With Pleasure

Thoughts on the Nature of Human Sexuality

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Introduction

Oscar Wilde, the master of paradox, once intoned, "I adore the simple pleasures, they are the last refuge of the complex." Unfortunately, sexual pleasure, as Wilde discovered, is seldom simple. In many ways, Wilde is emblematic of the vagaries of sexual politics, having been disgraced and jailed for his homosexuality. What started as a simple (but brazen) libel trial—initiated by Wilde against the Marquess of Queensbury for claiming that Wilde was "posing as a sodomite" and thereby adversely influencing his son, Lord Alfred Douglas—ultimately backfired against Wilde when evidence obtained from previous lovers irrefutably demonstrated that he was, in fact, a "sodomite."2

This is a book about sex, and about sexual pleasure in particular. In it we assert the obvious—that sex is pleasurable—and examine the myriad implications of this seemingly innocuous assertion for evolutionary, cultural, and psychological theories of human sexual expression.

Our point of takeoff is the duality of human sexuality. Sex is pleasurable, true, but it is also necessary for the survival of the human species. The long-standing tension between the procreative and the pleasurable aspects of sex has befuddled theoreticians ranging from Aristotle to Freud. The failure to adequately resolve this conflict has resulted in the conceptual muddle of the present day, in which sexual enjoyment is sometimes pathologized as an obsessive/compulsive disorder, rather than celebrated as an evolutionary adaptation extraordinaire.

The notion that sex is pleasurable appears, at first glance, almost too obvious to merit additional comment. However, the pleurability of
specific sexual acts is not always so obvious. One may question, for example, whether sadomasochism is pleasurable. The influential French philosopher Michel Foucault answered in the affirmative:

The practice of S/M is a creation of pleasure... and that's why S/M is really a subculture. It's a process of invention. S/M is the use of a strategic relationship as a source of pleasure (physical pleasure). ... [This] possibility of using our bodies as a possible source of very numerous pleasures is something that is very important.

One may similarly question the pleasurable ability of anal intercourse. Although many gay men enjoy anal sex, not all do. Nor do all enjoy both roles, insertive and receptive, equally. Nevertheless, anal sex can be pleasurable for both parties. It is therefore strange that female pleasure in anal intercourse is so often overlooked. In heterosexual activities it is presumed that anal sex is instigated and enjoyed solely by the male (insertive) partner, never the female (receptive) partner. Yet, there is clearly no anatomical basis for this gender disparity—an anus is an anus.

As Eve Sedgwick observes, “although there is no reason to suppose that women experience, in some imaginary quantitative sense, ‘less’ anal eroticism than men do... [no] one even pretends to name or describe (never mind value) the anus as a site of women’s active desire.” Lesbians, we hasten to add, also practice various forms of anal eroticism.

In general, however, the inherent pleasures of sex are widely appreciated. This being the case, why is pleasure so often overlooked in theoretical discussions of human sexual behavior? And why do cultural, historical, and religious treatises so often fail to emphasize this readily apparent characteristic of human sexuality? These are among the many topics to be examined in this book.

Reproduction and Pleasure

From the pristine vantage point of religious, political, and evolutionary doctrine, it is sometimes argued that the sole function of human sexuality is reproduction. As a consequence, nonreproductive expressions of sexuality are deemed illicit, immoral, or illogical. However, we believe the primacy of reproduction to be vastly overemphasized, and the insistence on procreation as the end-all of human sexuality to be inherently misguided. Although, according to some, dogs, pigs, and sheep copulate exclusively to reproduce, this clearly is not the case for more advanced species such as the higher primates, especially humans.

Indeed, we shall argue that, at least in humans, sexuality has undergone a functional bifurcation, so that human sexuality now serves pleasure no less than procreation. As we shall show, this duality of purpose is evident physiologically, psychologically, and culturally. In other words, contrary to beliefs fostered by the prevailing Western/Judeo-Christian tradition, people were meant to enjoy sex!

