectives, where researchers have often described functional manifestations (i.e., useful for the youth, man, and social group). The goal here, then, is to review this broader evidence and use it to reconsider Western assumptions of pathology. This evidence will be useful in examining assumed pathology at the level of both the individual (older, younger partner) and group (society).

Numerous reviews examining male homosexual behavior from historical and cross-cultural perspective have been conducted (e.g., Adam, 1985; Cardoso & Werner, 2004; Carrier, 1980; Crapo, 1995; Ford & Beach, 1951; Greenberg, 1988; Gregersen, 1983; Herdt, 1991, 1997; Murray, 2000; Murray & Roscoe, 1998; Werner, 2006). These reviews have described a multitude of societies in the recent and distant past, in which pederastic behavior was commonplace or institutionalized.[9] For the present review, thirty-three of them from across the globe were selected

for illustration and analysis (see Table III): Europe (n = 5), North Africa, Western and Central Asia (n = 2), Sub-Saharan Africa (n = 4), Southeast Asia (n = 6), Melanesia-Australia (n = 9), Polynesia (n = 1), and the Americas (n = 6). Some of these societies were small in territory and number of inhabitants (e.g., the various Melanesian tribes), whereas others were vast geographically and in population (e.g., the Muslim culture across North Africa and into Western and Central Asia). Many other pederastic societies have been described and could have been included. For example, beyond the nine Melanesian-Australian cultures in Table III, at least fifty others with institutionalized pederasty have been studied (Herdt, 1997); Murray (2000) reviewed eighteen Sub-Saharan African cultures beyond the four included here; five Southeast Asian societies were included, but many others also had a tradition of pederasty (Greenberg, 1988; Herdt, 1997); given that Amazonia had a pattern of pederasty similar to that in Melanesia (Herdt, 1987), many more examples from the Americas could have been included. Importantly, the current list, with its varied examples, is likely to be representative of other societies with institutionalized or culturally widespread pederasty, because all of these societies tended to have much in common structurally and in the way pederasty occurred (Adam, 1985; Crapo, 1995; Murray, 2000).[10]

In column two of Table III, the typical beginning and ending ages of boys' participation in pederasty are provided, where they were available or could be estimated. The mean beginning and ending ages were, respectively, 10.72 (n = 25, SD = 1.77) and 16.35 (n = 20, SD = 2.74) and the corresponding median ages were 12 and 17. One society (East Bay) was mostly pedophilic in form (ages 7–11). In the several other societies with beginning ages under 10, these lower ages represented extremes rather than norms. For example, Sambian boys began somewhere from 7 to 10, but generally toward 10 (so 7 was an extreme) (Herdt, 1997), and boys in Muslim cultures could begin as young as 8, but the most common interest was in boys from about 11 to 15 (Rouayheb, 2005). In short, the typical age pattern in these societies generally indicates that the interest or practice began with peripubescence and ended with later adolescence.

Pederastic Interest/Behavior in Men: Examining Assumptions via the Broad Perspective

Western clinical, victimological, and popular thinking generally holds that adult male erotic attraction to males in the pederastic range is highly abnormal, a condition that necessarily pertains to a small minority of men, whose attractions must have resulted from abnormal circumstances such as disturbed development (e.g., brain injury) or deformed personality (e.g., poor self-esteem). Notably, the same thinking used to apply to gay attractions, but that eroded in the aftermath of gay liberation, when such attractions came to be seen by liberal society as normal and non-pathologically caused. The rule that came to dominate thinking

Table III: Examples of Historical/Cross-Cultural Societies (or Subgroups) with Institutionalized or Widespread Pederasty

Society	*Ages of Boys Involved*	*Characteristics of Pederasty*	*Sources*
Europe			
Ancient Greece	12–17	Had mentoring function (prepared elite boys for adult roles as warriors, citizens). Boyish beauty repeatedly valorized in the arts (e.g., love poetry, pottery); body hair (face, legs) ended boys' attractiveness; bisexual interests (women, boys) widespread; attraction to other adult men scorned. Notables with pederastic interests: poets (e.g., Alcaeus, Ibycus, Anacreon, Theognis, Pindar); playwrights (e.g., Aeschylus, Sophocles, Euripides); political leaders (e.g., Solon, Demosthenes, Agesilaus, Philip, Alexander); philosophers (e.g., Socrates, Plato, Zeno, Chrysippus). Eroded with rise of Christianity.	Crompton (2003); Hubbard (2003); Lear (2004); Lear & Cantarella (2008)
Ancient Rome	12–20	No social function. Boyish beauty thematic in love poetry; attractions were to smooth, hairless bodies regardless of gender (for boys, from puberty to start of beard); exclusive attraction to one gender seen as eccentric; relations with other adult men seen as disgraceful. Notables with pederastic interests included: poets Catullus, Horace, Juvenal, Martial, Tibullus, and Virgil, and emperors Trajan and Hadrian. Tradition eroded with consolidation of Christian sexual morality.	Cantarella (1992); Crompton (2003); Lambert (1984); Williams (1999)
Renaissance Italy	12–18	The majority of younger men and adolescent boys in all classes (working to elite) in Florence and other Tuscan cities were involved. This practice represented an unbroken continuance of the ancient Roman practice. Despite severe penalties (e.g., torture, death) based on belief in God's retribution, cases were often treated leniently (e.g., fines) through much of the Renaissance, a pragmatic response to its pervasiveness. Notables with pederastic interests: Donatello, Verrocchio, da Vinci, Botticelli, Pontormo, Bronzino, Cellini, and Caravaggio. The tradition was eroded through stepped-up religiously based anti-sodomy campaigns, especially Savonarola's in the 1490s, along with harsher penalties with more determined enforcement. The tradition was also entrenched in other areas such as Venice.	Crompton (2003); Moulton (2003); Rocke (1996); Ruggiero (1985); Saslow (1986, 1989)
Albania	12–17	Highly romanticized pederasty still found in latter half of twentieth century, owing to isolation from outside world (it was institutionalized during Ottoman rule); nineteenth and early twentieth century visitors confirmed that younger men frequently cultivated passionate, enthusiastic erotic relations with boys (12 to 17); Muslim Albanian custom of "boy-brides" also spread to Albanian Christians.	Greenberg (1988); Murray(1997, 2000); Williams (1992)
English Boarding Schools	11–14	Deeply sentimentalized, erotically based attachments were common in many all-male private boarding schools before 1970s between older (about 17–18) and younger (about 12–13) boys; older teens sought "cute" boys, calling them "talent," "crushes," or "tarts;" younger boys competed to be selected (for the many favors, privileges it entailed); older-younger pairs exchanged notes, poetry, and other items of endearment; after graduating, most moved on to heterosexuality.	Chandos (1984); Gathorne-Hardy(1978); Lambert & Lambert (1968); Lewis (1955); Nash (1961)
North Africa, Western & Central Asia			
Muslim Societies	8–20	Pervasive in Muslim societies (North Africa, Western-Central Asia) eighth to nineteenth centuries; pederastic attractions seen just as normal as heterosexual ones; main interest in boys was early to mid-teens, peaking at	Baldauf (1988); Crompton (2003);

Table III: *(continued)*

Society	*Ages of Boys Involved*	*Characteristics of Pederasty*	*Sources*
***North Africa, Western and Central Asia* (continued)**			
		about 14; appeal vanished with beard (about 16, 17); adult men scorned if passive partners in homosexual relationships; manly behavior was to be active (partner gender did not matter); staggering amount of love poetry shows obsession with boyish beauty, seen as comparable to women's; poets attracted to boys constitutes a Who's Who; desire for boys, but not behavior or lust, was permissible under Islam, but behavior was common nevertheless; tradition ended in late nineteenth century, because of Western colonialism, with its abhorrence of the tradition and the local embarrassment this created, along with local assimilation of European concepts and efforts to modernize.	Massad (2007); Murray & Roscoe (1998); Patanè (2006); Rahman (1989); Rouayheb (2005); Schild (1988); Wright & Rowson (1997)
Siwans of Libya	12–18	Pederasty was a well-entrenched custom from antiquity to at least 1950s; matchmakers made marriage-like arrangements between men and boys; the boy got a gift larger than brideprice for females; man and boy then entered into alliance with family approval; prominent men lent each other their sons for sex; love affairs and jealousies over boys were common; Robin Maugham said: "They will kill for a boy. Never for a woman."	Adam (1985); Herdt (1997)
Sub-Saharan Africa			
Azande of Northern Congo	12–20	Under polygynous system, women were scarce; warriors married boys aged 12 or older; commanders might have more than one boy-wife; man and boy addressed each other with terms such as my love and my lover; boy performed wifely duties and apprenticed for man; on reaching adulthood, the boy typically joined a military company, taking a boy-wife of his own; tradition faded when practice of military service discontinued under British colonialism.	Evans-Pritchard (1971); Murray & Roscoe (1998); Seligman & Seligman (1932)
Mossi of Burkina Faso (W. Africa)	8–15	All chiefs (ca. late nineteenth century) had large groups of pages, boys aged 8 to 15 chosen for attractiveness (some were thought to be quite beautiful); on Friday nights, because heterosexual intercourse was forbidden, a chief would engage in sex with a boy instead (he could also on other nights). Upon reaching maturity, a boy was given a wife by the chief.	Murray & Roscoe (1998); Tauxier (1912)
Tsonga of Southern Mozambique	?–?	Common practice in twentieth century among native men, used as miners by colonialists, was taking boys as wives (with wedding feast, brideprice payment); boy performed domestic, sexual duties; was given presents, money in exchange; fidelity was expected; relationships were marked by intense feelings and jealousy; marriage could be terminated in divorce; some men took boy-wives home after mining, where they were accepted by men's other wives and tribal leaders. Asked if boys desired being wives, an elderly Tsonga man answered, "Yes: for the sake of security, for the acquisition of property and for the fun itself." A beard indicated the boy was no longer a sex object but a competitor for boys.	Murray & Roscoe 1998); Wallace ((2006)
Bantu Speaking	12–18	Male peer homosexual behavior was universal from puberty until age 18 or 20, and adult-youth sexual interactions were common as well. The older men disposed to form such relationships were described as bian	Wallace (2006)

Table III: *(continued)*

Society	*Ages of Boys Involved*	*Characteristics of Pederasty*	*Sources*
Tribes in Central Africa		nku'ma (having a heart for boys). In various Central Bantu groups, boy initiates resided at a sex-segregated lodge during their initiation phase and were required to manipulate the phalluses of the lodge-keeper and other adult male visitors, a practice that was seen as instrumental in helping the boys' phalluses grow large and strong.	
Southeast Asia			
Dynastic China	10–18	Multiple forms of male homosexuality (especially pederasty) occurred across 2 millennia of dynasties; cut sleeve became term for homosexual love (ca. 0 CE) when emperor cut his sleeve rather than waking up his boy favorite, who was on it; poetry after 220 CE often discussed beauty, charms of boys; marriage to boys was a common Fujian practice (ca. 1000 CE); key seventeeth century author (Li Yu) wrote a book illustrating popular interest in pederasty; Western visitors in nineteenth century expressed shock at prominent Chinese men openly courting boys (aged about 14-15); tradition ended in later nineteenth century with embarrassment at Western repugnance and efforts to modernize.	Crompton (2003); Hinsch (1990); Leupp (1995)
Pre-Meiji Japan	10–18	From eleventh to nineteenth centuries, bisexuality (women, boys) was pervasive; over time pederasty appeared in three contexts (monastic, samurai, kabuki theater), the first two as mentorships with boys of ranking families, the last as prostitution; among samurai, it fostered loyalty and sacrifice in youths training to be warriors; shoguns and warlords from twelfth to eighteenth centuries involved in pederasty reads like a Who's Who of military-political history; key seventeenth century author (Saïkaku) illustrated its pervasive presence; another described typical ages of interest (10–13 = "blossoming flower;" 14–17 = "flourishing flower;" 18–21 = "falling flower"); tradition ended in late nineteenth century in response to Western abhorrence and efforts to modernize.	Crompton (2003); Leupp (1995); Watanabe & Iwata (1989)
Ancient Korea	?–?	Pederasty at times common in the imperial realm. By sixth century CE, imperial court had hwarang ("flower boys"), a corps of young warriors made up of aristocratic youth chosen for beauty, education, and martial prowess. Various kings through the fourteenth century known to have had pederastic relations at the court. Monastic pederasty was widespread. Popularity of "beautiful boys" in seventeenth century entertainment indicates pederasty was common among the gentry. It was especially common among provincial gentlemen, some of whom kept boy-wives, a practice openly acknowledged in their villages.	Leupp (1995)
Tibet	?–?	Monasteries had a strong reputation for master-novice sexual relations, which participants viewed without shame as they made no attempt to conceal them to Westerners upon early contacts.	Prince Peter (1963)
Batak of Northern Sumatra	12–?	In late childhood, boys moved into all-male houses with about a dozen other boys and young men. From puberty until marriage, homosexual behavior was prescribed and constant. Pederasty and age-equal sex were both common. Sequestering the sexes ensured girls remained virgins until marriage (premarital sex for girls was highly taboo). With outside cultural contact, the tradition began to change.	Money & Ehrhardt (1972)
Java	8–14	In Ponorogo area, all-male folk dance was a major cultural institution (before 1990s); spectating men admired beauty of dancing youths; boy dancers aged 8–14, called gemblaks, often had culturally approved sex with	Weis (1974); Williams (2011)

Table III: *(continued)*

Society	*Ages of Boys Involved*	*Characteristics of Pederasty*	*Sources*
Java *(continued)*		men; interviewees who had been gemblaks all viewed the sex positively; all got married; some had long-term sexual relationships with the dance troupe directors (the Waroks). Waroks were spiritual guides, valorized by the community. Each Ponorogo village had a formalized male group for unmarried males; the group did socially constructive work for the community; heterosexual sex before marriage was disapproved, so members had sex with gemblaks; this practice was seen as benefiting the gemblaks, who got gifts, the group members, who got a sexual outlet, the community, which got good works. Under Western influence, educated Ponorogo people began seeing all this as an embarrassment (relic from an "uncivilized" past); have since worked to end the practice.	
Melanesia-Australia			
Sambia of New Guinea	7–14	Boys between 7 and 10 taken into men's society; until age 14 fellated older bachelors up to age 25; semen viewed necessary for growth to be strong warrior; after age 25, most men stopped being semen "donors" to get married (some men continued who preferred boys); relations were not just duty for the boys, who were often complicit in arousing bachelors through bawdy enthusiasm; as boys matured, they tended to express more desire for insemination, became more aggressive in soliciting it.	Herdt (1991, 1997)
Gebusi of New Guinea	11–14	Boys in early adolescence "coquettishly" initiated sexual relations with older, unrelated males. As with the Sambia, the belief was that insemination grew the boys into men. The sexual relations were based on personal affection rather than obligation.	Herdt (1991, 1997)
Keraki of New Guinea	12–14	All boys were sodomized for about a year, seen as essential for their development; adult informants repeatedly answered, when asked whether they submitted as boys, "Why yes! Otherwise how should I have grown?" Bachelors saw some boys as more attractive, gave them more attention; they sodomized boys until marriage, then engaged mostly in heterosex, but continued to have relations with boys on occasion.	Williams (1936)
Marind-Anim of New Guinea	12–20	Upon reaching puberty, a boy moved in with a mentor and his wife; he assisted the mentor in gardening, hunting, and other chores; their relation was sexual and lasted about seven years until boy's later marriage; bond between them was extremely strong; the sexual contacts seemed to contribute to the strength of this bond; insemination was regarded as helpful to boy's growth.	Van Baal (1966)
Kaluli of New Guinea	10–13	From 8 to 28, males resided in sex-segregated hunting lodge; daily, boys accompanied older males on grueling hunting trips, learning essentials of the practice; at 10 or 11, a boy's father chose for him an older male to inseminate him for months or years; some boys chose their own inseminator; insemination thought essential for growth. Men looked back on youth in hunting lodge with nostalgic excitement, zest; remembered continual hunting, growth-stimulating insemination, ritual discipline, unity of purpose, vigorous manly ethos as highlight of their lives; whole practice was one of prestige for them. Tradition ended in 1960s by colonial administration and missionaries, who policed against it.)	Schieffelin (1982)

Table III: *(continued)*

Society	*Ages of Boys Involved*	*Characteristics of Pederasty*	*Sources*
Big Nambas of Malekula, Melanesia	?–?	Society had rampant warfare, chiefs had near monopoly on women; father chose man to circumcise his son; this man then became boy's "husband," and the boy his "wife;" intercourse believed to strengthen boy's penis; relationship was very close; boy followed the man everywhere, participating with him in daily chores; man was intensely jealous if other men took interest in the boy; if man or boy died, the other would mourn deeply; some men were so deeply homosexual in affections that they would seldom have intercourse with their wives, preferring the boy; every chief had several boy lovers.	Herdt (1993); Layard (1942)
East Bay Islanders (Santa Cruz)	7–11	Nearly every male engaged in extensive homosex; men had sexual relations with boys (7 to 11); it was obligatary to give boy presents in return; the boys discussed these contacts freely and without shame in presence of parents, friends. Upon marriage, only a few men became exclusive heterosexuals; most continued to have sex with boys as well; only one man in the study preferred exclusively boys.	Davenport (1965)
Aranda of Australia	10–14	Typically, an unmarried man (late teens) would take a boy from 10 to 12 years old to be his wife and live with him for several years until he (the older partner) got married to a woman. Aside from sex, the man served as the boy's mentor (e.g., in hunting).	Strehlow (1913–15)
Nambutji of Australia	?–?	Every boy became a baywife to a man, who circumcised the boy and whose daughter became the boy's wife when he reached adulthood. In the intervening time, the man and boy were homosexually involved.	Roheim (1945)
Polynesia			
Marquesas Islands in Polynesia	?–?	Adolescent boys frequently had sex with each other. Married men rarely had homosex, but would when conditions prevented heterosexual intercourse; they preferred boys for this purpose, whose bodies they said were soft, like females; contacts with boys were casual, fleeting, and without stigma.	Suggs (1966)
Americas			
Mayans, Aztecs, and Incas	?–?	Among sixteenth and seventeenth century Mayans, missionaries reported a custom of youth-younger boy marriages. In field work, Williams (1992) found pederastic behavior still common in late twentieth century Yucatan. Missionaries reported religious-based pederasty as common among the Aztecs and Incas.	Greenberg (1988); Williams (1992)
Coerunas Indians of Brazil	?–?	An apprentice healer would go into the woods for an extended time with an older healer, who would transmit his special powers to the youth through sexual relations and also directly instruct him on the art of curing illnesses.	Greenberg (1988)
Zapotecs of Mexico	12–?	Boys entering puberty commonly had sexual relations with men.	Williams (1992)
Various Indian tribes in southern Mexico	12–?	Married men would adopt an adolescent boy, who was proud to have been chosen and saw it an honor to be the man's lover; the boy would help the wife, her children, and the household, and would take a boy of his own when later an adult and married	Ross (1991)

Table III: *(continued)*

Society	*Ages of Boys Involved*	*Characteristics of Pederasty*	*Sources*
Pirates	12–?	Lived in all-male arrangements with mixed ages from young adolescents or younger through older men. Sexual relations between men, especially pirate captains (e.g., Blackbeard), and adolescent boys were common.	Burg (1995); Williams (1992)
Hobos	12–?	Between 1880 and 1930, sexual relations between men and adolescent boys were commonplace among transient workers in the Pacific Northwest. Developing industries (e.g., lumber, mining) drew in large numbers of unmarried men and male youths from other parts of the United States to perform backbreaking work. They lived and worked in all-male societies, which fostered intergenerational sex (rather than age-equal sex). Their relations were social, not just sexual—the boys often served domestic functions for the men. In return, they got various benefits (e.g., advice, apprenticing, emotional support, safety, protection). By the 1930s, these all-male societies eroded, owing to mechanization (which reduced brute-strength work) and population expansion (with more women). These changes, along with constant policing activity (the middle class saw pederasty as a threat to their youth and the family), helped to dissolve the tradition.	Boag, (2003); Flynt (1927); Williams (1992)

Note. Age ranges of boys involved in pederasty are explicitly stated in sources in most cases, estimated from sources' descriptions in others (e.g., if beginning of puberty or adolescence is noted, age 12 was used).

was that sexual attractions are normal when they are directed at other fully mature persons, whether the same or opposite sex; however, when directed primarily at less than fully mature others, such attractions are disorders (e.g., Blanchard et al., 2009). The unarticulated assumption in this thinking is that adult sexual attractions have been "designed" (e.g., by evolution) to be directed only at other adults, and pederastic attractions are therefore "against design," and consequently unnatural and abnormal (cf. Wakefield, 1992). A counterpoise to this assumption is that it is culturally constructed, that "unnatural" and hence "abnormal" are conflations with "uncultural," and that judgment as to facts of nature have been biased by hegemonic cultural values (cf. Vanggaard, 1972; Williams, 1999). The historical and cross-cultural evidence in Table III, the related scholarly source material, and the many literature reviews on homosexuality across time and place are probative regarding these competing accounts.