Of course, according to the theory of evolution via natural selection, the ultimate function of sex is genetic reproduction; in other words, the purpose of sex is to propagate parental genes, and thereby to reproduce the species. The evolutionary function of sexual pleasure, in contrast, is to motivate people to engage in precisely those conjugal activities (i.e., penile-vaginal intercourse) likely to result in conception. In the language of evolutionary psychology, sexual pleasure is an adaptation that solves the problem of sexual motivation in humans and the higher primates. (An adaptation as an evolved solution to a problem that is relevant to either survival or reproduction.)

Pleasure is thus the motive force behind procreation. But the impetus it provides is not specific to reproductive sex—sexual drive can be satisfied by any of a number of diverse, nonreproductive behaviors. This loophole in the evolutionary scheme permits sexual pleasure to be co-opted to other purposes, such as the facilitation of bonding and the reduction of personal and interpersonal tensions. With regard to the evolution of human sexuality, it therefore appears that pleasure is no less central than procreation. Sex isn’t just for reproduction anymore—it’s also for pleasure. The intense pleasure that accompanies sex may serve to motivate copulation and thereby facilitate reproduction, but this is no longer its sole function. Instead, human sexuality has bifurcated: reproduction taking one route; unadulterated pleasure another. In other words, humans experience pleasure for pleasure’s sake, not necessarily for reproduction’s sake.

Of course, it’s exceedingly difficult to disentangle the pleasurable aspects of human sexuality from the reproductive. The two conceptions are inextricably linked in the human psyche, via the simultaneous identifications of sex with reproduction (S = R), and sex with pleasure (S = P); a simple contraction then yields the false identification of pleasure with reproduction (P = R). The persuasiveness of this logic is beautifully exemplified by the medieval European belief that the only fecund sexual encounters are those that yield mutual enjoyment to the partners

*Throughout, an asterisk preceding a note number indicates a substantive note.
involved. Thus, it was believed that female as well as male orgasm was required to ensure conception, for without orgasm, “the fair sex [would] neither desire nuptial embraces nor have pleasure in them, nor conceive by them.” As recently as the turn of the century, the Reference Handbook of Medical Sciences advised that “conception is probably more likely to occur when full venereal excitement is experienced.” Nevertheless, there is in fact no necessary link between the pleasurable aspect of sex and its reproductive function. The imperative to copulate could just as well be driven by hormones, for example.

Perhaps the following thought experiment will help to clarify this point: Imagine a man with Herculean control over his reproductive system, who, when sexually aroused, can decide to have an orgasm without ejaculating, ejaculate without orgasm, or ejaculate with orgasm. Such a man would have no need of contraceptive devices because he could freely enjoy heterosexual intercourse without the possibility of impregnating a female partner. If, on the other hand, he and his partner desired offspring, their attempts to conceive could be conducted—on his part at least—with businesslike aplomb, unencumbered by the threat of the loss of self-control that often accompanies orgasm. For this man, then, the reproductive and pleasurable aspects of sex would be entirely distinct (provided that we focus exclusively on orgasmic pleasure and neglect the precedent pleasure that accompanies the sexual act itself).

Though fictional, perhaps this example is not too far-fetched. To most people, male orgasm and ejaculation are nearly synonymous, in that orgasm is viewed as the psychological concomitant of the physical act of expelling sperm. The prevalence of this view notwithstanding, male orgasm and ejaculation are in fact separate phenomena. For instance, some men ejaculate without orgasm, as a result of damage to the central nervous system. On the other hand, experiments in which the brain has been artificially stimulated demonstrate that men can experience orgasmic pleasures without ejaculation. Young, still infertile boys are also capable of orgasm, as are postmenopausal women. Physiologically then, reproductive sex need not be pleasurable, and, as is well-known, pleasurable sex need not be reproductive.

Furthermore, reproductive sex—that is, penile-vaginal intercourse between fertile individuals—constitutes but a miniscule fraction of the range of human sexual expression. Alternative sexual practices, such as masturbation, oral and anal sex, petting, and so on, are widespread. Even penile-vaginal intercourse is practiced far more often than necessary to ensure the continuation of the species. Therefore, while procreation is indisputably the ultimate function of sex, this reproductive aspect alone cannot account for the variety of meanings and practices encompassed by human sexuality. Such an understanding requires consideration of the ancillary concept of sexual pleasure. The notion of pleasure provides a unifying framework in which to consider the various meanings and subsidiary functions of human sexuality.

Not only are nonreproductive sexual behaviors common, the motivation for most sexual encounters is also nonreproductive. Although the pursuit of pleasure is undoubtedly the most prevalent rationale for engaging in sex, it is by no means the only function, or meaning, of sex. Sex satisfies many needs beside procreation and pleasure. Sex may be used, for example, to express feelings of intimacy and love for a partner, as a means of reducing intra- or interpersonal tensions (“the best part of fighting is making up”), or to strengthen an existing emotional bond. These functions are largely by-products of the pleasurable aspect of sex, in that their successful expression depends on sex being enjoyable. Sex fosters intimacy, for example, by providing a means for the giving and sharing of pleasure. In this way, sexual pleasure forms the basis for the myriad meanings of human sexuality prevalent in contemporary Western society.

The rise and legitimization in Western societies of the pursuit of sexual pleasure can be traced to the sexual revolution that marked the decline of Victorianism at the turn of the twentieth century. In Victorian America, many medical and moral authorities advised that sexual intercourse be limited solely to the purpose of procreation, even in marriage. Pleasure, when mentioned at all, was linked to lustful, bestial, and uncivilized behavior. More commonly, it was simply not discussed: “For most nineteenth-century Americans, to speak of sex was to speak of procreation.” By the end of the century, however, a sea change was evident in popular attitudes regarding sex, as more Americans came to view intercourse as an undeniable source of visceral pleasure rather than as merely an instrument of reproduction. In the words of historian Estelle Freedman:

Over the course of the nineteenth century, as white American women bore fewer and fewer children, the reproductive function of sexuality became less central. Although some middle class Victorians may have heeded advice to limit sexual intercourse, others experienced sexuality as a nonprocreative act. The evidence of contraceptive use, abortion, and homosexuality, of a tension over eroticism within American sexual ideology, and of the political defense of a sexuality limited to reproduction all suggest that Americans struggled to come to terms with the potential of an erotic, nonprocreative sexuality.
Furthermore, as we argue later, the expansion of pleasure over procreation as the dominant meaning of human sexuality in the twentieth century is adaptive for the species as a whole. A focus on pleasure rather than reproduction encourages alternative forms of sexual expression, both in the practices selected (e.g., oral sex and mutual masturbation), and in the choice of partners, either of the same or the opposite sex. Nonprocreative encounters permit sexual desires to be satisfied without the risk of increasing the population of our already overburdened planet. Some of these activities are also associated with beneficial health outcomes, such as decreased transmission of sexually transmitted diseases, including the human immunodeficiency virus that causes AIDS.

The ideas outlined here will be expanded upon in the chapters that follow. At this point, however, it might be instructive to consider in greater detail just what we mean by “sexual pleasure.”

Sexual Pleasure—What a Concept!

What is sexual pleasure? Unfortunately, the concept denoted here by “sexual pleasure” is a rather slippery creature, weighted down by considerable pop psychological baggage, and subject to cross-cultural and cross-historical variation. Nevertheless, it is desirable to have some definition of this concept, however inexact, to provide an anchor for subsequent discussions. With this in mind, we offer the following very simple (and regrettably vague) definition: Sexual pleasure consists of those positively valued feelings induced by sexual stimuli. Notice that this conceptualization encompasses a broad range of sexual pleasures, from the soothing sensations of sensual massage, to the explosion of feeling that accompanies orgasm.

Although the positive sensations we are calling sexual pleasure can be evoked, to some extent, by erotic thoughts, fantasies, and direct neural stimulation, we assume here for the sake of simplicity that stimulation of the genitals, breasts, or other relevant body parts (i.e., the erogenous zones) is necessary to initiate these feelings. According to this simplified model, the experience of sexual pleasure begins when the skin receptors in one or more erogenous zones are stimulated, and ends with a positive evaluation within the brain that the sensations experienced are indeed both pleasurable and sexual in nature.