In society after society in the table, it was the typical adult male, not the deviant one, who had erotic interest in immature males, an interest that usually ended shy of attainment of full sexual maturity by the younger males, a stage in development that pervasively represented a sexual turn-off for the adult males. In most of these societies, erotic attractions to fully mature males were rare and scorned. In ancient Greece and Rome, adult males were generally attracted to smooth, young bodies—boys in the "flower of youth" (beginnings of puberty until beard growth) and women in their prime (Hubbard 2003; Williams, 1999). Body hair (e.g., on face and legs) was decisive in ending boys' attractiveness. Not only women, but boys, too, were frequently seen as beautiful, as repeatedly expressed in love poetry written by Greece and Rome's premier poets. Men exclusively attracted to only one gender were considered "eccentric," although it was common for them to be more inclined to one gender than the other (Williams, 1999, p. 228). Men's sexuality was energized by difference—women's different gender, boys' different age and level of maturity, and sometimes other adult men's different gender orientation (i.e., cross-gendered). Williams laid out this pattern of difference as a principle of mature male eroticism across time and place, except for the modern West, with its unique emphasis on egalitarian sexual relations. Cross-cultural reviews of male homosexuality support Williams's thesis (e.g., Adam, 1985; Greenberg, 1988; Herdt, 1997; Murray 2000).

The essentials of ancient Roman adult male erotic attractions applied to most of the other literate civilizations in Table III (e.g., ancient Greece, Renaissance Italy, pre-Meiji Japan, Muslim societies of North Africa and Western, Central Asia). In Muslim societies from the eighth to nineteenth centuries, particularly extensive documentation shows that "men's attraction to boys was considered as natural as their attraction to women" (Rowson, 1997, p. 159) and that it was widely taken for granted that "beardless youths posed a temptation to adult men as a

whole, and not merely to a small minority of deviants" (Rouayheb, 2005, p. 115). Monroe (1997) illustrated these common beliefs by quoting a twelfth century religious jurist, who remarked that "He who claims that he experiences no desire when looking at beautiful boys or youth[s] is a liar, and if we could believe him, he would be an animal, not a human being" (p. 117). Though pederastic *behavior* was condemned by Islam (a carryover from its Judeo-Christian roots), pederastic *desire* was not disapproved, unlike in Judeo-Christian culture, a circumstance that contributed to its flourishing.

As in Muslim societies, pederasty was pervasive in China and Japan until the nineteenth century. Much evidence remains of its practice and prevalence in these cultures, owing to the extensive legacy of writings and other source materials dealing with it (Hinsch, 1990; Leupp, 1995; Watanabe & Iwata, 1989). For example, in Japan's Tokugawa period (1603–1868), the overwhelming majority of sexual or romantic references attests to a culturally entrenched bisexuality in men directed at women and boys, the latter aged 10 to 18 with 14 to 17 being the prime (Leupp, 1995). Important with respect to drawing inferences about pederasty is the complete cultural independence between societies of the Far East and the Mediterranean and Near Eastern societies, coupled with a common pervasiveness of pederastic interests in both. Likewise, the many nonliterate cultures in Table III, which were independent of the high civilizations and often each other as well, and in which pederastic desire and behavior were similarly pervasive, add force to inferences about mature males' potential for pederasty.

Beauty and intensely passionate feelings concerning peripubertal and adolescent boys were recurring themes in both the literate and preliterate cultures in Table III. In the former, traditions of love poetry focused particularly on boyish beauty and strong passions, and were crafted not merely or necessarily to express personal feelings but to feed the demands of a literate audience, where such perceptions and feelings were commonplace (Hinsch, 1990; Lear & Cantarella, 2008; Leupp, 1995; Rouayheb, 2005; Williams, 1999). These traditions are indicators of widespread genuine pederastic desire for boys in those cultures, rather than mere role playing in response to custom and cultural expectations. Notably, men in these cultures saw beauty in both women and boys: a parallel love poetry genre existed for both. Just as men eroticize women in all human societies in connection with their perceived beauty, so they often eroticized boys in the societies in Table III in connection with perceptions of boyish beauty. This is an important point, because part of sexual victimological theory is that erotic attractions to minors are based essentially on power, not sex (cf. Paglia, 1992). This view, however, was never based on empirical evidence, but instead derived from ideological assumptions coupled with clinical impressions. The empirical evidence in the present historical and cross-cultural review, however, locates pederastic desire in genuine eroticism rather than in "power needs."

In short, contrary to Western thinking, in these cultures pederasty was not confined to men on the fringes, but applied alike to typical men, high-status men (e.g., chiefs), and esteemed men (e.g., the *Who's Who*). The clinical, victimological, and popular assumption in the West that pederastic desire is intrinsically deviant for the entire human species is both incorrect and clearly a social construction, as the historical and cross-cultural perspective amply reveals. The assumption that if a "normal" man is going to be attracted to another male, then that male *must* be an adult, is a late twentieth century Western construction, not an empirical induction based on the historical record of what "normal" men have actually found attractive. Later, the issue of pederasty and "design" is examined (cf. Wakefield, 1992), but for now it seems clear that Western assumptions about unnaturalness and intrinsic abnormality are conflations with unculturalness (cf. Bullough, 1976; Vanggaard, 1972; Williams, 1999).

A theoretically important point is the repeated finding across the societies in Table III that individual males differed in their pederastic inclinations, inasmuch as few men had particularly enduring attractions focused mostly on boys, many had a mix of attractions to both boys and women (but often somewhat inclined toward one or the other), and some others were concentrated mostly on women (e.g., Davenport, 1965; Herdt, 1997; Leupp, 1995; Rouayheb, 2005; Williams, 1999). This pattern suggests a natural variation in pederastic tendencies along a continuum. In societies tolerating or approving the behavior (e.g., ancient Greece, Samurai Japan), or in environments encouraging it (e.g., the all-male English boarding schools or pirate and hobo societies), the continuum appears to be normally distributed. But in antagonistic societies or environments, such as ours, this normally distributed potential is highly constrained in its actualization, such that only individuals presumably above a certain threshold on the continuum are likely to express the potential, producing a highly skewed distribution, with the strong modal outcome being no expressed interest at all. This speculation is consistent with the historical and cross-cultural data, as well as with the pattern in our own society, and suggests approaching pederasty as a normally distributed behavioral tendency that interacts with the cultural environment at hand to produce the phenotypic distribution. Contemporary Western assumptions that locate the cause of pederasty in idiosyncratic pathology, which describes dominant professional opinion well, rather than in the interaction between preexisting potentials and cultural-environmental inputs, fail in light of the historical and cross-cultural evidence.

Pederasty and Boys: Examining Assumptions via the Broad Perspective

Anthropological studies on preindustrial societies with culturally institutionalized or widespread pederasty provide reports on how the

younger males responded to sexual contacts with older males (see Table III). Among the Javanese, men remembered their boyhood pederastic experiences entirely positively, despite the researcher's probing to uncover negative cases (Williams, 2011). Sambian boys showed much initiative in these contacts, especially at older ages (Herdt, 1991, 1997). Keraki men believed that they could not have developed properly without these relations as boys (Williams, 1936). Kaluli men looked back on the complex of grueling hunting, living in a sex-segregated men's lodge, ritual discipline, unity of purpose, vigorous manly ethos, *and* growth-stimulating insemination by older males as the highlight of their lives (Schieffelin, 1982). East Bay boys discussed their sexual experiences with men freely and without shame in the presence of their parents and friends (Davenport, 1965). Gebusi boys aged 11 to 14 initiated sexual relations with older males based on personal affection rather than obligation (Herdt, 1991). The bond between Marind-Anim boys and their adult male partners was extremely strong, which was apparently facilitated by the sexual interactions (Van Baal, 1966). Likewise, pederastic relations were extremely close among the Big Nambas (Layard, 1942). Among the Kiman, pederastic behavior would stop after adolescence, but "nevertheless, a lifelong emotional relationship often" resulted (Serpenti, 1984, p. 305). In various southern Mexican Indian tribes, adolescent boys were proud to have been chosen for pederastic relationships, seeing it as an honor to be their men's lovers (Ross, 1991). And being a Tsongan boy-wife was not just good for security, but for the "fun" it afforded (Murray & Roscoe, 1998).

What is important to point out about these reactions, which are diametrically opposite to clinical characterizations and popular suppositions in the modern West, is that they came from boys in cultures in which pederasty was acceptable and often esteemed. Even in Western society, as the empirical review presented previously showed, pederastic relations have frequently been experienced positively by youths when these relations occurred under certain circumstances (e.g., within friendships, depending on the perception of willingness and receiving important nonsexual benefits). Notably, these Western relationships all occurred within a cultural atmosphere highly condemning of pederasty, a circumstance that was likely to influence the boys' perceptions of their experiences to some degree negatively, depending on the extent to which they were exposed to the moral negatives about pederasty or homosexuality and had actually absorbed them (cf. Constantine, 1981). The net positive response in these cases implies that the perceived benefits outweighed the perceived moral negatives. If this latter factor were turned into moral positives, as it would have been in cultures approving and encouraging pederasty, then it follows that net positives in the population of experiences would increase sizably. Culture contributes significantly to the interpretation of personal experiences, sexual or otherwise, and must be taken into

account for valid understanding of reactions (Herdt, 1997; Williams, 1999). Western professional thinking, not to mention lay thinking, has been quite neglectful or oblivious in this regard, rarely taking into account cultural influence, locating negative reactions instead entirely in the experience itself.

Pederasty and the Group: Examining Assumptions via the Broad Perspective

In our society, pederasty is not simply considered pathological in the case of the adult actor and damaging in the case of the youth involved, but harmful to society as well. A frequent claim included within media commentaries, for example, is that *no* society that permits this behavior can survive. Given this thinking, it is noteworthy that many of the cultures listed in Table III held diametrically opposite views and lasted for centuries or even millennia. Many of them considered pederasty necessary for their boys to develop properly so as to enable their culture to function adequately. This section reviews pederastic functioning according to accounts by historians, anthropologists, and the societies themselves and then reconsiders our society's view of *intrinsic* malfunction not just at the individual but also the group level.

Sexual victimologists and others have compared adult-minor sex, including pederasty, to slavery, and when they have considered societies such as ancient Greece, they have dismissed claims of pederasty's social role there, arguing that these societies had slavery, too. Slavery can be described in many ways, but for present purposes what is relevant is that it retards or prevents another's development and realization of potential by forcing him or her to sacrifice effort that instead advances the slaveholder's interests. In ancient Greece, pederasty was institutionalized among the elite in order to advance, not hinder, elite boys' development, so as to recreate adult male citizens who functioned well according to the society's needs (Hubbard 1998; Lear, 2004; Rice, 2005). That is, the social custom was viewed as functional at the level of the adult male lover (*erastes*), the beloved youth (*eromenos*), and society: the *erastes* had a dedicated apprentice; the *eromenos* learned manly skills and virtues; the society as a whole had a stronger citizenry. In the warrior culture of early Greece, manly skills (e.g., martial) and virtues (e.g., courage, loyalty, self-sacrifice) were needed, and one-on-one mentoring with its emotional connection was an efficient means of transmitting these characteristics (Neill, 2009). The slavery analogy is a projection of current dominant ideologies and obfuscates the actual character of pederasty in ancient Greece and many other cultures across time and place—that is, societal benefit, owing to building, not thwarting, youths.

It is relevant to add that this social custom in ancient Greece came as a package involving beauty, desire, sexual excitement, and pedagogy (Lear, 2004). Boyish beauty was thematically valorized in vase paintings,

with the inscription *kalos* (beautiful) frequently inscribed (Lear & Cantarella, 2008). In philosophy, Plato's *Phaedrus* held boyish beauty to be that which most closely resembled the Form of Beauty (i.e., the ideal of beauty) in high heaven. Numerous Greek poets from the seventh century BCE to the triumph of Christianity in the fourth century CE wrote of the bewitching power that boys' beauty held over them or other men (Hubbard 2003; Lear, 2004). A leitmotif from the archaic period (before 480 BCE), which was imitated repeatedly in later times, was the power of a beautiful boy's eyes, which were said to induce a state of helplessness in the adult male admirer (Hubbard, 2002). The point is, as with the earlier discussion on beauty, that Greek pederasty was driven by a genuine erotic energy tapped for the benefit of the social group, not the neurotic energy of satisfying personal "power needs" in opposition to the group's well-being (cf. Hubbard, 2000; Paglia, 1990).

In medieval and premodern Japan, pederasty was also institutionalized for its social utility (Leupp, 1995). By the thirteenth century it was prevalent in Buddhist monasteries. Boys from ranking families entered around age 10 to train for the clergy or to learn scripture and by their early teens may have formed a pederastic relationship with a monk, serving as his acolyte. The relationship was acceptable in the culture, being understood as facilitating the pedagogic process, and thus serving to maintain the institution. It was eventually formalized in a "brotherhood bond," resembling man-boy marriages in many other pederastic societies (see Table III). Monastic pederasty influenced the development and institutionalization of feudal pederasty practiced by samurai warriors. Feudalism developed by the twefth century, when centralized state institutions collapsed. Rule was then organized in a hierarchical military class made up of lords and samurai warriors, who exchanged service for land. By the late sixteenth century, the samurai population had reached the hundreds of thousands. The practice of pederasty was pervasive among them and was recognized to serve the mentoring function of transmitting martial skills and virtues to the youths, to aid the warriors by giving them devoted apprentices, and ultimately to maintain the functioning of the ruling order and thus the social whole.

A revealing view into the nature of premodern Japanese pederasty comes from the writings of Saikaku, one of the world's literary giants, who first achieved national recognition with his 1687 book on *shudo* (i.e., pederasty), entitled *The Great Mirror of Male Love* (with subtitle *The Custom of Boy Love in Our Land*) (Schalow, 1989). His book became an instant success, owing to the contemporary popularity of pederasty as well as his novel approach—he combined the three main forms of pederasty (monastic, samurai, and kabuki) into a single prose work. His forty short stories reflect and reveal the ideals of pederasty as viewed in his day. Pederasty involved mutual emotional exchange between man and boy, embodying *ikiji* (shared masculine pride), an element not obtainable

from male-female relations. A youth was deemed worthy of the love of a man if he possessed *nasake*, a form of empathy that involved emotional sensitivity to the suffering of a potential lover, as well as the desire to relieve that suffering. In the case of the samurai, the man was expected to give social backing to the youth and to provide a model of manliness. In exchange, the youth was expected to be a good student of samurai manhood, which meant vowing to be loyal, steadfast, and honorable in his actions. Both were expected to sacrifice for the other, even the ultimate sacrifice of life if honor required it (Schalow, 1989; Saikaku, 1990). This practice is unimaginable to our society, where pederasty is conceived of only in terms of exploitation and harm. But in premodern Japan, with its very different social structure, pederastic relations were an efficient means, owing to their intimate nature, of transmitting culturally needed masculine skills and emotional readiness to the next generation in service of the wider society (cf. Neill, 2009).

In most preliterate cultures in Table III, pederasty was also institutionalized for its mentoring value. In the anthropological literature, these cultures are referred to as "mentorship" societies, in recognition of the social function that pederasty was serving for them (Crapo, 1995). The form of mentorships could be one-on-one mentor-apprentice arrangements of the type in ancient Greece or communal arrangements, as in many of the Melanesian societies (Adam, 1985). In Table III, examples of the ancient Greek (one-on-one) form were the Azande warriors of the Northern Congo, the Marind-Anim of New Guinea, the Aranda of Australia, and the Coerunas Indians of Brazil. Examples of the Melanesian (communal) form were the Sambia, Gebusi, and Keraki of New Guinea. In this latter form, boys would interact sexually with many older males, taking in their semen orally or anally, with the belief being that the semen "grew" the boys, without which they would not mature (Herdt, 1987, 1993). In these societies, pederasty was one of a number of cultural rituals involved in transforming boys into cultural producers of socially needed activities, particularly warfare, by instilling in them the skills, emotional readiness (e.g., courage), and group orientation (e.g., loyalty, sacrifice) required for these activities. It was a mechanism for reproducing the male group, so vital to the way of life in these societies (Herdt, 1987, 1991, 1993, 1997; Keesing, 1982).

In our society today, the male group is far less present or important compared with the societies just discussed. One key reason why is unprecedented advances in technology, which have enabled women to take on many jobs or tasks that traditionally only men could do. But in the low-tech environs before the modern age, only males could undertake war and big-game hunting (Gat, 2006; Gilmore, 1990). As Gat argued, war was often not a choice, but a necessity throughout our species' existence, as enemy tribes posed a constant threat to invade at night and kill everyone: this pattern of warfare has been ubiquitous among extant and

historical hunter-gatherer and primitive horticulturalist societies, and inferentially can be assumed to extend throughout prehistory.[11] Warrior responsibilities and big-game hunting necessarily fell on males, being twice as physically strong as females on average, such that in low-tech environs females could not have competed with male enemies. Because of this, in past low-tech societies where warfare or big-game hunting were priorities, the male group was also a priority, as was its maintenance, which behooved adult males to recruit and train boys continually (Mackey, 1990; Weisfeld, 1979; Weisfeld & Billings, 1988). It was in such environs that pederasty was one of the mechanisms to facilitate boys' enculturation to maintain the male group, as the historical and cross-cultural review just presented shows. Later, it will be considered whether pederasty was a naturally selected mechanism designed to serve this function (cf. Mackey, 1990).

In short, pederasty is pervasively portrayed in our society as *intrinsically* disordered in the case of the man, harmful in the case of the boy, and destructive in the case of society. The historical and cross-cultural review just presented adds much weight to the previous nonclinical empirical review in undermining these assumptions. Moreover, the present review supports the radically (from our society's point of view) different conceptualization of pederasty, already suggested in some of the nonclinical empirical data and in the case studies of Lambert and Kohut presented previously, that it can be functional at both the individual and group levels rather than necessarily dysfunctional. Importantly, function, culture, and environment interact, which is considered in greater detail next.