The interpretive function of the brain in the experience of sexual pleasure cannot be overemphasized. The sensory signals arriving at the brain following stimulation of an erogenous zone are not inherently pleasurable, or even inherently sexual. Instead, interpretation of these signals by the brain is required for the impinging sensations to be recognized as sexually pleasurable. It is this interpretive stage that admits the profound influences of culture and context in the experience of sexual pleasure. With regard to context, it is often claimed that sex isn’t really sex for a prostitute plying her trade; sex with a lover, however, is an entirely different matter. A rather extreme example of the pervasive influence of culture is provided by the Manus, a pre-World War II society in Papua New Guinea. Among the sex-negative Manus:

*Intercourse between husband and wife was considered to be sinful or degrading, and was undertaken only in strict secrecy. Women considered coitus to be an abomination which they had to endure, even painfully, until they produced a child.*

Unfortunately, the definition of sexual pleasure provided here neglects several of its more salient aspects, including the pleasure of giving pleasure. For example, in the butch/femme lesbian culture of the 1940s and 1950s, the butch partner often derived her greatest erotic satisfaction from pleasuring her femme counterpart, “if I could give her satisfaction to the highest, that’s what gave me satisfaction,” in such stereotyped role playing it was neither expected nor desired that the femme should reciprocate. This does not mean, however, that the butch’s pleasure necessarily lacked a physical component. According to Elizabeth Lapovsky Kennedy and Madeline Davis:

*Many butches were and remain spontaneously orgasmic. Their excitement level peaks to orgasm when they make love orally or digitally to a woman. The nature of this orgasm is unclear. Some describe it as physical, while others think it is mental.*

The popular 1993 film, *The Crying Game,* can be used to illustrate one of the main aspects of our conception of sexual pleasure—namely, the interpretive role of the mind. Politics and mayhem notwithstanding, this Academy Award-winning film’s plot follows the basic modern love story, up to a point. Thus, boy meets girl, boy falls in love with girl, boy and girl decide to have sex. But then, in the pivotal sex scene, the boy discovers—a much to his dismay—that the girl is really a guy, penis and all. The boy responds by vomiting uncontrollably.

*Why? Wasn’t the boy in love (or at least in lust)? And wasn’t he also highly aroused sexually? So what triggered his disgust? Presumably, his reaction sprang from his brain rather than his heart. Despite his intense attraction and physiological arousal, this encounter was no longer inter-*
preted as heterosex, but was instead homosex. Even with love and lust, the circumstances were no longer acceptable, and, therefore, no longer arousing to him.

As conceptualized here, sexual pleasure encompasses a loosely defined collection of physiological and psychological responses. Physiologically, it appears that the capacity for sexual pleasure is "hardwired" in the sense that it constitutes an innate and universal aspect of human sexual anatomy. However, like any intrinsic characteristic, sexual pleasure is moderated by and unfolds within a particular physical and cultural milieu. It is therefore subject to the cultural vagaries of permissibility and restriction that influence both the overt expression and subjective experience of sexual pleasure.

Even if the capacity for sexual pleasure is innate, and in some sense "basic" for the human species, one might argue that pleasure is secondary to procreation (or reproduction). This is certainly true for the "lower" species of mammals, which, if they experience pleasure at all, are nonetheless restricted sexually to the reproductively fertile estrus periods of the female. For these animals, sexual pleasure (if it exists) is clearly subservient to reproduction. With the primates, however, one begins to see a bifurcation in the functional meaning of sex. Although the reproductive cycle of many nonhuman primates remains at least partially bound to hormones, sexuality is no longer entirely restricted by the female cycle.

In humans the divergence of the reproductive and the nonreproductive is even more striking. Essentially free of the hormonal regulation of sexual desire, women can—and do—engage in sex at any time in their cycle, irrespective of fertility status. For men and women, pleasure is not dependent on fecundity. Sexual desire is evident in postmenopausal women and in prepubescent children of both sexes. Furthermore, human sexual anatomy is specialized for pleasure no less than procreation. The sole function of the clitoris, for example, is the generation of pleasure. Pleasure, not reproduction, also provides the most parsimonious explanation of the presence of numerous nonobvious erogenous zones, such as ears, toes, and the backs of kneecaps. Similarly, the wide variation in sexual practices observed across cultures, and even within cultures, is largely inexplicable within a reproductively oriented explanatory framework. Psychologically, pleasure drives the human desire for sex, and also provides the foundation for ancillary sexual functions, such as emotional bonding. In sum, the evidence suggests that the pleasurable and procreative aspects of human sexuality are conceptually, anatomically, and psychologically distinct.