Sociological Considerations

Cultural ideologies and social structures are closely linked, and either may causally influence the other (Gilmore, 1990). The social structure composing the Greco-Roman world (e.g., sharp gender-role divisions; mentorships institutionalized within a warrior culture) was favorable to the expression of pederasty (Crapo, 1995), as were key cultural ideologies (e.g., manly sex was rigidly defined by the active role; the gender of acceptable partners was irrelevant) (Williams, 1999). Cultural ideologies, in turn, may be encoded in myths that validate them. For the Greeks, many of their most important male gods sought sexual relations with both women and boys. Examples of pederastic affairs included Zeus with Ganymede, Apollo with Hyacinthus, Poseidon with Pelops, Dionysus with Ampelus, and Hercules with Hylas (Pequigney, 2002). Premodern Japan had similar social structure, cultural ideologies, and validating myths. Pederasty was supported by the beliefs that Kūkai, founder of the Shingon Buddhist sect and one of the great religious figures in Japanese history, imported it from China in the ninth century CE, that one of the gods of Happiness indulged in it, and that a number of Shinto gods were guardians of it (Leupp, 1995). In Melanesia, pederasty always had religious

sanctification (Herdt, 1991). In this section, cultural ideologies and social structures, as they influence the expression of pederasty, are examined.

Cultural Ideologies

The Greco-Roman tradition of pederasty, lasting at least a millennium, gradually decayed as Christianity, which was intensely hostile to it, rose to dominance (Crompton, 2003). Christianity brought in the Old Testament (Genesis 18–19) tale of God's destruction of Sodom and Gomorrah and the other cities of the Plain as punishment for a variety of sins, one being the attempted homosexual rape of two angels appearing as male youths: this sin is the one that came to define the entire tale in the Western mind (Crompton, 2003; Rice, manuscript in preparation). The Sodom myth served to morally invalidate pederasty, as well as any type of homosexual behavior between adults, because it instated the belief that all homosexual behavior was wicked and dangerous, a belief that lawmakers for centuries afterward helped to institutionalize through draconian legislation (punishments often included torture and execution), lest cities yet again be destroyed by God (Crompton, 2003; Greenberg, 1988; Rice, manuscript in preparation).[12] The ideology of pederastic and other homosexual behavior as evil was implanted in the Western mind, conditioning in the populace concomitant emotional feelings of revulsion in reaction to instances of this behavior.

When Westerners visited the Far East or Muslim societies much later and encountered pederastic relations, their reactions, under the influence of centuries of this potent ideology, were ones of unfathomable disbelief and deepest abhorrence. An Englishman visiting China in 1806 recorded his reactions, writing of "detestable and unnatural" acts that are "attended with so little sense of shame." He complained that the first officers of the state did not hesitate to show off their interests, with each "constantly attended by his pipe-bearer, who is generally a handsome boy, from fourteen to eighteen years of age" (quoted in Hinsch, 1990, p. 141). Another Englishman visiting Baghdad, when learning that his Iraqi guide's beloved was a boy, later recounted that he "shrunk back from the confession as a man would recoil from a serpent on which he had unexpectedly trodden" (quoted in Rouayheb, 2005, p. 92). By the middle of the nineteenth century, this attitude of unyielding revulsion from Westerners worked to undo a millennium or more of pederastic traditions in China, Japan, and the Muslim world, as the elite of these cultures, embarrassed by Western reactions and yet wanting to modernize in line with the West to get its goods and technology, sought to discard permissive ideologies concerning pederasty and institute Western-style heterosexual exclusivity (Hinsch, 1990; Leupp, 1995; Massad, 2007; Rouayheb, 2005).

Notably, even within the West with these ideologies already instated, the fall of pederasty was slow to occur (Boswell, 1980; Oberhelman,

1997). In certain pockets, particularly Renaissance Florence and neighboring regions, it lasted in unbroken form from Greco-Roman times as a pervasive pattern, falling only with renewed energized efforts by church and state to suppress it (Rocke, 1996). For present purposes, the point is that cultural ideologies strongly affect the expression of pederasty among a populace. If supportive, the practice can be widely distributed across the male population. If antagonistic, the practice will be or become uncommon. The Sodom myth has been a particularly potent antagonistic ideology, with direct and indirect effects across the globe.

Social Structures

Cross-culturally, as reviews have repeatedly shown (e.g., Ford & Beach, 1951; Greenberg, 1988; Murray, 2000; Werner, 2006), when male homosexual behavior has occurred in a society as an acceptable pattern, it has generally fallen into three basic forms: (a) age-stratified (i.e., pederasty), (b) gender-stratified (i.e., a masculine male with a transgendered male), and (c) egalitarian (usually between adolescent boys, who give up the practice when they become adults). The pederastic and gender-stratified forms have both frequently occurred cross-culturally and historically, with the former often being practiced society-wide but the latter being restricted to much smaller numbers of individuals (Adam, 1985; Ford & Beach, 1951; Gregersen, 1983). Notably, the gay pattern (i.e., exclusively same-sex relations between relatively equal adults), a subtype of the egalitarian form, has been restricted to the modern West and is exceptional from a cross-cultural and historical perspective (e.g., Adam, 1985; Cardoso & Werner, 2004; Gregersen, 1983; Herdt, 1987; Werner, 2006).

Crapo (1995) and Murray (2000) examined the moderating effects of social structure on the appearance of the different forms of homosexual behavior by conducting cross-cultural statistical analyses. Combining their results, they found that mentorship (i.e., pederastic) societies had greater sex role distinctions, greater adolescent sex-segregation, greater tendency to consider virginity to be necessary for brides, less paternal effort in rearing the very young, less female political power, less occurrence of husbands and wives sleeping together, and more polygyny (limited to older and wealthier men). Crapo added that mentorships were commonly embedded in exclusively male settings (e.g., military, religious), where young males were initiated into the skills and symbolism of warfare, religion, politics, and male social dominance. According to Crapo, in mentorship societies, younger males needed the training offered by their elders to climb the male status ladder. Conversely, gender-stratified societies had greater equality between the sexes in political matters, in principal subsistence work and in sex roles more generally, and were less likely to segregate adolescent males. Murray found that egalitarian systems were most likely where premarital sex was most permissible and fewer wealth distinctions existed. Crapo concluded that the social traits commonly

associated with gender-stratified homosexuality were also present where homophilia (e.g., the gay pattern in the modern West) was found.

In Western culture, the pederastic form dominated from classical times through the Renaissance, being openly and widely practiced early on, though more hidden and sporadic later (Greenberg, 1988). Sometime after the Renaissance, the homophilic, or gay, form began emerging as a significant pattern in the West. At the same time, the pederastic form lessened, owing to the industrial revolution, which acted to create greater distance between the generations, and thus to reduce older male-younger male social interactions, which beforehand had been extensive. Nevertheless, well into the twentieth century, both forms, though derogated and criminalized, appeared in various underground contexts with regularity (for the former, see Reiss, 1961; Rossman, 1976). By the 1970s, a series of major social structural changes set in, which helped to alter the trajectories of the pederastic and gay forms substantially, rendering the former even more deviant, but the latter relatively normal. These changes included most of the elements analyzed by Crapo (1995) and Murray (2000). Tendencies toward sex-segregation during adolescence began to disappear, virginity until marriage was no longer emphasized, sex-role distinctions weakened considerably, women gained more significant political power, fathers exerted more child-rearing efforts with young children, and all-male societies weakened and disappeared as men began spending free time mostly with female companions and nuclear family units rather than men's groups (cf. Coontz, 2006; Mackey, 1986, 1990).

These structural changes were all related to major advances in technology throughout the twentieth century, increasingly reducing or eliminating the purely muscular nature of many male occupations, while opening up many occupations that were not physically demanding at all (e.g., white collar, tertiary, service sector). These changes helped to erode sex-role distinctions, because women could do most of these jobs as well. Another technological advance, the invention of the pill in 1960, removed pregnancy as a major obstacle in women's securing careers (Gibbs, 2010). It also helped usher in the sexual revolution, in which virginity lost its cultural importance. Cross-culturally, manhood has been valued to the extent that the social and physical environment is dangerous and physically demanding, as in warrior and big-game hunting societies (Gilmore, 1990). With the significant reduction in brute-strength male activities, however, manhood has weakened in our society as a cultural ideal or necessity, paving the way for women's gains in political power. Moreover, cross-culturally, males generally congregate with other males in all-male groups in cultures where brute-strength male activities predominate, but associate mainly with women and nuclear families when these activities do not (Mackey, 1986). Increasingly, all-male groups have thinned out or disappeared in our culture with the advances in technology, and the genders mix much more regularly outside the workplace as well, such

that former practices of sex-segregation have all but vanished and new practices, such as fathers' greater involvement in child-rearing of young children, have grown.

In short, cross-cultural and sociological considerations provide an important means for attempting to understand trends and fluctuations in pederasty and homophilia. The supplanting of former dominant social structures with the current one has altered the practice and perception of both the pederastic and gay forms. As we shall show, associated changes in cultural ideologies have been important as well.

Additional Considerations: Cultural Ideologies Revisited

As just discussed, changes set in beginning around 1970 that heightened pederasty's deviant status, rendering it considerably more derogated than previously, while virtually eliminating the deviant status for androphile gay sexuality, which quickly became not simply tolerated but acceptable in many circles. For example, across states in the United States, pederastic behaviors that might have brought probation or minimal prison sentences half a century ago today are routinely subject to decades or life in prison (Hubbard, in this volume), whereas gay relations that subjected the participants to prison half a century ago are now increasingly becoming eligible for marriage. The discussion of cultural ideologies and social structures up to this point needs supplementing to adequately account for the intensity of this altered cultural thinking with respect to pederasty.

An older cultural ideology that formed an important foundation for the changes after 1970 was "childhood innocence," the conviction that children are asexual and need to avoid sex for healthy development. This notion emerged during the Enlightenment and formed the basis for the masturbation hysteria from the mid-eighteenth to early twentieth centuries, in which childhood masturbation was claimed to cause a long list of maladies from acne to death (Hare, 1962). It also influenced Freud's early theory that childhood seduction is the cause of all neuroses (Foucault, 1978). As Foucault showed, these beliefs developed in response to changing social conditions and relations between the state and individuals, in which it was useful for the state to asexualize children, and in which clinicians accommodated the state in their theorizing. That childhood innocence is a Western belief, not a scientific fact, was empirically demonstrated by Ford and Beach (1951) in their cross-cultural and cross-species review of child sexual development.

Another older cultural ideology was that sex was for procreation. By the 1970s, in consequence of the sexual revolution, this older ethos was replaced by "consenting adults" as the legitimate basis for sexual relations (Levine & Troiden, 1988), which helped enable gay liberation to occur and succeed. At the same time, various feminists were raising consciousness about rape of women, making quick gains in changing social views and response. Following this success, they moved on to

incest, attributing to it the same motives (e.g., power) and effects (e.g., trauma, lasting maladjustment), which they observed in or attributed to rape. Sexual victimology, consisting of a loose network of mental health and law enforcement professionals concerned with sexual victimization, arose in response to the campaigns against rape and incest. It appeared as a scientific discipline on the surface, but adopted as axiomatic the assumptions, theorizing, and ideologies espoused by the antirape and anti-incest feminist advocates. By the early 1980s, the rape and incest models became the basis for sexual victimological understanding of all forms of adult-minor sex (Jenkins, 1998, 2006).

From a scientific point of view, what is problematic is that many feminist advocates in the 1970s focusing on sexual abuse were given to hyperbole in service of political aims (Angelides, 2004, 2005; Sommers, 1995). Their goal was to uproot the "patriarchy," in which challenging or undermining ideologies of masculinity was instrumental. Using male sexual transgressions of all types became a chief tactic, and freely mixing hyperbolized claims with valid ones became routine (Jenkins, 1998; 2006). Angelides (2004) referred to these advocates as "radical feminists," whereas Sommers (1995) referred to them as "gender feminists." Such activists did not represent all types of feminists in the 1970s or afterward (e.g., prominant feminist writers such as Camille Paglia or Gail Rubin opposed their ideology, message, and tactics). Importantly, however, their point of view came to dominate throughout the West. Sexual victimology emerged, incorporated their point of view, and gave it a "scientific" face. In other words, hyperbole and ideology were built into the foundations of sexual victimology. Though it has never been a valid science, its assertions have been taken as scientific and have substantially influenced public policy (Malón, 2011).

In terms of adult-minor sex, the hyperbole of these activists and sexual victimologists was readily accepted by professionals and the public, in part because it was built on top of the already existing ideology of childhood innocence. Freud's seduction theory was revived by sexual victimologists, and adult-minor sex came to be invested with all the pathogenic agency that had once been attributed to masturbation (Jenkins, 1998; Malón, 2010). In the 1980s, the results of this 1970s thinking were dramatic, as moral panic spread across the United States with satanic-sexual-ritual abuse by staff in day care and recovered memories by adult patients in therapy (Jenkins, 1998; Nathan & Snedeker, 1995). These false claims, repeatedly sensationalized in uncritical media coverage, firmly implanted in social thinking the belief that adult-minor sex is the ultimate crime with the most extreme negative psychological effects.

In short, building upon earlier assumptions about childhood innocence, reflecting the new ideology of anything goes provided it involves "consenting adults" and proceeding from radical feminist discourse,

all adult-minor sex became equated with rape and incest, accompanied by assumptions of invariable imposition of power, lack of consent, and extreme harm (Jenkins, 1998; Malón, 2011). Pederasty, being a type of adult-minor sex, came to be fully invested with this ideology. In 1980, the National Organization for Women issued an opinion, clarifying its view on pederasty to remove any previously existing ambiguity. It resolved that pederasty is "an issue of exploitation or violence, not affectional/sexual preference/orientation" (quoted in Jenkins, 2006, p. 125). Such thinking has since been an entrenched social belief.

An early paradigmatic illustration of this thinking was a 1984 editorial in a major US newspaper, in which the writers decried a series of recently uncovered sexual relations between men aged 18 and over and boys aged 12 to 17—that is to say, pederastic relations (*Philadelphia Inquirer,* 1984, 22A). The writers asserted that "there can be no question" that such relations "are among the most brutalizing [crimes] known to civilized society." They claimed that all credible psychological and psychiatric theory recognized that all relations of this sort are "profoundly damaging" and "leave emotional scars, distrusts, [and] self-contempt that last through lifetimes." They further claimed that this theorizing rested on "the truth that such contacts invariably involve the imposition of power and exploitation, in the most fearfully private of ways." They emphasized that these relations had nothing to do with homosexuality, and that homosexuals, who deserved dignity, should not be confused with "pathological, and criminal, pedophiles." What is notable in this diatribe is its point-by-point adherence to radical feminist discourse, even while presuming to be scientific. In 1984 the large bulk of scientific literature on pederasty actually reported it to be benign or beneficial (see empirical review earlier in this article). But the editorial, driven by ideological fervor, committed the moralistic fallacy by strongly reading into the pederastic relations many of the talking points of this ideology. From this time frame to now, there has been an unbroken chain in mainstream media coverage, in which the view, tone, and hyperbole in this editorial have been repeated. Notably, the editorial writers' journalistic forebearers a generation earlier, under a different set of cultural ideologies, were given to similar tirades against gay men, rather than advocating dignity for them.

In sum, cultural ideologies and social structures have strongly influenced both the practice and perception of pederasty across time and place. These influences in the modern West over the last four decades have been especially potent in this regard. It is important in scientific analysis to take such influences under consideration. By contrast, relying on current cultural ideologies and the social structure as final reference points in making claims about factual matters (e.g., pederasty is "profoundly damaging") is to invite commission of the moralistic fallacy.

Cross-Species Perspective

Pederasty has repeatedly appeared in different societies in institutionalized form for its mentoring and enculturation value (Crapo, 1995), as well as in many other societies on a more casual, but still widespread, basis (Murray, 2000). As Ford and Beach (1951) argued, when a sexual pattern recurs across societies, evolutionary roots should be considered, and cross-species comparisons are useful to this end. In this section, other species are examined for pederastic-like behavior, referred to here as "age-discrepant homosex," which stands for age-discrepant homosexual relations between older males and immature males.[13] First, primates are considered, which have direct relevance for humans, who are primates as well. Next, subprimate mammalian and then avian species are examined for additional perspective. The review relies on four basic sources: (a) Vasey's (1995) review of primate homosexual behavior in about three dozen species; (b) Bagemihl's (1999) review of homosexual behavior in several hundred species of mammals (including primates) and birds; (c) Sommer and Vasey's (2006) edited collection of extensive recent field studies of homosexual behavior in various mammalian and avian species, and (d) many of the primary studies on primates.

Before proceeding, it will be helpful to consider in more detail the logic behind this sort of comparative analysis. In the social sciences, there has been much resistance to drawing inferences from animal behavior to human behavior, as if humans are discontinuous with respect to the rest of the animal kingdom and different laws of evolution apply to them. This is a fallacy. Humans are evolutionarily continuous with prehuman and nonhuman ancestors, and the same evolutionary processes that apply to other animals apply to humans as well. In particular, what we learn about animal sexual behavior can be informative about human sexual behavior (Vasey & Sommer, 2006). Human heterosexual mating was not "specially" created for humans, but derives, with modification, from primate and mammalian patterns. By studying mating in other primates or subprimate mammalian species, we can learn about general principles that may apply to humans, even if the details in mating patterns in other species are different. The same applies to patterns in homosexual behavior (Bagemihl, 1999; Ford & Beach, 1951; Vasey & Sommer, 2006). Rather than imagining that human homosexual behavior is "against nature," as some conservatives might argue, or was specially created in humans, as some liberals might believe, an informed scientific approach is to analyze patterns across species, especially those more closely related to humans. Even though the details of these patterns in other species (e.g., form, function) may not transfer to the human pattern, nonetheless general principles may be inferrable. This inference is stronger the more similar the cross-species patterns are to the human pattern. To repeat Ford and Beach (1951), when a human pattern recurs often, cross-species analysis

is called for to consider an evolutionary basis for this pattern. This principle applies as well for pederasty.

Primates

Bagemihl (1999) provided extensive descriptions of twenty-one primate species, in which male homosexual behavior has been documented (in all these species, age-discrepant homosex was one of the forms). In Table IV, these species along with three additional ones are listed, for a total of twenty-four species.[14] In the table, each species is rated along three dimensions based on Bagemihl's (1999) ratings and descriptions, Vasey's (1995) ratings, and the descriptions in the primary studies themselves. The three dimensions, appearing in columns 2–4, are: (a) frequency of male homosexual activity, (b) dominant type of age pairings involved, and (c) receptivity regarding the younger partners in age-discrepant homosex. The last column presents brief summaries of the male homosexual behavior, including age-discrepant homosex, in each species. The ratings and the summaries will be useful for reconsidering human pederasty from a comparative approach. For example, if pederasty is *innately* pathological, as believed in our society, it might be expected to find evidence in the primates pointing in the same direction. If pederasty has functions, as other cultures believe, and if such functions have an evolutionary basis, then evidence of utility and benefit rather than harm in primates would be informative.

Male homosexual activity occurred frequently in 42 percent of the listed species and moderately in another 50 percent. Mature-immature contacts (i.e., age-discrepant homosex) dominated in 29 percent of the species, immature-immature relations in 13 percent, and mixed relations, with non-dominant occurrences of mature-immature, immature-immature, and mature-mature relations, in 58 percent of the species—in no species did relations between two adults dominate.[15] Receptivity, rather than resistance, on the part of immature animals involved in age-discrepant homosex predominated in most of the species (83%). The summaries provided in the last column in the table flesh out the ratings and provide information useful for assessing pathology, neutrality, and function.

Consent/assent by younger partner. In many species, the younger animals involved in age-discrepant homosex were frequently observed not simply assenting to the sexual interactions but actually initiating them (e.g., bonobos, chimps, gorillas, gibbons, Hanuman and Nilgiri langurs, crab-eating macaques, rhesus macaques, Tibetan macaques, patas monkeys). Specific examples include juvenile Tibetan macaques jumping up to the faces of adult males to be fellated (Ogawa, 1995), an adolescent gibbon repeatedly soliciting sex from his father (Edwards & Todd, 1991), and juvenile rhesus macaques fiercely competing to be the one mounted by an adult male (Kempf, 1917). In a number of species,

Table IV: Homosexual Behavior Between Mature and Immature Males in Primates.

Species	*Freq*	*Age*	*Rec*	*Researcher Observations/Summaries*
Great Apes				
Bonobos (Pan paniscus)	3	1	3	Mature males frequently performed thrusts on much younger males who might actively solicit the mounting (Kano, 1980). Common also is an adult male masturbating an adolescent male lying on his back with legs spread apart. Sex serves to reduce social tension (de Waal, 1997).
Chimpanzees (Pan troglodytes)	2	2	3	Male homosex varies considerably across and within chimp populations (Bagemihl, 1999). Kollar et al. (1968) described multiple age-gap encounters (e.g., a young juvenile male interrupted copulation of an adolescent male and female, then presented to the older male, who mounted him).
Gorillas (Gorilla gorilla)	3	4	3	In all-male groups, adults are most attracted to adolescents; mounting can be initiated by either (Harcourt, 1979; Yamagiwa, 1987, 2006). Courtship and copulation occur daily (Bagemihl, 1999). Age-gap sex may help group cohesiveness (Harcourt, 1979).
Orangutans (Pongo pygmaeus)	2	2	3	Homosex is often consensual (heterosex often not), often occurs within a special friendship (Bagemihl, 1999). Example: An adolescent male that received fellatio from a young adult male became very attached to him, and followed him wherever he went (Rijksen, 1978).
Lesser Apes				
White-handed gibbons (Hylobates lar)	2	4	3	Homosex occurs sometimes in father-son pairs (Bagemihl, 1999). Edwards and Todd (1991) observed fifty-five episodes between father and adolescent son, always without tension or aggression, initiated by both; seemed to provide reassurance to the adolescent.
Siamangs (Hylobates syndactylus)	2	1	2	Father-son sex occurs (like gibbons), but is sometimes accompanied by threats, when the younger partner wants to end it before the older one does (unlike gibbons) (Bagemihl, 1999).
Old World Monkeys				
Hanuman langurs (Presbytis entellus)	3	1	3	Immature males frequently engage in mounting, often with like-aged males, but also with mature males (Sommer et al., 2006). Immature males increase their touching, mounting, and embracing of adult males as they mature (Jay, 1965). Weber (1973) found that male-male age-gap mounting was usually initiated by the immature partner, with apparent function of securing social acceptance (juveniles are no longer protected by mothers and turn to other adults; mounting and other physical contact are mechanisms to achieve social integration).
Nilgiri langurs (Presbytis johnii)	2	1	3	Dominant males (alphas) mount subordinate males (juveniles, adolescents, younger adults) in dominance displays, which the subordinates may initiate by presenting. Mounts are brief, with several thrusts but no penetration, and are part of a communication matrix that maintains troop harmony (Hohmann, 1989; Poirier, 1970).
Proboscis monkeys (Nasalis larvatus)	1	2	2	Homosexual mounting occurs in younger males (adolescents and juveniles); it tends to stem from play wrestling. It is resisted by the younger male in some cases (as females sometimes also do in heterosexual mounting). Its frequency is low, as is heterosexual sex (Bagemihl, 1999; Yeager, 1990).
Bonnet macaques	3	1	3	Males of all ages are frequently involved in a wide variety of homosex. Younger males often masturbate

Table IV: *(continued)*

Species	*Freq*	*Age*	*Rec*	*Researcher Observations/Summaries*
Old World Monkeys *(continued)*				
(Macaca radiata)				other males to orgasm, sometimes eating the semen. Some do only a little homosex, others a great deal (Bagemihl, 1999).
Crab-eating macaques (Macaca fascicularis)	2	1	2	Males can develop intense sexual friendships, especially between older and younger males (with affection, arousal, mounting). Homosexual mounting is both consensual (54%) and nonconsensual (46%). In the former, the mountee fully cooperates and may initiate the mounting (Bagemihl, 1999).
Crested black macaques (Macaca nigra)	2	4	3	Younger males often mount older ones (Bagemihl, 1999). Dixson (1977) frequently observed the oldest male in one troop presenting to younger males, who invariably responded by mounting him, often with erections. Also, ritualized "greeting" gestures (e.g., penis-grabbing), especially by younger males, are common practice (Bagemihl, 1999).
Japanese macaques (Macaca fuscata)	3	1	3	All adult and juvenile males were seen presenting to another male (aggression was rare, <3%) (Hanby & Brown, 1974). Takenoshita (1998) observed free-ranging adult-juvenile consort relationships (adults ejaculated, juveniles erected; they foraged, groomed, and attacked others together).
Pig-tailed macaques (Macaca nemestrina)	3	1	3	Age-equal and age-gap male-male mounting (juveniles, adolescents, adults) occurs frequently, is not associated with force (as heterosexual mounting sometimes is), and makes up from 8% to 67% of individual males' overall mounts (Bagemihl, 1999). Dominants invite subordinates to mount them as an elaborate display of tolerance toward subordinates (Oi, 1990) or mount subordinates as a rank maintenance mechanism (Tokuda et al., 1968).
Rhesus macaques (Macaca mulatta)	3	1	3	Age-gap consort relationships occur, highly affectionate (Bagemihl, 1999). Kempf (1917) observed two juvenile males competing to be mounted by an adult male. Homosex helps juveniles get protection, integrate into group (Carpenter, 1942). Older, younger both show sexual excitement; mature-immature relationships are frequent, seem to have sexual basis (Hamilton, 1914). Redican et al. (1974) observed an immature male taking the sexual initiative with an adult male in an intensive relationship.
Stumptail macaques (Macaca arctoides)	3	1	3	Chevalier-Skolnikoff (1976) reported mutual excitement and affection in several intense friendship-based mature-immature sexual relationships. These were "rewarding" to all participants (e.g., protection for younger partner). Homosex seemed to foster greater social cohesion.
Tibetan macaques (Macaca thibetana)	3	4	3	Ogawa (1995) found that male adult-juvenile homosex occurs on a regular basis; either may initiate oral sex on the juvenile; it is never aggressive; both are excited; context is friendly. It seems to serve to reduce tension.
Savanna baboons (Papio cynocephalus)	2	1	3	All males, from juvenile to adult, greet one another via ritualized sexual behaviors. These behaviors (presenting, mounting, fondling) occur briefly (a few seconds), constitute "greetings," and appear to serve in part formation of coalitions (Bagemihl, 1999; Smuts & Watanabe, 1990).
Hamadryas baboons (Papio hamadryas)	2	4	3	Zuckerman (1932) observed a three-year sexual relationship between an adult and immature male. Whenever the immature was threatened, the adult immediately rescued it.

Table IV: *(continued)*

Species	*Freq*	*Age*	*Rec*	*Researcher Observations/Summaries*
Old World Monkeys *(continued)*				
Gelada baboons (Theropithecus gelada)	2	4	3	Bernstein (1975) found that mounting occurs between bachelors and immature males in the all-male group. When a bachelor successfully challenges a harem leader, he switches entirely to heterosex (the deposed leader switches to homosex).
Mona monkeys (Cercopithecus mona)	3	1	3	Glenn, Ramsier, and Benson (2006) found that homosex, with oral sex (often with orgasm), is universal in all-male groups, where males spend most of their lives. It involves all combinations from juveniles to adults; aggression is extremely rare. It seems to function to help younger males' immigration and social skills, as well as the groups' social cohesion.
Patas monkeys (Erythrocebus patas)	2	4	3	Adolescent or younger males often fondle and nuzzle the genitals and scrotum of adult males (Bagemihl, 1999).
New World Monkeys				
Squirrel monkeys (Saimiri sciureus)	2	1	3	Denniston (1980) frequently observed male homosexual behavior, the commonest form being between adults and adolescents. Baldwin (1969) frequently observed sexual mounting and sometimes consortships between older adolescents and much younger juveniles (of both sexes); older adolescents, unlike younger adolescents, were gentle with their younger partners, who consequently allowed the interactions to take place (by contrast, they tended to resist the much rougher initiatives from younger adolescents).
Prosimians				
Verreaux's sifaka (Propithecus verreauxi)	1	1	1	Homosexual behavior is rare in prosimians. In this lemur species, adult males sometimes mount younger adults or adolescents, who often snap and struggle to wriggle free (Bagemihl, 1999).

Note. Freq = frequency, based mainly on Vasey's (1995) and Bagemihl's (1999) ratings (1 = incidental or rare; 2 = moderate; 3 = frequent or primary). Age = age class (dominant age pairings that occur), based mainly on Vasey's (1995) ratings (1 = mixed ages; 2 = between immatures; 3 = between adults; 4 = mature with immature). Rec = receptivity based on researchers' descriptions (1 = mostly unwilling with resistance or aggression; 2 = mix of receptive and nonreceptive encounters; 3 = mostly receptive with no or little aggression). Researcher observations/summaries provide illustrations from research on typical encounters and overall nature of mature-immature male homosex.

the researchers noted the sexual excitement exhibited by the immature partners in age-discrepant homosex (e.g., rhesus, stumptail, and Tibetan macaques). In several species, sometimes immature males were assenting and sometimes not (e.g., siamangs, proboscis monkeys, crab-eating macaques, and squirrel monkeys). In siamangs, sometimes the younger animal assented but then wanted to end the contact earlier than the older animal did (Bagemihl, 1999), and in squirrel monkeys juvenile males tended to resist sexual approaches from younger adolescent males, who were rough, although they accepted these approaches from older adolescent males, who were more gentle (Baldwin, 1969). In only one species (Verreaux's sifaka) was age-discrepant homosex, as well as adult-adult sex, predominantly or always non-consensual, where the approached animal resisted aggressively (Bagemihl, 1999). In the other examples in the table, as well as in most primate species in general, aggression in connection to homosexual behavior of any sort is rare or absent; when it occurs, it typically is associated with heterosexual interactions between mature animals (Bagemihl, 1999; Vasey, 1995).

Adult male interest. Adult male primates frequently exhibited a bisexual orientation, with interests often directed at both mature females and immature males. Mature male bonobos frequently directed thrusts on immature males (Kano, 1980), adult male gorillas were primarily and intensely aroused by immature males in their all-male groups (Harcourt, 1979; Yamagiwa, 1987), and adult male rhesus, stumptail, and Tibetan macaques showed excitement in their sexual interactions with immature males (Chevalier-Skolnikoff, 1976; Hamilton, 1914; Ogawa, 1995). Being in all-male groups contributed to the expression of these interests by adult males (e.g., gorillas, mona monkeys, gelada baboons), although adult males also exhibited interest in younger males in the presence of sexually receptive females (e.g., bonobos, rhesus macaques, stumptail macaques). Adult males' interest in immature males could switch to females with a change in social environment or status. For example, adult male gorillas in mixed groups generally directed erotic attentions to mature females instead of immature males (Yamagiwa, 1987, 2006), and adult male gelada baboons who moved from all-male groups to become harem leaders switched from interests in immature males to interests in mature females (Bernstein, 1975).

Special friendships. Intense sexually based friendships or consort relationships between older and younger animals have been documented in various species, including gorillas, orangutans, macaques (crab-eating, Japanese, rhesus, stumptail), Hamadryas baboons, and squirrel monkeys. Takenoshita (1998) observed consort relationships between adult and juvenile male Japanese macaques, where these pairs, in addition to engaging in homosexual interactions, foraged together, groomed one another, and attacked other monkeys together. Chevalier-Skolnikoff (1976) described intensely affectionate relationships between mature and

immature stumptail male macaques, in which both older and younger partners responded with sexual excitement to the sexual interactions. Zuckerman (1932) observed a three-year sexual relationship between an adult and an immature male Hamadryas baboon. Redican, Gomber, and Mitchell (1974) observed an intense attachment between an adult male rhesus macaque and a much younger male, in which the latter took strong initiative in establishing the relationship and sexual interaction. Hamilton (1914), also studying rhesus macaques, reported that he "found that friendships between immature males and mature males are of frequent occurrence, and that they seem to have a sexual basis" (p. 308). In one illustrative case, Hamilton reported, when a separated mature-immature pair was allowed to reunite, the two rushed into an embrace, smacking their lips. Both animals showed marked sexual excitement, and the older mounted the younger, who rotated his head to achieve lip contact with the older partner.

Frequency and variability. As indicated in Table IV, the frequency of age-discrepant homosex and other homosexual interactions varied both between and within species. In some, these interactions occurred incessantly (e.g., gorillas, mona monkeys, Tibetan macaques). In gorillas, as Yamagiwa (1987) noted, courtships and copulations between older and younger participants occurred daily. In general, Vasey (1995) noted a trend across the primate order in frequency of homosexual behavior from rare or absent in prosimians, to somewhat more common in New World monkeys, to frequent in Old World monkeys and apes, with the former two groups being more distantly, and the latter two more closely, related to humans. Researchers have also noted the variability of age-discrepant homosex and other homosexual behavior among individuals within particular species (e.g., chimpanzees, bonnet macaques, pig-tailed macaques). In pig-tailed macaques, for example, 8 percent to 67 percent of individual males' mounts are homosexual (Bagemihl, 1999).

Real versus pseudo/proto-homosexual behavior. Homosexual behavior in primates can look like human homosexual behavior (e.g., masturbation, oral sex, penetration) or it can look superficial (e.g., dominance rituals with very little contact). Age-discrepant homosex, in particular, frequently is of the former type (e.g., bonobos, gorillas, orangutans, gibbons, bonnet macaques, Japanese macaques, Tibetan macaques, mona monkeys). In bonobos, adult males commonly masturbate adolescent males, who display full erections (de Waal, 1997). In gorillas, adult males anally penetrate younger males (Yamagiwa, 1987). In mona monkeys, oral sex accompanied by orgasm is frequent (Glenn, Ramsier, & Benson, 2006). In other species, homosexual interactions are often ritualistic, as in dominance mounts (e.g., Hanuman langurs, Nilgiri langurs, savanna baboons). In a study sample of Hanuman langurs, male homosexual behavior included no manual stimulation, oral sex, or anal penetration, but instead mounts in which erections were rare and in which ejaculations

occurred less than 1 percent of the time (Sommer, Schauer, & Kyriazis, 2006). In Savanna baboons, mounting and fondling occur frequently among males from juveniles to adults, but last only a few seconds (Smuts & Watanabe, 1990).

Functions. Finally, researchers have frequently inferred or speculated that male primate homosexual relations, including and often specifically age-discrepant homosex, serve positive functions for the participants, such as overcoming social tension (bonobos, Tibetan macaques), communicating or acknowledging rank to express or seek tolerance or to avoid conflict (pig-tailed macaques, Nilgiri langurs), facilitating social cohesion (gorillas, stumptail macaques, mona monkeys) and social integration (Hanuman langurs, rhesus macaques, mona monkeys), providing reassurance (gibbons) and protection (rhesus macaques, stumptail macaques, hamadryas baboons), initiating cooperation (savanna baboons), and helping the young to acquire social skills (mona monkeys).

Summary and conclusions. Immature males in many of the primate species reviewed, especially those more closely related to humans, frequently assented to, and even initiated, sexual contacts with mature males. In general, assent predominated over non-consent across these species, and aggression in connection to the latter was quite rare. Adult males in these species generally showed the capacity to respond erotically to younger males, and they frequently expressed it. In many of these species, older-younger pairs formed special friendships, which included affection, intense bonds, and sexual interactions. Species varied from common to infrequent in homosexual behavior, as did individuals within the species. Age-discrepant homosex often included forms of sexual behavior that, in human terms, would be called genuine sex. In many species age-discrepant homosex appeared to serve one type of function or another. Taken together, these findings lend no support to the notion that homosexual behavior between mature and immature males is an intrinsic pathology in the primate order, but instead point to neutral or functional value. The parallels with the human nonclinical empirical, historical, and cross-cultural data are fairly strong and suggest that human pederasty has evolutionary roots that are shared by many other species in the primate order. The primate data add to the nonclinical human data in contradicting the view that pederasty is an intrinsic pathology.

Subprimate Mammals and Birds

Animal species from different orders or classes are more removed from humans in evolutionary terms, but a brief look at them can be useful. Given the prevalence of primate age-discrepant homosex, it becomes of interest to examine whether and to what extent this behavior occurs elsewhere in nature. If its occurrence is frequent rather than rare, for example, locating human pederasty in the context of nature and evolution, rather than idiosyncratic pathology, is further indicated. In the review to

follow, most of Bagemihl's (1999) case studies that involved age-discrepant homosex are included, and the list is updated with some of the primary studies in Sommer and Vasey's (2006) collection.

Mammals

The twenty-six species listed in Table V include eleven marine mammals, thirteen hoofed mammals, and two other types. The descriptions below summarize key themes from the table.

Dolphins and whales. In the dolphin and whale species, male homosexual behavior was frequent, sometimes exceeding heterosexual behavior. It generally occurred in all-male settings, was most characteristic of younger males, often involved intimate (e.g., penetrative) and lengthy interactions, and could involve extensive mutual affection and bonding (as in some age-discrepant boto and bottlenose relations). In orcas, the age-discrepant type predominated, where adolescents typically were involved with much older or younger males, courting was frequent, and sexual interactions were usually reciprocal. In Mann's (2006) extensive field study on bottlenose dolphins, immature males were hypersexual, frequently behaving homosexually with peers, but with older males as well. More than half of adult males' sexual activity was directed at immature males. Mann concluded that immature males' homosexual behavior was functional, serving later male-male alliance formation, which facilitates male-female consortships.

Seals and manatees. In the seal and manatee species in Table V, male homosexual behavior was generally quite common. It usually involved all ages, and age-discrepant relations were common. Although resistance was characteristic in adult-immature relations in northern elephant seals, consent, including initiative from the younger animal, predominated among age-discrepant homosexual relations in the other species. For example, younger males mounted older ones among Australian and New Zealand sea lions. Affection was common in manatees, where males of all ages intensively interacted in a homosexual way. Walruses were notable for their nearly universal male homosexual behavior, which usually occurred between adolescents or between adults and adolescents, and in which adolescents frequently solicited adults, adults frequently courted adolescents, and adults and adolescents fairly often formed companionships.

Deer and moose. Male homosexual behavior occurs only occasionally in deer and moose. When it occurs, all ages can be involved, although it is more common among the young. In age-discrepant homosex, typically younger males mount older ones. Sometimes older and younger males form companionships, as in wapiti and moose. Bartos and Holeckova (2006) found that resistance to being mounted occurred mainly between immature bucks; it was not a factor between older and younger deer.