Standing on the Shoulders of Giants

Naturally, we are not the first authors to examine the concept of pleasure. Philosophers ranging from Aristotle and Plato to Michel Foucault have also had much to say on this topic, as have psychologists including Havelock Ellis and Sigmund Freud, anthropologists such as Margaret Mead, Bronislaw Malinowski, and Lionel Tiger, and of course, the modern sexologists Alfred Kinsey, William Masters and Virginia Johnson. Hence, it seems appropriate at this point to briefly comment upon some previous conceptualizations of sexual pleasure.

Not surprisingly, interest in the concept of pleasure, both sexual and otherwise, has a long history. For Aristotle, and to a lesser extent Plato, the central concern was whether pleasure was always good, always bad, or contingent upon the motives and restraint exercised by the actor. In the *Nicomachean Ethics*, Aristotle summarizes the various arguments for the position that pleasure is bad, including the notion that "pleasures are an obstacle to good sense: the greater the joy one feels (e.g., in sexual intercourse), the greater the obstacle; for no one is capable of rational insight while enjoying sexual relations." Ultimately, however, Aristotle rejects this argument, noting that "it is the pursuit of excess, but not the pursuit of necessary pleasures, that makes a man bad." Sigmund Freud made elaborate use of the concept of pleasure, most notably in his famous pleasure principle. The pleasure principle is the desire for immediate gratification and tension reduction. It is presumed to be the modus operandi of the id, which is defined in turn as the dynamic chaos of forces that strive for discharge above all else. Tension is perceived as pain; discharge as pleasure. Eating, drinking, and sex each subdue a particular tension, in accordance with the pleasure principle.

More generally, in psychoanalytic theory (particularly as developed in Freud's *Three Contributions to the Theory of Sexuality*), "sexuality is divorced from its too close connection with the genitals and is regarded as a more comprehensive bodily function, having pleasure as its goal and only secondarily coming to serve the ends of reproduction." However, Freud and his followers considered most nonreproductive sexuality to be "perverse": "We term sexual activity perverse when it has renounced the aim of reproduction and follows the pursuit of pleasure as an independent goal." Similarly, Richard von Krafft-Ebing, who has been called "the most influential sexual psychologist of the last quarter of the nineteenth century," counted among the perversions "any expression of the sexual impulse which fails to correspond to the purposes of nature, i.e., of procreation."
The famous (and occasionally inscrutable) French philosopher Michel Foucault also devotes considerable attention to the concept of pleasure. Of particular relevance to this book is his exegesis of the multiple discourses of sexual pleasure and their frequent assimilation into a disproportionately moralistic framework. Regarding the sexual mores of the late-nineteenth century, Foucault asks:

Was this transformation of sex into discourse not governed by the endeavor to expel from reality the forms of sexuality that were not amenable to the strict economy of reproduction: to say no to unproductive activities, to banish casual pleasures, to reduce or exclude practices whose object was not procreation?

Even in the relatively permissive classical Greek culture, sex was unduly scrutinized by philosophers, doctors, and dream interpreters. And so it continues down to the present. Sex is dissected and debated throughout our culture, from the barroom to the Supreme Court. Indeed, it sometimes seems that there is more talk about sex than there is sex itself. As Edward Abbey observes in Down the River with Henry Thoreau:

Modern men and women are obsessed with the sexual; it is the only realm of primordial adventure still left to most of us. Like apes in a zoo, we spend our energies on the one field of play remaining; human lives otherwise are pretty well caged in by the walls, bars, chains, and locked gates of our industrial culture.

Is such a preoccupation with sex natural? Healthy? Or possibly disturbed and perverted? We believe that the emphasis—some would say, overemphasis—attached to everything sexual is an obvious consequence of the evolutionary significance of sex. People are obsessed with sex, quite simply, because it's in their genes. All other factors being equal, evolution favors those with a strong libido, provided that the pursuit of sex does not otherwise interfere with the struggle for survival. In nonhuman animals the libido is bound by hormones, whereas it is nearly synonymous with the desire for pleasure in humans. Evolutionarily then, a pronounced desire for sexual pleasure is adaptive rather than pathological, leading, as it should, to increased reproductive opportunities. Unbridled passions, however, are inimical to civilization, hence the institution of laws and regulations to control the overt expression of sexuality and, by misguided extension, the attempt to restrict the production and distribution of "obscene" materials thought capable of exciting sexual lusts. Although the pursuit of pleasure is natural, its regulation, to some degree, is nevertheless inevitable.