Antelopes and gazelles. In blackbucks and pronghorns, males of all ages frequently participate in homosexual behavior in their all-male

Table V: Homosexual Behavior Between Mature and Immature Males in Subprimate Mammals

Species	*Summary of Descriptions from Bagemihl (1999) or Primary Researchers*
Marine Mammals	
Dolphins and whales	
Boto or Amazon River dolphin (Inia geoffrensis)	Males participate in a wide variety of homosexual behavior, including various kinds of intercourse. When there is an age difference typically the older penetrates the younger. Pairs interacting sexually display a great deal of mutual affection, which Bagemihl (1999, p. 341) illustrates in a photo, in which an adult and immature partner are touching while swimming side by side.
Bottlenose dolphins (Tursiops truncates)	Homosexual behavior largely exceeds heterosexual behavior. Adolescents and younger males typically live in all-male groups, where homosexual behavior is common and exclusive. Only as full adults do they attempt to father calves via heterosexual contact. Younger adolescents form homosexual pair-bonds with like-age males, which often last throughout life. When there is an age difference in homosexual sex, either party may penetrate the other—adolescents have been observed penetrating adults (Bagemihl, 1999). McBride and Hebb (1948) observed adult males repeatedly interacting sexually with younger males and described an intense, affectionate bond in one pair. In an extensive ten-year field study, young immature males were found to be the most sexual (most often with male peers, but also with all other age-sex classes); most of adult males' sexual interactions were with immature males (Mann, 2006).
Orca or killer whales (Orcinus orca)	Orcas are the largest in the dolphin family. Homosexual behavior is integral to male social life. During salmon feasting, males of all ages spend afternoons courting, being affectionate, and engaging in overt homosexual behaviors, with 90% being reciprocated. Sessions last an hour on average. Most involve adolescents and an age difference of at least five years. At least half of all males get involved.
Sperm whales (Physeter macrocephalus)	3–5% of males may be homosexually bonded, with couples consisting of two adults or an older and younger male. Sexual interactions leading to orgasm can take place in groups of primarily younger males.
Bowhead whales (Balaena mysticetus)	Intensive male homosexual sessions lasting up to forty minutes occur, involving mainly groups of adolescents and young adults.
Seals and Manatees	
Gray seals (Halichoerus grypus)	Male homosexual behavior is common; males of all ages mount each other on shore after molting.
Harbor seals (Phoca vitulina)	Male homosexual behavior is common, involving males of all ages, but mainly adolescents and adults.
Northern elephant seals (Mirounga angustirostris)	Adolescent and young adult males do same-sex mounting during the molting season. Adult males sometimes mount younger adolescent or juvenile males, but the younger males usually struggle to escape.
Australian sea lions (Neophoca cinerea) & New Zealand sea lions (Phocarctos hookeri)	Male homosexual mounting is common. All ages may be involved, but usually a younger partner mounts an older one. As mating is polygynous, many males never mate heterosexually.
West Indian manatees (Trichechus manatus)	Males can form bachelor herds. Males of all ages intensively interact homosexually, involving embracing, kissing, mouthing, caressing, genital rubbing, and frequent ejaculation.

Table V: *(continued)*

Species	*Summary of Descriptions from Bagemihl (1999) or Primary Researchers*
Marine Mammals (*Seals and Manatees*) *(continued)*	
Walruses (Odobemus rosmarus)	Males are segregated during the nonbreeding summer months. Here, homosexual courtship, affection, and sex are common. Typically, a younger male will display to an older one, and each may mount the other. Groups of younger males may crowd an adult male, making body contact. An adult may sing a courtship song to a group of younger males or a specific younger male companion that accompanies him. Younger and older males also pursue each other during the breeding season. Homosexual behavior is very common if not universal among male Walruses, even during the breeding season, where up to a third of mounting is between younger males or between an adult and a younger male.
Hoofed Mammals	
Deer and Moose	
White-tailed deer (Odocoileus virginianus)	Males are sex-segregated most of year. Mounting sometimes occurs between two adults, two yearlings, or an older-younger pair, where the younger mounts the older one (Bagemihl, 1999). Most commonly, it is young males that mount others. Mounting is not based on dominance; no specific function is apparent. Mountees generally do not oppose being mounted if age-discrepant, but do so more if two immature males are involved (Bartos & Holeckova, 2006).
Wapiti (Cervus elaphus)	They are sex-segregated most of year. Mounting occasionally occurs between two adult or adult-yearling males. Male pairs may form companionships, either older-younger or age-equal.
Père David's deer (Elaphurus davidianus)	Males sometimes mount each other, with the younger mounting the older one.
Moose (Alces alces)	They are often solitary. Yearling males sometimes mount adult males. Sometimes adult males associate with younger male companions called satellites.
Antelopes and Gazelles	
Pronghorns (Antilocapra americana)	Some males get territories and breed. The rest live in bachelor herds, where homosexual mounting occurs to a moderate degree. Males of all ages participate, but adult males usually direct their attentions to adolescents. Mounting is preceded by courting. Most males (70%) never breed.
Blackbuck (Antilope cervicapra)	Males with territories mate with females. The rest live in bachelor herds, where most engage in mounting. This follows friendly sparring. Adult males often perform courtship displays to adolescent males before mounting them. Blackbuck males are predominately homosexual, leaving the group only once or twice in their lives attempting to breed.
Grant's gazelles (Gazella granti)	They live in mixed or all-male groups. Homosexual behavior is rare. Adult males usually attack other males trying to mount them.
Wild Sheep, Goats, Buffalo	
Bighorn sheep (Ovis canadensis) & Thinhorn sheep (Ovis dalli)	Males live in homosexual societies in sex-segregated bands. Only during the rutting season do they meet females. Older males court younger, smaller males and mount them. The mountee facilitates by assuming lordosis. Interactions are non-aggressive; the younger male is usually willing. So pervasive is this, that females will mimic younger males to attract older males. Geist (1975) views older-younger male homosex as an adaptation, allowing the younger males to live in the group.
Musk-oxen (Ovibos moschatus)	They are in mixed or all-male groups. Adult males court and mount adolescent and juvenile males. Younger males do the same with each other. Mountees sometimes resist (as females do), but sometimes assent. About 40% of courting and 10% of mounting are homosexual.

Table V: *(continued)*

Species	*Summary of Descriptions from Bagemihl (1999) or Primary Researchers*
Hoofed Mammals (*Wild Sheep, Goats, Buffalo*) *(continued)*	
Mountain goats (Oreamnos americanus)	They are often sex-segregated. Adult males court younger males, using the species-typical approach used in courting females. Typically, the yearling male reacts aggressively. Almost one-fifth of courtships during the breeding season occur between adult and yearling males.
American bison males (Bison bison)	Male bison spend most of their time alone or in bachelor herds. In these herds, homosexual mounting, including full penetration, is prevalent, especially among younger males (i.e., adolescents), and exceeds heterosexual mounting in frequency. The mounted animal often facilitates the mounting. Younger males also sometimes form tending bonds with other males, involving following, defending, and mounting or being mounted by their partners (Bagemihl, 1999). Homosexual behavior is not based on dominance, but may serve a bonding function (Vervaecke & Rodin, 2006).
Other Hoofed Mammals	
Giraffes (Giraffa camelopardalis)	They are often in all-male groups. Sparring between males is almost always gentle, begins as calves and juveniles, and is most common among adolescents. Participants are often of different sizes, with the smaller, younger one usually initiating. Mounting sometimes accompanies sparring, and mostly involves older adolescents mounting younger ones. These behaviors are not associated with dominance. Homosexual behavior occurs mainly among the young (Pratt & Anderson, 1985).
African elephants (Loxodonta africana) & Asiatic elephants (Elephas maximus)	African and Asiatic male elephants often form all-male herds. Breeding males associate only temporarily with females. Male homosexual mounting occurs regularly, especially among younger males. In African elephants, homosexual mounting may be preceded by extensive affectionate interaction, and both adult and younger males participate. Males also form long-lasting bonds called companionships, mainly between older and younger "attendants"—heterosexual couples do not form long-lasting bonds. The attendant male and adult male often help each other in various ways, and they are constant companions. Sometimes an older male will have two attendant males. In Asiatic male elephants, almost a fifth have a male companion.
Other Mammals	
Dwarf cavies (Microscavia australis)	Dwarf cavies are small rodents that live in colonies of twenty to fifty individuals. Adult males are sexually attracted to juveniles of both sexes. A typical homosexual encounter begins with an adult male and juvenile male sitting together quietly, often in front of the juvenile's mother, who is not visibly bothered. The two males then engage in affectionate contact, which eventually escalates to sexual behavior. Adult males often have favorite younger males, and will actively seek them out while ignoring other juvenile males. More than half of adult male-juvenile sexual interactions are same-sex. Most males are homosexually involved. Occasionally, an adult male will have an adolescent male companion, who feeds with him and is physically affectionate with him. The adult may allow the adolescent to mount a female he is courting. Adult males in two other species, mocó or rock cavies (Kerodon rupestris) and préa (Galea spixii), sometimes also court juvenile males.
Feral cats (Felis catus)	In an extensive field study, a quarter of males did homosexual mounting, but only occasionally. It always occurred in the presence of estrus females. Mounters were adults, and mountees were adolescents, smaller in size, comparable to adult female size. Mounters bit the backs of mountees' necks, as they do when mounting females. Older-younger male homosexual mounting appears to be an outlet for heterosexual mountings that were recently frustrated (Yamane, 2006).

Note. The descriptions are based mostly on Bagemihl's (1999) summaries. Only when based on other authors instead or as well, citations are given.

groups. Adult males direct their attention mainly to adolescent males, which involves courtship before mounting them. These interactions may occur following friendly sparring. In contrast to these mainly consensual interactions, mountees in Grant's gazelles generally are not consenting, and mounted adults usually attack their mounter. Blackbucks live in essentially homosexual societies, leaving only once or twice to attempt mating heterosexually.

Wild sheep, goats, and buffalo. Like blackbucks, bighorn and thinhorn sheep live in male groups that are essentially homosexual societies. Adult males court adolescent males, which are generally willing to be mounted and cooperate by assuming lordosis. So common is this practice that adult females mimic adolescent males—they are the same size—to attract adult males. Geist (1975) argued that the age-discrepant homosex is an adaptation allowing younger males to remain in the male group. Musk oxen court and mount adolescent and younger males, who sometimes resist (as females do), and sometimes assent. Adult male mountain goats also court and try to mount young males, who usually react aggressively in response. In American bison, homosexual behavior, including penetration with facilitation by the mountee, is prevalent and frequent among younger males (i.e., young adolescents to young adults).

Giraffes and elephants. In giraffes, male homosexual behavior occurs among the young in all-male herds. Typically, a younger adolescent male initiates friendly sparring with an older adolescent. The latter then sometimes mounts the younger male. Male elephants also live in all-male herds, where homosexual mounting is frequent. This may be accompanied by affectionate behavior. Adults and younger males partake, but it is especially common among younger males. Adult males fairly often form companionships with younger males, which are long-lasting bonds.

Other mammals. Adult male dwarf cavies, a type of rodent, often engage in affectionate, then sexual, contact with juvenile males, and often have favorites among them. Sometimes they have adolescent male companions. In an extensive field study of feral cats, adult males who were frustrated in pursuing estrous females sometimes mounted adolescent males, who were the same size as adult females, and whom the adult males treated as they treat females during mounting (e.g., biting the neck).

Summary and conclusions. The foregoing summaries of the species in Table V show that age-discrepant homosex extends beyond the primate order to many other species in the mammalian class. Within these species, it was always part of the mix of male homosexual behavior, oftentimes one of the dominant forms. Homosexual behavior among the young was also very common. In other words, young male mammals were often homosexually involved, whether with age-mates or older males. The pattern of age-discrepant homosex, which emerges from these summaries, contradicts the notion of its being pathological in mammals. Such relations often involved mutual participation, even initiative by the younger

males. Resistance, occasionally with aggression, sometimes occurred but was not characteristic across the species. Notably, resistance occurs in other age-pairings between males, and even more so in heterosexual interactions, such that age-discrepant homosex does not stand out in this regard. Additionally, in many species age-discrepant homosex included affection and bonding. Several researchers endorsed adaptively functional or neutral explanations for this behavior; none suggested malfunction. In short, the subprimate mammalian evidence suggests that age-discrepant homosex is a variant that recurs across mammals, that many adult males in certain species have the capacity for it, and that it is often a friendly rather than antagonist interaction. This pattern adds to that in primates in countering the view of pathology and suggesting neutral or functional alternative explanations for this phenomenon in mammals, including humans.

Birds

Evidence for age-discrepant homosex in birds can further extend the evolutionary implications already suggested by the primate and mammal reviews. Table VI presents summaries of seventeen avian species included in Bagemihl's (1999) review, in which age-discrepant homosex occurred. Because birds are quite distantly related to humans, and the main point here is to consider possible deeper evolutionary roots of this behavior, a brief overview rather than a case-by-case analysis follows.

Among the species in the table, male homosexual behavior, including age-discrepant homosex, varied from occasional (e.g., blue-backed manakins, black-billed magpies) to frequent (e.g., Guianan cock-of-the-rock, acorn woodpeckers). In various species, half or more of the male population participated in this behavior (e.g., ruffs, Guianan cock-of-the-rock, superb lyrebirds). Adult male courtships and displays to adolescent, and sometimes juvenile, males were pervasive across the species. Typically, adult males also courted and displayed to females as part of a bisexual orientation. Displays to young males were elaborate, matching those typically directed toward females. Superb lyrebird adult males, for example, might follow an adolescent male for hours, periodically performing a wing display and serenading the adolescent. Sometimes adolescent males courted each other (e.g., superb lyrebirds), and in one species, juvenile males courted adult males in bowers they had built (i.e., regent bowerbirds—adult males also courted younger males in bowers they built). In some species, adult males formed long-lasting pair-bonds with other males, who could be other adults or adolescents or juveniles (e.g., Canada geese, bicolored antbirds). In some species, adolescents and juveniles were active, consenting partners in mounting behavior with adult males (e.g., Guianan cock-of-the-rock, acorn woodpeckers). In Guianan cock-of-the-rocks, adolescent males visited multiple adult males' leks in a season and mounted the adults with their full cooperation, and in acorn

Table VI: Homosexual Behavior Between Mature and Immature Males in Birds

Species	*Summary of Descriptions from Bagemihl (1999)*
Aquatic and shore birds	
Canada geese (Branta canadensis)	18 % of adult males form homosexual bonds with partners, who may be other adults or juveniles.
Ruffs (Philomachus pugnax)	About half of males are involved predominantly in same-sex sex. Certain adult males acquire a territory called a lek, where they display to potential sex partners, male as well as female. Male visitors may be those without leks or younger males, who have not yet developed adult plumage. The younger males rarely are heterosexually involved, but instead do mounting with each other and with adult lek residents.
Perching and song birds	
Guianan cock-of-the-rock (Rupicola rupicola)	Male homosexual mounting between two adolescents and between an adult and adolescent is routine, accounting for about half of all copulations and involving about 40 % of the total male population and 64 % of the adolescent male population. Certain adult males acquire leks, which females and young males visit to see whether they want to mate. In a typical homosexual encounter, while an adult male is displaying his colorful plumage, an adolescent male will land nearby. The adult keeps his back to the adolescent, showing off his plumage and inviting the adolescent to mount him. The adolescent climbs onto the adult's back, achieves genital contact, and then mounts several times in succession. Adolescents usually visit the display courts of numerous other adult males and may have relations with up to seven adults in a season, including some adults without leks. Adult males who avoid heterosexual contacts are the ones most often mounted by adolescent males
Swallow-tailed manakins (Chiroxiphia caudata)	Several adult males will form long-term associations and display together on their leks to attract both females and adolescent males. When a young male arrives, the adult males perform a group courtship ritual, in which they take turns jumping up and hovering in front of him. The young male sits motionless as he watches the spectacle. Same-sex sexual behavior likely makes up a sizable proportion of all sexual activity.
Blue-backed manakins (Chiroxiphia pareola)	Pairs of adult males behave similarly to swallow-tailed manakins, displaying to a third male, which is sometimes an adolescent, performing leapfrogging and cartwheels to impress the other male.
Bicolored antbirds (Gymnopithys bicolor)	Male homosexual pair-bonds make up 4–6% of all pair-bonds; partners may be two adults or an older and younger bird. The bonds are initiated by courtship-feeds, in which one offers the other a spider or an insect. The receiving male, unlike a female, then passes it back. Once paired, they become constant companions.
Red bishop birds (Euplectes orix)	In their nesting territories, adult males court both females and males, the latter being younger males who look like females in terms of their plumage coloring. When a younger male approaches, the adult male performs a distinct bumble-flight and displays his plumage to attract the oncomer.
Orange bishop birds (Euplectes franciscanus)	In captivity, both adult and younger males attempt to mount young males, who usually reject the attempt or react indifferently at most.
Red-shouldered widowbirds (Euplectes axillaris)	Adult males sometimes court younger males.

Table VI: *(continued)*

Species	*Summary of Descriptions from Bagemihl (1999)*
Aquatic and shore birds	
Black-billed magpies (*Pica pica*)	Homosexual behavior involving adult males with adolescent or juvenile males occurs occasionally. A typical courtship begins with one male ritually begging the other, followed by the second hopping around the first. Afterward, the two might form a pair-bond, in which they stay near one another, preen one another, and cooperate in evicting intruders.
Gray-breasted jays (*Aphelocoma ultramarina*)	Adult males have been observed to courtship-feed younger males.
Victoria's riflebirds (*Ptiloris victoriae*)	Adult males sometimes court younger males, using spectacular displays that are also used in heterosexual interactions. Male-male courtships occur frequently, although mounting is rarer and is likely to drive the mountee away.
Regent bowerbirds (*Sericulus chrysocephalus*)	Males build bowers, tunnels of twigs decorated with a variety of colors (e.g., from berries). Adult males display in their bowers to both females and younger males, sometimes ritually offering gifts to their guests. Juvenile males also build bowers and court males and females. When an adult male arrives, the juvenile male behaves in a ritual manner to attract the adult into the bower. Adult males spend 15% of their time displaying to other males, and juvenile males spend 28% of their time doing the same.
Satin bowerbirds (*Ptilonorhynchus violaceus*)	Adult males have been observed to court younger males.
Superb lyrebirds (*Menura novaehollandiae*)	Adult males often court adolescent males upon encountering them alone or in groups. The adult may closely follow the adolescent, even for hours, periodically performing a wing display accompanied by serenading the younger male with a variety of vocalizations. Adults will occasionally mount the adolescents, but genital contact may not occur because the younger male does not facilitate the interaction. Adolescent males also court and mount one another, behavior that is usually mutual. Occasionally an adult and adolescent male will engage in a mutual display to one another. Adult males approach groups of adolescents fairly often during breeding season and twice as often outside of it. They spend more than half their time away from their display mounds associating with adolescent males. Most males are bisexual, courting both females and adolescent males. Adolescent males appear to be exclusively homosexual in their behavior and often form companionships with like-aged males. Male and female lyrebirds live largely separate lives aside from brief encounters during breeding season.
Other birds	
Anna's hummingbirds (*Calypte anna*)	Both females and juvenile males visit an adult male's territory to feed on his supply of currant and blossoms. If a juvenile male visits, the adult male will perform a dive display several times, in which he climbs 150 feet, dives toward the visitor, and makes loud shrieking sounds. After the display, the visitor will usually fly off, with the adult in pursuit, singing at him. If the adult succeeds in attempting to mount the younger male, the latter usually strongly resists, and the adult may attempt to use force. About 25% of sex in this species is between males.
Acorn woodpeckers (*Melanerpes formicivorus*)	A ritualized group display occurs involving courtship and sex. At dusk, the members of a group gather and begin mounting one another in all combinations. Males mount females and other males, females mount males and other females, young woodpeckers mount older ones, and older woodpeckers mount younger ones. Reciprocal mounting is common. This mounting display is a regular feature in this species, occurring daily all year around.

woodpeckers, younger and older males reciprocated mounting. In other species, the adolescent was typically resistant or indifferent to being mounted by an adult male (e.g., orange bishop birds, Anna's hummingbirds). Additionally, in a number of species adolescent males mounted each other (e.g., ruffs, superb lyrebirds).

In short, adult male interest in younger males was common across these species, taking the form seen across human societies in which pederasty was commonplace—that is, bisexual interest in adult females and male youths. The actual age-discrepant homosexual interactions were sometimes like those described earlier in the review of primates (i.e., cooperative and completed), and other times fragmentary (e.g., the adult male shows extensive interest, but the younger male does not cooperate, and mounting is not achieved). Notably, however, the latter pattern in birds may be common between adult males as well (e.g., Kotrschal, Hemetsberger, & Weiss, 2006). On the whole, the bird species in this sample showed the rudiments of the homosexual, including age-discrepant, interactions seen in the higher primates. Together, the primate, mammalian, and avian evidence just reviewed shows that male age-discrepant homosexual behavior frequency occurs in nature, not just in humans.

Evolutionary Synthesis

The historical and cross-cultural review showed that pederasty has been a recurring behavioral pattern across time and place. The cross-species review, which also showed a wide distribution across a diverse set of species, suggests that the human pattern has a phylogenetic basis, with roots in primates, other mammals, and even birds. Even deeper roots might be suggested by looking at other animal classes. For example, Trivers (1976) described pederastic behavior in anolis lizards (*Anolis garmani*). In this reptilian species, adult males control territories, where they mate with females. Sometimes adolescent males are allowed on the territory, because they resemble females (e.g., in their smaller size) and allow the adult males to mount them. Trivers argued that this female mimicry is adaptive for the adolescents, as it permits them access to females, which they otherwise would not get. Analogous behavior has also been observed in some fish species (Werner, 2006). In short, it is reasonable to locate pederastic behavior in evolution. Ford and Beach (1951), using the cross-cultural and cross-species approach, did so with homosexual behavior—notably, much of their human and most of their primate evidence was pederastic in form. Various researchers since, using this approach, similarly located homosexual behavior in evolution, while relying substantially on evidence involving pederastic behavior (e.g., Bagemihl, 1999; Kirkpatrick, 2000; Muscarella, 2000). In this section, the notion that human pederasty is not simply an evolved behavior, but actually an adaptation, is examined.

Evolutionary Considerations and Previous Hypotheses

Adaptations are mechanisms (physical or behavioral) that have been naturally selected (i.e., produced by natural selection) in some past environment (i.e., the environment of evolutionary adaptedness, or EEA) because they had fitness-enhancing effects; the functions served by adaptations are the solutions produced in response to recurring adaptive problems in the EEA (Buss et al., 1998; Cosmides & Tooby, 1999). Evolved behaviors or physical traits (i.e., characters) are not necessarily adaptations—they can also be adaptively neutral or maladaptive (Buss et al., 1998; Thornhill, 1997; Vasey & Sommer, 2006). Natural selection selects out maladaptive characters, but allows adaptively neutral ones to persist in descendent populations. Adaptively neutral (i.e., functionless) characters can evolve in a number of ways, including as by-products of some adaptive character (referred to as "spandrals"),[16] as vestigial traits (i.e., traits that were adaptive in an ancestral species, but that have lost their function in the current species),[17] or as evolutionary noise (i.e., random effects via non-harmful mutation). In the following analysis, under the assumption that pederasty is an evolved behavior based on the phylogenetic evidence just reviewed, maladaptation, non-adaptation, and adaptation are all considered.

Background on Evolutionary Hypotheses for Homosexual Behavior

The assumption that all homosexual behavior is maladaptive was firmly entrenched before the 1950s. Ford and Beach's (1951) analysis was an initial challenge to this view. Hutchinson (1959), the noted evolutionary biologist, took the next step, proposing that homosexual behavior is actually adaptive, arguing that it must have some evolutionary function, because it occurs too frequently to be a biological "mistake." Nineteen years later, E. O. Wilson (1978) proposed an adaptive function (i.e., yielding kin-selection benefits). Since then, numerous evolutionary explanations for homosexual behavior have been offered, most of them proposing adaptive value, with several others proposing neutral value (for reviews, see Bagemihl, 1999; Vasey & Sommer, 2006).

Illustrative of the latter hypothesizing is Bagemihl's (1999) proposal. Bagemihl firmly concluded that homosexual behavior is evolved—he asserted that "anyone looking at the prevalence and elaboration of homosexual behavior ... in the animal kingdom will be led, eventually, to this conclusion" (p. 64)—but proposed that it is adaptively neutral, arguing that homosexual behavior arose because nature is exuberant or plentiful in what it produces, including sexual behavior. He showed that heterosexual behavior across species is exuberant in nonreproductive forms, far in excess of any apparent functional utility, which he used to support his inference regarding homosexual behavior. Once homosexual behavior evolves in a given species, he argued, it can be passed along

to future generations, as well as to descendent species, because selective pressures will not act against it.

Regarding pederasty, a number of hypotheses to be reviewed shortly have offered functional explanations to account for it. This review will be useful in further consideration of pederasty's possible adaptive value. But it will also be important to keep in mind non-adaptation as an alternative explanation, as Bagemihl (1999) did for homosexual behavior in general. For example, though the primate record amply points to phylogenetic roots for human pederasty, the primate forms of this behavior could all be adaptively neutral, and the human form may be nothing more than a continuation of this functionless primate pattern. Its functional uses in various cultures, then, would simply represent "cultural exaptations," which are co-optations of traits of neutral value for positive cultural purposes (Buss et al., 1998).

Previous Evolutionary Hypotheses for Pederasty

Before considering adaptation, it will be useful to comment on the possibility of maladaptation. The extensive reviews presented earlier in the present article (i.e., nonclinical empirical, historical and cross-cultural, sociological, and cross-species) combine to substantially contradict the possibility that pederasty is a maladaptation. Goethe observed that pederasty is as old as humanity and must therefore lie in nature (Hirschfeld, 1914), which the historical/cross-cultural record supports with regard to humanity (e.g., Greenberg, 1988; Herdt, 1997) and the cross-species record supports with respect to nature. If pederasty were maladaptive in an evolutionary sense, it should not have such longevity in nature or in humanity. And if maladaptive, it would be tightly associated with harm. The nonclinical empirical review presented earlier clearly indicates that pederasty is not perforce associated with harm—this outcome is an interaction of culture, circumstances, and the individual, rather than the behavior itself.[18] The cross-cultural data, coupled with sociological considerations, reinforce this conclusion, as do the primate data, which give no reason to assume pederasty is innately harmful among higher primates, including humans.

A number of hypotheses having indirect or direct bearing on possible adaptive value for pederasty are now considered. Werner (2006) proposed what he called the hierarchy/cooperation theory of human male homosexual behavior. He argued that male homosexual behavior evolved in stages. Drawing upon extant species, he argued that in primitive species in the distant past, adult males controlled territories for mating, chasing away other adult males. Adolescent males or transvestite adult males, both mimicking females in morphology or behavior, could get on the territories and get access to females through their mimicry, including homosexual submission. As species grew more complex, male homosexual behavior exapted (i.e., changed function), as males in various species shifted from

solitary to group living and evolved higher cognitive functioning, such that female mimicry no longer deceived other males. Now male homosexual submission served to elicit tolerance from more dominant males, upholding the dominance hierarchy, which in turn facilitated group living. The last stage in the evolution of male homosexual behavior was when groups of males did not simply live together but also formed alliances and cooperated on shared tasks. Citing baboons (cf. Smuts & Watanabe, 1990), Werner argued that homosexual behavior exapted once again, such that it facilitated alliances and cooperation. Because human males form cooperative alliances to such a great degree, he argued, homosexual behavior coevolved in elaborated form to serve alliance formation and cooperation. Werner's argument on stages fits the cross-species data in relation to social complexity well and so can be useful in any functional analysis of male homosexual behavior.

A shortcoming of Werner's hypothesis is that it was directed at accounting for androphilia (i.e., man-man homosexuality), while never adequately explaining how androphilia contributes to human male alliances and cooperation. He never considered how pederasty might fit this explanation, despite having discussed mentorship societies in his article. But the fit is strong, as the cross-cultural review presented previously indicates. Pederasty in mentorship societies was widely practiced to instill team spirit in boys so as to reproduce the coordinated male group (Herdt, 1991), whose highly dangerous and demanding activities, particularly warring and big-game hunting, depended heavily on cooperative male alliances (Gat, 2006; Gilmore, 1990; Weisfeld & Billings, 1988). Thus, human pederasty clearly fits in with the last stage in Werner's stage theory, because it was ultimately directed at teamwork. In short, as Werner argued, alliance formation and cooperation seem to be important for understanding the evolution of human male homosexual behavior—but it is for pederasty that these behaviors seem especially relevant.

Four hypotheses have been offered that did consider the evolutionary relationship between cooperative alliances and pederasty (i.e., Kirkpatrick, 2000; Mackey, 1990; Muscarella, 2000; Neill, 2009). Muscarella (2000) and Kirkpatrick (2000) both presented functional hypotheses for human homosexual behavior in general, but drew much or most of their evidence from cross-cultural pederasty, so their hypotheses are especially relevant to pederasty. Modeling from various cross-species and cross-cultural examples, Muscarella posited that male hominid adolescents were likely to have been peripheralized, that alliances with older males would thus have benefited them, and that these alliances were likely to have been facilitated by homoeroticism (i.e., through the bonds it created). He argued that the adolescents would have benefited from increased protection, greater access to resources, and valuable assistance in moving up the male hierarchy. He argued further that the older males would have benefited by expanding their social alliance networks.

Kirkpatrick reached similar conclusions regarding the adaptive mediating role of homoeroticism, but focused on alliances as the chief benefit, which he argued were needed for resource competition and cooperative defense. In age-discrepant alliances, he posited that older males benefited from younger males' assistance, whereas younger males benefited through acquisition of knowledge and resources. Mackey (1990), based on field research in sixteen countries from five continents, found that the adult male-peripubertal male dyad is especially common. He attributed this pattern to humans' unique evolutionary history, in which the male group became a well-coordinated warring and hunting unit, an adaptation that behooved adult males to continually recruit peripubertal boys to replenish the male group and its network of reciprocal alliances. He speculated that pederasty functioned to facilitate this recruitment and then foster the boys' enculturation. Neill (2009) argued that pederastic relations work to produce emotional bonds between younger and older partners, which benefit youths by enhancing role modeling tendencies, which in turn facilitate their acquiring skills and traits and assimilating beliefs and norms that they will shortly need to function successfully when fully grown. He further argued that clans would have benefited in the evolutionary past by this process, being strengthened in their competition with other clans.

Mentorship-Bonding/Enculturation-Alliance Hypothesis

The articles just reviewed form a foundation for further hypothesizing on the evolutionary origins of pederasty. In their hypotheses, the articles variously discussed benefits for the boys involved in pederastic relations (e.g., protection, resources, knowledge, enculturation), for the men involved (e.g., expanding alliances, getting assistants), and for the male group concerned (e.g., replenishment, bonding, maintenance of functioning). In this section, aspects of these hypotheses are combined with evidence from the multiple in-depth reviews presented earlier in this article, along with additional evolutionary considerations, to arrive at a refined adaptation-based explanation for pederasty. Unlike the previous studies just considered, the current hypothesizing focuses just on pederasty. Different forms of homosexual behavior are likely to have had different origins, evolutionary or otherwise, such that hypothesizing should be narrow rather than general and take care to limit cited evidence to that which is relevant (Dickemann, 2000; Jones, 2000; Vasey, 2000). In the hypotheses just discussed, for example, pederastic evidence was prominently tapped, but then applied to other homosexualities, sometimes not even to pederasty itself.[19] Pederasty should be isolated in hypothesizing because of the abundance of data relevant specifically to it, its clear relation in many other cultures to male group functioning, its likely role in this regard in evolutionary times, and, hence, its plausible adaptive origins that would be specific to it.

Environment of Evolutionary Adaptedness (EEA)

A fundamental principle in evolutionary biology or psychology is that adaptive physical or behavioral traits are products of past environments, in which recurring adaptive problems created selection pressures, which caused these traits to be naturally selected (Buss et al., 1998). For different adaptive traits, different past environments may have been involved in their natural selection. Such an environment for a given adaptive trait is referred to as its environment of evolutionary adaptedness (EEA). To examine whether a trait is adaptive, it should be assessed in terms of its usefulness not in the current environment but in the environment in which it is posited to have evolved, its proposed EEA.

That pederasty may sizably mismatch our social environment today is irrelevant to whether it is an evolved adaptation. What matters is how it fit in some past environment, its EEA, in which it was naturally selected, if that is what occurred. Primate pederastic tendencies are common enough that it can be inferred that early humans acquired these tendencies from primate ancestors. But the primate and human forms are different, with only the latter intimately connected to the male group and its shared goals or tasks, rather than simply consisting of private relations between individuals generally with no broader purpose. Additionally, only the human form is intimately connected to mentoring. Therefore, to understand human pederasty in evolutionary terms, it is necessary to look at the unique evolutionary history of humans, which requires looking at early human environments, those in which the human form of pederasty may have been naturally selected.

Big-game hunting emerged and became increasingly important among early human males—it was a male prerogative—setting in motion selective pressures for coordinated hunting units (Mackey, 1990). The hunting-gathering lifestyle defined humans for more than 90 percent of their existence, until the agricultural revolution ten thousand years ago, meaning that key aspects of male human nature were naturally selected in relation to the requirements of big-game hunting (Buss, 2007; Gat, 2006). But intergroup tribal warfare also emerged as a central component of early human environments (Gat, 2006; Holmes, 2008; Wade, 2008; Wrangham, 1987), which likewise produced strong selective pressures for the evolution of well-coordinated male groups along with facilitating psychological mechanisms (Buss, 2007; Gaulin & McBurney, 2004; Tooby & Cosmides, 2005; Wilson & Wilson, 2007). Owing to the brute-strength requirements of primitive warfare, it also became a male preserve (Gat, 2006). Among the psychological mechanisms facilitating male group behavior was male bonding, which produced such effects as loyalty, self-sacrifice, and courage, needed particularly and especially in warfare (Gat, 2006; Weisfeld & Billings, 1988). Given the significance of big-game hunting and warfare for the male group, and ultimately for the survival and welfare of the entire group, it behooved adult males to

continually recruit younger males in order to replenish the male group (Mackey, 1990; Weisfeld & Billings, 1988). Because years of practice and training were needed to acquire the skills and patterns of primitive hunting and warfare (Savin-Williams & Weisfeld, 1989), peripubertal boys, being at the right stage to be prepared for the difficult teamwork soon to be demanded of them, were sought out as recruits (Mackey, 1990).

The view that intergroup aggression was common in early human environments is controversial in anthropology (Gat, 2006) and thus needs further comment. Holmes (2008) reported on a recent conference involving anthropologists, archeologists, primatologists, psychologists, and political scientists, who assembled to examine warfare and its role in shaping human evolution. The emerging consensus was that warfare is quite ancient, not a product of the agricultural revolution, and that it was central in shaping the evolution of human traits such as coalitional aggression and super-high levels of cooperation. Gat (2006), in his evolutionary analysis of warfare, provided compelling evidence for these ancient origins of human warfare. After reviewing cross-species evidence to show the commonness of lethal aggression in the animal world (e.g., chimpanzees), he reviewed evidence on hunter-gatherer societies, which best reflect ancient humans. In one comparative study of ninety-nine extant hunter-gatherer bands in thirty-seven different cultures, almost all had engaged in warfare within a year of when the study was conducted; in another study, most of their hunter-gatherer societies engaged in warfare at least every two years (Divale, 1972; Ember, 1978; Otterbein, 1991). From the simplest hunter-gatherer societies (e.g., Australian and Tasmanian aborigines) to the more complex (e.g., coastal Northwest American Indians and Eskimos), warfare was rife and bloody, Gat noted. Deadly conflict, if not endemic, was always threatened, forcing a constant state of preparedness, often with aggressive territorial behavior and xenophobic attitudes. The Australian, Tasmanian, and coastal Northwest examples are significant, because they were "pure" in the sense that these societies had been little affected by agriculturalists and pastoralists before being studied. From this evidence, both cross-species and hunter-gatherer, Gat concluded that tribe-on-tribe warfare stretched back to the evolutionary formative years of humankind, substantially shaping its character.

For present purposes, in examining the importance of peripubertal recruits, mentoring, and group bonding to the male group's functioning, it is relevant to consider the nature of primitive warfare. As Gat (2006) documented, the pattern of primitive warfare, from hunter-gatherers of all levels of complexity to primitive agriculturalists, is remarkably uniform and manifests itself regularly. It ordinarily consists of ambuscade carried out in night raids, often with the goal of committing the greatest slaughter. Sometimes whole tribes are exterminated; other times, women are taken home by the victors, but the men and boys are killed. Most men bear scars of warfare, and mortality rates are commonly around 15 percent of

the entire group, but 25 percent of men. Anthropologists studying New Guinea and Australian tribes, for example, have noted that the inhabitants faced a constant threat or the actuality of warfare, creating a perpetual state of insecurity and preparedness. Elaborate ritualistic activity, invoking supernatural support before, during, and after battles, was pervasive in hunter-gatherer and primitive agriculturalist tribes to cope with losses (and pray for gains). This pattern, recurring as it has across numerous independent societies, can be inferred to extend back through human prehistory, which was entirely hunter-gatherer in nature, and it, rather than the recent invention of agriculture and the lifestyle changes it produced, determined the core of evolved male human nature (Gat, 2006).[20] It created powerful selection pressures for the strengthening of both the need and capacity for male bonding, the mainstay of troops' cohesion and fighting spirit, as well as for the evolution of associated mechanisms of preparedness, including recruiting boys, instilling group allegiance in them, and mentoring them in the skills and emotional readiness to be required of them as men (Gat, 2006; Mackey, 1990; Weisfeld & Billings, 1988).

Manhood Ideologies

Gilmore (1990) reviewed manhood cross-culturally and found that in culture after culture manhood was viewed as something that boys must achieve; it did not develop simply through maturation, as womanhood was ubiquitously thought to. In most cultures, boys had to pass tests on the way to manhood, and the harsher the environment and the more scarce the resources, the more manhood was stressed as important and the harsher the boys' tests were for being recognized as having achieved it. In warrior society after warrior society, peripubertal boys were subjected to extreme ordeals. Among the Masai and Samburu of East Africa, boys had to react stoically to excruciatingly painful circumcisions in front of the male group; the slightest flinching shamed them for life. Among the Amhara in nearby Ethiopia, all able-bodied adolescent boys had to engage in whipping contests, which lacerated faces and tore ears open; any sign of weakness was derided with taunts and mockery. Among the Tewa Indians of New Mexico, young adolescent boys were purified by ritual, then stripped naked and whipped mercilessly by men dressing up as spirits, inflicting permanent body scars; the boys were expected to bear up to it impassively, or else their manhood was in doubt. In many cultures in the New Guinea Highlands, boys were subjected to a series of brutalizing rituals, including whippings, flailing, and beatings, which they had to endure stoically; if they could not, it was believed, they would not mature into real men. In at least two-thirds of the world's cultures that have been studied, harsh ordeals for boys in these rites have been commonplace (Weisfeld & Billings, 1988).

In our society, these rituals would be seen as senseless acts of cruelty. But their pervasive occurrence in independent cultures around the world

clearly indicates some sort of function. The function was to harden boys for the far greater ordeals that awaited them shortly when they reached adulthood, as well as to emotionally bind them to the male group, so that they would be effective, loyal, and courageous team members (Gilmore, 1990; Weisfeld & Billings, 1988). The problem is that, if not pushed into manhood, boys and young men will find eschewing difficult and dangerous manhood tasks congenial, as Gilmore (1990) found in several exceptional cultures, where manhood was not needed or valued. In Tahiti, for example, there was no concept of manhood when Europeans first arrived in the 1770s. Men and women had exactly the same roles, boys were never tested in their masculinity, and the men were generally effeminate in demeanor and quite content in their status. Tahiti was a paradise, with no natural enemies because of isolation; food could be picked from trees and fish snatched from shallow waters. Gilmore (1990) argued that these exceptional cases show that manhood is socially constructed, not an obligate endpoint. As he noted, manhood ideologies are adaptations to particular social and physical environments. The correlation between the harshness of environment and the degree that manhood is stressed in different cultures "could not be more clear, concrete, or compelling," he emphasized (p. 224).

Interpreting Gilmore's (1990) findings in light of two additional decades of research and theorizing in evolutionary psychology, it can be concluded that manhood is an evolved capacity, not an irresistible drive. It evolved among ancient humans as an adaptation in response to the commonly harsh and dangerous social and physical environments confronted (Gat, 2006). As an innate capacity, it emerges in relation to environmental contingencies. The more pressing the contingencies, the more extensively manhood emerges. Cultures with extreme manhood ideologies (e.g., Melanesian societies) therefore should not be simplistically reduced to examples of oppressiveness, while those without any (e.g., Tahiti) are classified as liberated. Rather, these variations should be looked at in relation to the forces producing them (i.e., social and physical environments) interacting with the evolved capacity for manhood.

Manhood ideologies are a type of cultural ideology and are interwoven with social structures (see earlier section on sociological considerations). For present purposes, the importance of the manhood embedded within these ideologies is that it is reflective of an EEA, whose selective forces naturally selected a complex of facilitating behavior patterns, including those directed at replenishing manhood when it was culturally needed: for example, recruiting boys, reorienting them psychologically and emotionally to meld into the male group, and mentoring them. It has been the contention of several researchers (e.g., Mackey, 1990) that pederasty was part of this complex as well. In short, in evaluating adaptive functions for pederasty, manhood and manhood ideologies need to be taken into account.

Individual Versus Group Selection

Up to this point, this chapter has inferred from the cross-species data that early humans inherited pederastic tendencies. It has noted that previous hypotheses have connected these tendencies to benefits for boys, men, and groups where pederasty was practiced. It was argued that early human environments were extremely harsh and perilous, such that male bonding and mentoring boys often would have been needed. It was argued further that manhood tendencies are evolved capacities stemming from selective pressures from past harsh environments, such that particular societies' efforts in "manning up" boys are moderated by the degree of environmental stress in those societies. These elements allow for presenting a more refined version of the previous hypotheses concerning pederasty's adaptive value. First, however, one additional consideration will be useful.

Notably, the hypotheses presented by Muscarella (2000), Kirkpatrick (2000), and Neill (2009) focused on individual benefits, mostly for the youths, but also for the men, involved in pederastic relations. Mackey's (1990) focus was directed at benefits to the male group; Neill (2009) also explicitly touched on group benefits. Distinguishing between individual and group benefits is directly related to the evolutionary processes of individual and group selection, which none of these authors discussed, but which are important for evolutionary hypothesizing. Individual selection holds that physical and behavioral traits are naturally selected in relation to the survival and reproductive fitness they confer on individuals possessing these traits. Group selection, on the other hand, holds that traits are naturally selected in relation to benefits to the group, even when individual fitness is lessened in individuals with these traits.

Group selection as a legitimate evolutionary process has been in disfavor since the 1960s. Wilson and Wilson (2007), however, noted that the dismissal of group selection came only through argumentation, not through a distinguished body of empirical evidence. Since the 1960s, they continued, a number of key biologists who had rejected group selection later reverted back to it as a supplemental process (e.g., George C. Williams, William D. Hamilton, John Maynard Smith). More importantly, growing evidence for it has emerged in microbes, plants, insects, and vertebrates, in which various species (a small minority of all species) have crossed an evolutionary threshold to include this process as part of their evolutionary nature. Once crossed, group selection has been a powerful evolutionary force in shaping the concerned species, they argued, and it has contributed to their dominance over other species. Group selection in ants, for example, is now considered a model instance (Wilson & Hölldobler, 2008). Wilson and Wilson (2007) and Wilson and Hölldobler (2008) argued that humans, being unusually groupish, are partly products of group selection, an argument that is suggested by parallels with ants: hyperaggressiveness between groups, hyper-cooperativeness within groups, and extreme evolutionary success (all hallmarks of group

selection). In terms of evolutionary success, ants and humans are the two most dominant animal species on earth.[21] In various interviews, E. O. Wilson argued that group selection helps to explain human males' level of bravery, innovativeness, sacrifice, and loyalty, traits all necessary in human intergroup competition (*Discover,* 2006; Wade, 2008).

In short, group selection appears to be an important supplement to individual selection in evolutionary thinking regarding humans. Gat (2006) saw its obvious value in his attempt to account for warfare across human existence, given that warfare is centrally about group-on-group competition. Pederasty has so often occurred in societies in connection with group behavior and in service of it, that group selection appears useful in analyzing pederasty. The hypothesis to follow makes use of individual selection, but considers group selection as well.

Current Hypothesis

The refined adaptation-based explanation for pederasty is entitled the "mentorship-bonding/enculturation-alliance hypothesis," which corresponds to how pederasty has actually occurred in societies in which it served explicit cultural functions. In the narrow context between individual men and boys, *mentorships* transmitted culturally needed skills (e.g., hunting, warring) and emotional readiness (e.g., bravery, courage) to the boys, and they also yielded apprentice benefits to the men. The *bonding* produced by the intimate nature of the pederasty facilitated these mentorships (cf. Kirkpatrick, 2000; Muscarella, 2000; Neill, 2009). In the broader group-level context, pederasty served as a mechanism, among others, to immerse boys in the ways of the male group (i.e., *enculturation*) and to bond them with the group and its members in strong *alliances* needed for well-coordinated group behavior in difficult and dangerous activities, particularly big-game hunting and warfare (cf. Mackey, 1990).

Formally, this hypothesis holds that pederasty evolved in the early human hunter-gatherer EEA as an adaptation (i.e., exaptation), whose function it was to reproduce the male group by facilitating the mentoring and enculturation of boys from peripubescence through adolescence, as well as their emotional and psychological binding with the group. This function was a solution to the recurring adaptive problems in the EEA of surviving and exploiting an extremely dangerous and competitive social and physical environment, which frequently involved the serious risks and valuable rewards (e.g., nutritional) of big-game hunting, as well as the extreme (i.e., lethal) risks and sizable rewards (e.g., material) of warfare.

Individual and group selection. In the narrow context just discussed, individual selection is the evolutionary process assumed to have driven the proposed exaptation. Here, pederastic relations facilitated mentoring and bonding, which helped to enhance boys' development and secure assistance for the men involved. Boys and men benefited as individuals in the near term and later on. Regarding the latter, the maintenance of the

male group over time would have fed back positively on the now grown up boys and their former older partners.

Notably, however, sizable proportions of males would have been seriously injured or lost through their male group activities in the harsh EEA, meaning that the male group also imposed significant costs on many individuals involved. Under these circumstances, in order for the male group to function successfully, it had to be prioritized over the individual. As in the social insects, individuals mattered less than the group and could be sacrificed. The history and prehistory of warfare clearly attest to this relation (Gat, 2006). Group selection is the evolutionary process indicated here. Pederasty is inferred to have exapted in early humans in service of the group, not just the individual. Following its actual practice in mentorship societies, it is inferred that pederasty facilitated enculturation and group allegiance in the EEA, which could override individual benefit in favor of the group when needed.

Design features. Humans have designed many devices for particular purposes. A reading lamp, for example, is designed to produce light (i.e., its function), which its various design features (e.g., filament, vacuum, glass encasement) enable. Heat is emitted, but this is incidental (i.e., a by-product). The same reasoning applies to adaptations, designed instead by natural selection. If a trait is an adaptation, it will have special design features that are tightly tied to the function it is serving. By documenting a trait's design features and showing their fit to the function being proposed for the trait, confidence can be built that the trait is an adaptation serving the proposed function. As in the lamp analogy, traits can also be by-products of adaptations, rather than adaptations themselves (Buss et al., 1998; Tooby & Cosmides, 2005).

If pederasty is an adaptation that serves reproducing the male group, aspects of it (i.e., design features) should fit this function well. Cross-culturally, boys are brought into male groups at peripubescence, and by later adolescence they are well-integrated, participating members (Mackey, 1990; Weisfeld & Billings, 1988). It is during this period that mentoring and enculturation occur, the direct means of group reproduction. Notably, pederastic attractions typically emerge at the beginning of this period (i.e., peripubescence) and terminate at the end (i.e., later adolescence), suggesting that these attractions are design features, which act to switch on and then switch off older males' interest in putting special effort into the boys' development, thereby replicating the group. In the historical and cross-cultural review, in society after society, pederastic interests not only emerged, but surged at the peripubescent stage, but then were completely shut off by later adolescence with boys' development of body hair on the legs and especially the face. Nonclinical empirical data in our own society reveal the same pattern, in which attractions surge around ages 12 to 14, but then vanish with the emergence of boys' facial hair and macho behavior (Lautmann, 1994; Wilson & Cox, 1983).

Not only is boys' initial pubertal development a likely design feature that switches on pederastic attractions, but so is their adventuresome demeanor at this stage. Lautmann (1994) reported that the men attracted to boys in his sample were not only attracted to the "blooming of the flower" (i.e., puberty), but that they found a boy particularly appealing when he was a "burst of energy," and when he was "no angel," but a "rascal." Men in his sample attracted to girls were not drawn to such characteristics in girls. These boy-specific attributes appear also to be design features that not only activate the pederast's interest, but that are useful for the rough male role that awaits boys in harsh environments, to which mentoring and enculturation are geared.

During peripubescence, boys become decidedly team-oriented and readily hero-worship older males, whereas by later adolescence a firm sense of independence generally emerges in them (Neill, 2009; Weisfeld & Billings, 1988). As well, nonclinical empirical research indicates that, when they have not absorbed the moral negatives about sex with other males or with older males, boys can be open to pederastic relations until later adolescence, at which point they usually lose all interest in favor of pursuing females (e.g., Lautmann, 1994; Money & Weinrich, 1983; Rossman, 1976; Tindall, 1978). In the pederastic cultures in the historical and cross-cultural review, boys in later adolescence similarly lost this interest, at which point they frequently became sexually interested themselves in younger boys, in addition to females. These early and later characteristics are coordinated and appear to be additional design features that promote boys' receptiveness to and even enthusiasm about mentorships and enculturation, as well as pederastic relations, for a limited time, as needed to achieve the developmental milestones that will serve them in becoming adults and will serve the male group as well.

In short, the ages of boys sought out as recruits in male groups, the period in which they are mentored and enculturated, the ages of boys that men in such societies (and our own) find erotically appealing, the ages at which boys are especially open to being mentored (and capable as well, owing to an emergent adult-cognitive capacity), and the ages at which they are open to pederastic relations appear to be part of a single package, in which each of these characteristics seems to be a design feature and element of a larger design, whose function is reproducing the male group.

Adaptation versus by-product. It has frequently been suggested that, when females are not available, boys can become their substitutes for older males, such that older males' erotic interests in boys are essentially a by-product of their adaptive attractions to females. For example, in English boarding schools prior to the 1970s, older teens frequently developed intense erotic crushes on peripubertal boys, only to become exclusively heterosexual upon graduation when they reentered sexually mixed society (Gathorne-Hardy, 1978; Lambert & Lambert, 1968). The problem with this argument is the assumption that living mostly in sex-segregated settings while a youth

is intrinsically artificial, when the cross-cultural data show otherwise. In particularly harsh environments, sexual segregation at this stage of life has been common, and likely was so stretching back into the EEA. In numerous mammalian species, sexual segregation for youthful males is also common, showing that such arrangements are part of nature, not intrinsically against it. In such settings in the case of humans, as the earlier historical and cross-cultural review suggests, older male erotic interest in boys appears to be an emergent attraction, not simply a substitute for females, arising as part of a functional package supporting the maintenance and continuation of the male group. Sexual segregation is not an arbitrary arrangement, but one generally associated with societal needs at the time—for example, when the male group is especially needed for its contributions (e.g., hunting, warfare) to the wider group. In this context, mentoring, enculturation, and male bonding become important, and emergent pederastic interests can be awakened. In short, the by-product alternative explanation to adaptation, though likely valid in particular cases, does not appear to be valid across a significant part of the domain of pederastic interests.

Obligate versus facultative traits. Finally, it is important to note that genetically based traits may be obligate or facultative. Barring major disruptions, obligate traits will always be expressed. The expression of facultative traits, on the other hand, is contingent on environmental and other inputs (Gaulin & McBurney, 2004). Social behaviors that are adaptations generally fall into the second category. Their activation may crucially depend on various inputs during development, for example. Moreover, other types of input during development can disrupt or completely block their emergence (Buss et al., 1998). Another reason why adaptations may not be expressed is that other adaptations can be in conflict with them, such that their expression is suppressed by the expression of the other adaptations (Wilson & Wilson, 2007). Though Kirkpatrick (2000) argued that homosexual behavior is adaptive, he emphasized that its expression is variable, being contingent on environmental conditions such as social and family structures. Under certain conditions, homosexual behavior is associated with benefits (e.g., as when alliance formation is important), and so will tend to be expressed. Under other conditions, it may be associated mainly with costs, and so will rarely find expression.

Notably, Kirkpatrick's (2000) evidence for facultative homosexual expression specifically concerned pederasty, which has been widespread in certain environments (e.g., Melanesia, ancient Greece, premodern Japan) but rare in others (e.g., the modern West). It is important to emphasize that pederasty's relatively infrequent expression in societies such as ours does not imply that it is not an adaptation. In our society, developmental inputs have traditionally been intensely hostile toward homosexual behavior, often accompanied by severe social sanctions, including public disgrace and punishment, which can be expected to have had a significant dampening effect on the emergence and activation of pederastic desire

and the expression of pederastic behavior. On the other hand, developmental inputs, as well as social and family structures, have been entirely encouraging of exclusive heterosexual interests and behavior, generally producing this outcome. Cross-culturally, as well as in other species, pederasty and heterosexuality have often resided in the same individual, rather than being characteristic only in separate individuals. Therefore, when the one behavior is punished and the other is rewarded, as is very much the case in our society, it follows that the latter is the one that will be activated and expressed in most individuals.

In our society, pederastic desire and behavior nevertheless still do occasionally surface. The explanation that best fits the evidence presented throughout this chapter is that pederastic tendencies are naturally variable across the male population, probably forming a normal distribution from little to high potential, with most males having moderate potential. These tendencies are presumably genetic, the result of primate heritage, natural selection, and pederasty's functional utility in the EEA. As well, heterosexual tendencies probably form a distribution of potential, perhaps negatively skewed (i.e., few have a low potential in the direction of the negative end of the scale, most have a high potential in the direction of the positive end). Given our society's cultural ideologies and social structure, for males with high heterosexual potential (i.e., most males), exclusive heterosexuality is the likely outcome, even if the pederastic potential is also high. For males with high pederastic potential, but lower heterosexual potential, a pederastic outcome may be likely. Thus, even though adaptive in the EEA, pederasty, being a facultative trait, is nevertheless rare in our environment. On the other hand, in cultures with cultural ideologies and social structures facilitative of pederastic desire and expression, its occurrence has been widespread across the male population, which is consistent with the assumptions that most males have at least a moderate potential for the behavior and that such potential is sufficient for the behavior to emerge, provided other factors are not inhibitory.

Discussion

Clinicians, psychologists, journalists, and other influential opinion-makers who comment on the nature of pederasty nearly unanimously state or imply that it is innately pathological in the adult male, intrinsically disturbing for the youth, and always damaging for society. Their epistemological approach, however, is the same as that formerly used to judge masturbation, homosexuality, and other sexual behaviors as pathologies: values, ideologies, and clinical cases. This approach, however, is not scientifically sound. Such generalizations require broader evidence and perspectives to be valid (Bullough, 1976; Ford & Beach, 1951; Kinsey et al., 1948). Broader evidence (e.g., anthropological, sociological, zoological) is copious. The present chapter employed such evidence to critically assess the dominant generalizations about pederasty.

The current view that pederasty is intensely psychologically harmful for the youths involved derives most directly from sexual victimological theory (SVT), which emerged in the 1970s (Jenkins, 1998, 2006; Nathan & Snedeker, 1995). SVT, using rape and incest as its model, implanted the view by the early 1980s that all forms of adult-minor sex, including pederasty, are characterized by coercion, trauma, and long-term maladjustment. As well, SVT fostered and amplified general views that pederastic desires are intrinsically pathological and that society is badly damaged by pederastic behavior. In the nonclinical empirical review in the present article, SVT was clearly refuted with respect to adolescent boys, where consent, positive reactions, and normal adjustment were common, particularly in age-discrepant sexual relations that were sexual orientation consistent (i.e., heterosexual boys with women, homosexual boys with men) and in pederastic relations occurring within special friendships (i.e., typically involving heterosexual boys with men). Moreover, within these special friendships, the evidence suggested function rather than dysfunction for the youths involved.

A historical and cross-cultural review was conducted next, because sexual behavior is profoundly influenced by culture, and so any valid generalizing about sexual behavior needs to take culture into account (Bullough, 1976; Ford & Beach, 1951). Thirty-three societies with institutionalized or wide-spread pederasty were considered. In these societies, pederasty was often characteristic of the typical man, contradicting our society's assumptions that locate this behavior necessarily in idiosyncratic disturbance. The evidence from these societies suggested that pederastic propensities are normally distributed across males, ranging in potential from weak to strong, with most in the moderate range. The evidence also indicated that males perceived their pederastic involvements as youths in positive terms, consistent with the positive ideologies of these cultures. In the many mentorship societies examined, pederasty was seen by the natives themselves and described by visiting anthropologists as being functional, acting to reproduce the male group, which in these societies usually performed dangerous but vital services (e.g., big-game hunting, warring) in the interests of the wider society. Pederasty served to create bonds between younger and older males as well as allegience to the male group. These bonds, in turn, facilitated the transmission of culturally needed skills and emotional readiness to the youths.

Sociological considerations then showed that pederastic expression across time and place has varied as a function of cultural ideologies and social structures. In general, these factors feed back on one another, and each reflects the material needs of a given culture as well as its social constructions stemming from politics. In the present-day West, all these factors have combined to position pederasty as an unfathomable deviance in both lay and professional thinking, which helps to account for its negative-halo, in which all sorts of harms and pathologies are readily

attributed to it. Importantly, the sociological perspective, along with the other perspectives in this chapter, reveals the social constructionist nature of this Western thinking, which, far from being equivalent to scientific thinking, is quite at odds with it.

The cross-species review was the next logical focus, given the argument that deeper (i.e., evolutionary) roots should be considered when a human sexual behavior pattern recurs cross-culturally (Ford & Beach, 1951). In this review, twenty-four primate, twenty-six subprimate mammalian, and seventeen avian species were considered. The review showed that pederastic-like tendencies are common in the primates most closely related to humans (Old World monkeys and apes), as well as in many other higher mammals. In these species, the evidence indicated that this behavior is not a pathology but instead a normal variant, which is often associated with assent or even initiative on the part of the younger animal and may serve useful functions. The special friendships reported in many of these species show parallels with those reported in the human nonclinical and cross-cultural literature. Pederastic-like behavior also often occurs in subprimate mammals, sometimes with probable functionality (e.g., bighorn and thinhorn sheep), and it occurs in numerous bird species, where adult male courting of adolescent males was frequently observed. In short, the cross-species evidence shows that pederasty is part of nature and indicates that it is generally a benign and sometimes functional behavior, rather than a maladaptation. This evidence strongly suggests that benign or perhaps functional pederastic tendencies were inherited by human ancestors. Their trajectory in humans was then determined by humans' unique evolutionary history.

In the evolutionary synthesis, which built on the evidence in the earlier sections, a functional hypothesis for pederasty was proposed. In the censorship of the 2005 version of this chapter in the *Journal of Homosexuality,* the brief functional allusion in that article was received incredulously by critics. So it is important to emphasize here that discussing function is fully consistent with the scientific literature, in which: (a) cultural function for pederasty has repeatedly been discussed in the anthropological literature, (b) social or individual function for pederastic-like behavior has repeatedly been discussed in the zoological literature, and (c) at least four published scholarly studies to date have made use of the cross-cultural and cross-species evidence to hypothesize function for human pederasty. In this synthesis, the "mentorship-bonding/enculturation-alliance" hypothesis was proposed, directly reflecting the way that pederasty has appeared in the many societies across time and place institutionalizing it. In these "mentorship" societies, as they are referred to by anthropologists, pederasty was one of the means employed by the male group to replicate itself, which was effected through: (a) *mentoring* boys in specific skills and emotional demeanor to be needed later on, (b) facilitating this mentoring through *bonding,* to which pederasty's erotic

character contributed, (c) *enculturation* of boys into the practices and ideologies of the group, and (d) cementing *alliances* with other male group members, which were essential in the teamwork needed in activities such as big-game hunting and warfare.

Support for this hypothesis came from various considerations, a few of which are recapped here for emphasis. First, human nature as an evolved set of behavioral adaptations was molded in ancient humans, not modern people, and understanding it therefore requires looking at ancient human environments (i.e., the EEA). In the EEA, conditions were harsh and demanding, more or less in line with Hobbes's (but not Rousseau's) "state of nature" (Gat, 2006). In these environments, with intergroup aggression, or the perennial threat of it, as well as frequent big-game hunting, the male group would have especially mattered, and so recruiting boys would have been continually needed, which entailed mentoring, bonding, enculturation, and alliance formation. Evolved mechanisms would have been needed for each of these behaviors or processes, and pederasty seems likely to have been one of them, given its role in mentorship societies. Second, cross-cultural manhood ideologies were reviewed, which indicated that "manhood" is an evolved capacity, whose degree of expression depends on the harshness of the environs. Significantly, manhood is not a drive—it does not emerge in paradises like Tahiti. Harsh environs create the need for it, boys have to be pushed into developing it, and so mechanisms facilitating this push then become important. Pederasty appears to be one of these mechanisms. Third, pederasty as an adaptation was supported by identifying various design features, including the correspondence in boys' ages for the emergence and termination of pederastic attractions with the period in which boys are generally recruited and eventually fully assimilated into the male group. In this age matching, pederasty appears to function as an activating or energizing mechanism. Finally, pederasty as a facultative trait was discussed, in which its degree of expression at the population level was argued to depend on the interaction between its assumed normally distributed potential and environmental inputs, including harshness of environs, the social structure, and cultural ideologies. In our society today, the environment is more like Tahiti than the New Guinea Highlands because of super-technology and strong statehood: acquiring food is a trip to the supermarket, combat is consigned to paid volunteers, and safety is usually ensured by the state. Our social structure, fashioned by the super-technology, favors mixed-sex socializing while disfavoring all-male groupings, which have lost much of their value. And cultural ideologies emphasize egalitarian sexual relations while derogating relations based on substantial difference, especially age differences involving minors. Given these inhibitory influences, pederastic expression is generally only likely to emerge among males with high genetically based propensities; hence, it is uncommon in our society.

Evolutionary Mismatch

From the evolutionary synthesis emerges the conclusion that pederasty is an evolutionary mismatch. That is, though it is a functionally evolved mechanism, well suited to ancient and other more recent human environments, it is ill-suited to our own. The modern-day pederast is like the moth with a light-coloring mechanism transported to an industrialized, sooted environment, in which the mechanism is functioning as designed, but this functioning now imperils the moth. The moth does not have a disease, because it does not have a dysfunction; the problem is external (cf. Wakefield, 1992, 1999, 2007). The pederast likewise does not have a disease, because he does not have a dysfunction. His erotic attraction mechanism is functioning according to design, but in the wrong environment. Attempts to classify such attractions as a pathology, as a mental disorder (see Blanchard et al., 2009), are misguided in the same sense that classification of masturbation and homosexuality in past were misguided. These misclassifications stem from value judgments, which serve dominant ideologies and interests of the day, but not science.

Many youths involved in pederastic relations have benefited from them—a finding well supported by the empirical literature. On the other hand, many other youths have reacted negatively, either during the relationships or later—as clinical studies report. The problem is that the latter findings receive 100 percent of media and professional attention, in service of the cultural view that pederasty is a crime against nature, which invariably harms and destroys. The current review, which is scientific (examines broad-based evidence, rather than focusing on a narrow slice), shows this view to be untenable. Missing from our cultural view is consideration of the evolutionarily mismatched nature of pederasty in the present environment. Pederasty is currently gravely at odds with the social structure and cultural ideologies, especially since their modifications in the 1970s. Therefore, when it occurs now in particular cases, it is likely to be occurring far outside the context associated with its design, devoid of mentoring, bonding, and group purpose. Its occurrence is prone to being tainted by opprobrium and a sense of exploitation and violation. It is this evolution-culture mismatch rather than the behavior itself that is a prime source for negative response. Neill (2009, p. 436) referred to pederastic behavior in such mismatched contexts as "distorted discharges."

Science Versus Advocacy

As previously noted, the study of adult-minor sex was commandeered by sexual victimology over three decades ago, a paradigm and movement essentially ideological and political in nature, given to unchecked hyperbole, and yet accorded immense powers to define the nature of these sexual relations in "scientific" terms (Malón, 2010, 2011; Money, 1979, 1988). Sexual victimology grew out of a particular strand within the feminist movement, which Angelides (2004, 2005) referred to as

"radical feminism" and Sommers (1995, 2000) as "gender feminism." In contrast with other forms of feminism, this form focused on male misbehavior (sexual and otherwise) as a chief advocacy tactic. It did so not simply to right past wrongs, but specifically to weaken the male brand as a means of advancing women's power. The problem is not simply that hyperbole became entrenched in this advocacy—as it may in any political advocacy—but that it became absorbed into sexual victimology. The problem is that sexual victimology was received by professionals and the public as "scientific," as a legitimate authority on the topics under its purview. But it was not a science; it was the codification of an ideology, with extremist character. To wit, shortly after sexual victimology's rise to dominance, moral panics broke out across the United States in day care and recovered memories—a direct result of sexual victimology's extremist claims regarding the nature and effects of sexual misconduct (Jenkins, 1998, 2006; Nathan & Snedeker, 1995).

Notably, the Rind et al. (1998) meta-analysis was one important corrective to this extremism, documenting myriad methodological and hermeneutic flaws recurring in sexual victimological studies and demonstrating the value of the application of proper methods and interpretation. For example, along with related meta-analyses (Rind et al., 2001; Rind & Tromovitch, 1997, 2007), it showed that child sexual abuse is associated on average with small, not large, differences in psychological adjustment in the general population. In laymen's terms, if two of one hundred persons in the general population have clinically significant problems, only three of one hundred persons having experienced child sexual abuse do—far fewer than the large majorities implied by sexual victimologists.[22]

The Rind et al. (1998) meta-analysis was not conducted to advocate adult-minor sex, but rather a return to the scientific study of it, an important goal, given the moral panics sweeping through the United States during the 1980s and 1990s. Similarly, the current review was not conducted to advocate pederasty, but to advocate the scientific study of it. Whereas the foci of moral panics in the 1980s and 1990s were alleged abuse of very young girls and boys in day care centers and young girls in recovered memories of adult patients, new foci have emerged since, of which pederasty is one. For at least the last decade, pederasty has been constantly in the news, perhaps as the most often discussed form of child sexual abuse. The rhetoric follows the radical feminist ideology illustrated in the 1984 newspaper editorial discussed earlier. The claims follow sexual victimological pronouncements, the same ones that previously had targeted the now discredited cases of day care abuse and recovered memories. Just as the Rind et al. (1998) meta-analysis was useful in its day, the current review fits the present vis-à-vis the panic surrounding pederasty by confronting sexual victimology with science. This review's findings of benign or functional pederasty throughout

nature are not offered to suggest that this behavior be adopted in our society (the naturalistic fallacy). Its summaries of functional pederasty across numerous other societies are not offered to argue that we instate the practice (the relativistic fallacy). But its findings, summaries, and evolutionary conclusions are offered to expose the moralistic fallacy that pervades the discourse on pederasty, in which moral certitude of its wrongfulness, championed especially by radical feminism and sexual victimology, continually has led to universal claims of its pathological nature and unique harmfulness.

Of the Rind et al. (1998) meta-analysis, it was said that it would open up the floodgates to abuse of children by leading to relaxed laws and vigilance. In the fifteen years since, just the opposite has occurred, in which laws and social attitudes have become increasingly severe (Heller, in this volume; Hubbard, in this volume; *The Economist,* 2009a, 2009b). Scientific reports challenging conventional wisdom generally have little or no effect when faced with powerfully entrenched social structures and cultural ideologies. The same applies to the current review of pederasty. Its potential benefits are in toning down the discursive hyperbole regarding this behavior, as well as illustrating the value of using the broad perspective in analyzing sexual behavior, which has general applications far beyond pederasty. Its potential to alter the relationship between pederasty and society is weak, because this relationship is driven by the dominant social structure and cultural ideologies, which are firmly rooted and unlikely to change significantly in our lifetimes.

Conclusion

2,000 years from now, when the social structure, cultural ideologies, and sexual behavior patterns have significantly altered, as they are bound to do, historians will look back on the sexual patterns of our culture today. When doing so, they will not see our patterns of approved and disapproved sexual behaviors as perfected reference points for judging psychological normality and abnormality, but rather as one manifestation among innumerable others of how cultures construct sexuality, only the totality of which is suggestive of deeper patterns. On the contrary, present-day psychologists, psychiatrists, and other professionals accorded authority to tell us what constitutes normal and abnormal sexual behavior, and what the harms associated with the latter are, do take our patterns as perfected reference points for judgments. This problem has been a recurring one since clinicians supplanted clerics as the "experts" on sex (Foucault, 1978; Szasz, 1990). Kinsey et al. (1948), Ford and Beach (1951), and many others since have complained about this problem, while demonstrating empirically that status-quo theorizing on sexual behavior in many cases is cultural rationalization rather scientific explanation. The present review study on pederasty falls in with this latter tradition in its logic, methods, and conclusions. It offers scientific clarification of

this behavioral phenomenon at a time when such clarification is culturally useful, given the constant attention presently surrounding it, yet an attention too often colored by hyperbole and moral panic, rather than one aimed at any kind of objective, dispassionate, and nuanced appraisal.

Notes

1. More precisely, sexual moralities are culturally variable, being constructed from biological foundations in human nature, cultural needs over time, and prevailing cultural ideologies. That is, sexual moral systems are not limitless, even though they are plastic.
2. Drawing inferences from animal, including primate, behavior to human behavior is controversial in many branches of the social sciences. Later in the article, when cross-species data are discussed, due attention will be paid to their controversial nature.
3. Drapetomania was classified as a psychiatric disorder, in which slaves were considered mentally disordered when they ran away from their masters.
4. See Table III in the Historical, Anthropological, and Sociological review later in this article.
5. Subjects were asked how much they enjoyed the event (none, little, some, or much), and "much" was used as "very positive" in this analysis.
6. Unweighted means for reactions were computed, owing to the outlier nature of the Doll et al. (1992) study compared with the other seven studies in terms of its sample type (i.e., quasi-clinical as opposed to purely nonclinical), sample size (z = 2.22 above the mean sample size), and reaction pattern (i.e., z = 1.89 above the mean negative reaction). The Doll et al. (1992) study also stood apart from the other studies in the way it asked participants about whether they had early age-gap sex. They were asked "whether they were encouraged or forced to have sexual contact before the age of 19 with a person whom they perceived as older or more powerful than themselves" (p. 857), which is a leading question. Its phrase "encouraged or forced" suggests interactions that were mainly passive or unwanted, and its "more powerful" negatively framed the contacts. Compare this question with the completely neutral question in the Stanley et al. (2004) study: "As a child or adolescent, did you have any sexual contact with an adult or older person?"?
7. In these studies, reactions were assessed by direct questions to respondents, as were constructs such as "force." "Abuse" was assessed either by direct questions to respondents or by the researchers' definitional criteria. Importantly, these criteria allowed for non-abusive boy-man sex, in addition to abusive cases. This contrasts with victimological research, where abuse is assumed *a priori*.
8. The studies were, with *n*s followed by positive, neutral, and negative percents in brackets: Fishman (1991) [17—12, 35, 53], Fromuth and Burkhart (1987) [25—n/a, n/a, 52], Okami (1991) [29—72, 17, 10], West and Woodhouse (1993) [29—7, 52, 41], Woods and Dean (1984) [19—16, 32, 52]. Estimated mean percents do not add up to 100 because of missing data in the Fromuth and Burkhart study. Four studies were US samples, and one was British (West & Woodhouse, 1993).
9. "Institutionalized" pederasty, like heterosexual marriage, means a cultural custom, which is organized, socially sanctioned, expected, and ceremonialized—all done because the practice is seen as for the social good. Such cultures are discussed later in detail.
10. Technically speaking, even if the selected societies were unrepresentative, they would still be adequate for testing the dominant assumptions of pathology in the social group, the man, and the youth, assumptions that are *universal* in character. Because pathology is imputed to pederasty per se, regardless of context, contrary examples will serve to challenge this view, and a consistent pattern of contrary examples will negate it.

11. Gat (2006) noted that two views of war have dominated since Hobbes and Rousseau, that of constant war and conflict since the dawn of humankind (Hobbesian), and that of war entering in only with the agricultural revolution ten thousand years ago, when larger societies with their increasing degrees of material possessions encouraged intergroup aggression (Rousseauian). Based on cross-species comparisons and on archeological, historical, and cross-cultural evidence, Gat concluded that Hobbes was much closer to the truth, because the entirety of the evidence indicates that tribe-on-tribe warfare has extended throughout not only the history of our species, but our genus as well. This view is increasingly being espoused among social scientists across many disciplines, as evidence mounts to replace earlier speculation or ideology (e.g., Bowles & Gintis, 2011; Holmes, 2008; Pinker, 2011; Wade, 2008, 2011; Wrangham, 1987). Later in this article, more details are given in the section on humans' "environment of evolutionary adaptedness."
12. In the Greco-Roman world, active partners in homosexual acts between adult men were not stigmatized, only passive partners were. The Sodom myth derogated the active partner as well, with consequence that all forms of homosexual behavior were immoral and then criminal. The Sodom myth thus acted to institutionalize heterosexuality (Rice, manuscript in preparation). Whereas in the classical world, the driving distinction was active-passive, with partner's gender relatively unimportant, in the Christian world, the driving distinction came to heterosexual-homosexual, with the latter always unacceptable (Williams, 1999).
13. In many cases to be examined, age-discrepant homosex parallels human pederasty in relative stages of development of older and younger partners, although age-discrepant homosex has more variability in this regard. In all cases, though, the younger partners are non-adults, and the other partner is significantly older.
14. Bagemihl (1999) featured descriptions of twenty-four primate species (he also included brief references to various other primate species with observed male homosexuality at the ends of some of the featured descriptions). Three of the featured species were omitted from the current review: in two of them, only female homosexuality had been observed (golden monkeys and bushbabies); in the other one (Rufous-naped tamarins), the description was sparse, as was the primary literature. The three species added to Table IV were the mona monkey, patas monkey, and Tibetan macaque.
15. In Vasey's (1995) review, aside from species in the mixed category, mature-immature pairings dominated in 43% of the species, immature-immature in another 43%, and mature-mature in only 14%. In the mixed category, mature-immature pairings were always part of the mix usually along with immature-immature.
16. Spandrels are spaces left in between in architecture—so here, they are functionless side effects of adaptations.
17. *Phylogentic legacy* is another term for vestigial trait, where an adaptation no longer provides any functional purpose but persists through phylogenetic inertia over evolutionary time until it becomes too costly (Thornhill, 1997).
18. Many anthropologists would argue that there is no such thing as "the behavior itself" outside of culture, circumstances, and the individual. And some anthropologists, following this thinking, have argued that gender and sexual relations themselves likewise do not exist outside of culture, circumstances, and the individual. The present article presents a different view, one that clearly endorses cultural and personal effects, but one that also emphasizes a biological component. The fact that mating behavior exists throughout the animal kingdom is proof that human mating behavior has a biological component based on evolutionary heritage. The human form is different from other species: some of that difference is cultural and individual, but some is also biological, as an adaptation to humans' unique evolutionary history. These points apply to homosexual behavior in general and pederasty in particular. Culture, circumstances, and individual factors all matter, but they interact with a biological foundation of evolutionary heritage, as indicated eariler this study.

19. Werner (2006) reviewed pederasty and gender-stratified male homosexuality, but focused on the latter in his hypothesizing. Kirkpatrick (2000) did likewise, presenting a predominance of pederastic cross-cultural evidence, but putting emphasis on androphilia in his hypothesizing, as well as trying to account for female homosexuality. Muscarella (2000) also sought to explain male and female homosexual behavior—a broad task—but focused mostly on pederasty. Neill (2009) similarly sought to explain all of human homosexuality, again with a preponderance of pederastic evidence.
20. The extent to which the study of modern hunter-gatherers provides a basis for inference into the past has been a topic of long-standing debate in anthropology and archaeology. But the fact that the warring pattern is so consistent across extant culturally independent hunter-gatherers of all complexity and primitive agriculturalists is significant. It is suggestive of a long-standing pattern dating back to ancestral humans, when warring became characteristic.
21. Ants are in the class Insecta, which falls in the kingdom Animalia; thus, ants are animals. Group selection in ants is associated with a high degree of relatedness of colony members (importantly, though high degrees of relatedness can contribute to group selection, they are not essential; Wilson & Wilson, 2007). Notably, early human male group members are considered to have generally been related to varying degrees, given current human and African ape evidence indicating that male endogamy and female exogamy (i.e., males stay in their natal group, but females leave at puberty) were most likely the rule in early humans (Wrangham, 1987).
22. Notably, research has repeatedly shown that child sexual abuse in our society is confounded with negative family and peer environments, such that the small association between child sexual abuse and later poorer adjustment cannot be assumed to be causal at the population level. In particular cases, it surely causes severe harm, but so do certain cases of adult-adult sex. The main question is whether harmful outcome is a property of this experience, and the nonclinical empirical research indicates that it is not, but instead is an interaction effect of circumstances and individuals.

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