The Varieties of Sexual Experience

As a concept, sexual pleasure has numerous discernable connotations. It can denote enjoyment, gratification, sensual delight, satisfaction, and so on. It is also multiply determined, reflecting the interacting influences of nature and culture, as well as the vagaries of the particular historical epoch in which it unfolds. Whatever the potential of sexual pleasure may be, it is ultimately interpreted and evaluated according to the prevailing social contexts and interpersonal themes of the times. This variety in sexual expression arises because the experience of sexual pleasure is infinitely malleable. When conceived of as sin, sex is experienced with distress and turmoil; when conceptualized as a joyous revelation, it is embraced with both subtle and expansive pleasure.

This emphasis on the plasticity of sexual pleasure challenges conventional notions of sexuality in several ways. For example, nonnormative behaviors are often deemed nonsexual because they are inconsistent with conceptions of "normal" sexuality. At various times, Western culture has vilified behaviors such as oral-genital and penile-anal contact as perversions of the "natural" sexual instinct. These "pathological" forms of behavior were not acknowledged as belonging to human sexuality because (according to this point of view) sexuality has but a single function—to perpetuate the species.

In other cultures, however, oral-genital sex is considered neither perverse nor unnatural, and in some cases is even recruited for important ritual functions. For example, the Sambia, a warrior culture that inhabits the isolated southeastern highlands of Papua New Guinea, believe that ingested semen is critical to strength and masculinization. Young boys are therefore expected to perform ritualized fellatio on older boys as an integral component of normal male psychosocial development.

Sambia males pass through three distinct sexual stages. First they are fellators, seeking manhood through the semen of others. Then, after they have "accumulated" an adequate reserve of semen, they become fellatees. Later, in the final stage of development, all homosexual activity ceases and they are socially recognized as men, with wives, children, and all the accouterments of heterosexuality.

Ritualized homosexual activity is not unique to this group. More than fifty comparable cultures in Melanesia are known to have similar ritual complexes to ensure proper gender development. But, at what
point does ritual end and sexual enjoyment begin? Robert Stoller and Gilbert Herdt suggest that no clear demarcation exists for the Sambia:

Social anthropologists might argue that Sambia homoerotism is only a facade, a performance with a precise set of rules, clearly defined as not truly erotic and openly recognized as an essential step to heterosexuality . . . but our Sambia friends would not recognize such a description of their experience . . . . They do not just accept fellatio; they want it. Almost all the boys indulge with fine erotic enthusiasm. 

The plasticity of sexual pleasure—and ultimately, of sex itself—is also evident in the historical record. In ancient Greece the propriety of a sexual behavior was determined by the roles (i.e., dominant/submissive) assumed by participants and by the impact of the behavior, not by the participants' genders or the specific type of behavior. Sexual proscriptions were oriented toward individual responsibilities (e.g., not being carried away by pleasure; striving for a state of tranquility; moderation in sexual appetite) instead of instituting universal codes of conduct. Homosexual relationships between men and boys were thus tolerated, and even encouraged, provided that certain cultural norms were respected.

Various forms of prostitution, both male and female, were also prevalent in ancient Greece. Female prostitutes ranged from the lower class brothel "whores" (prostiti), with whom sex could be had for mere pence, to the highly educated, talented courtesans known as hetairai. The hetairai occupied a unique position in Greek society. Unlike other women of their time, the hetairai were permitted entree into men's society and the world of political affairs, and often served as advisors and confidantes. Of intermediate status were the streetwalkers, who frequented the taverns and thoroughfares of Athens:

*In Attica there is a girl. Europa is her name.*
*She has a warm clean lodging, she lives a life of shame.*
*And anyone can know her, though his purse is far from full.*
*Dear Zeus, why did you trouble to change into a bull?*

Female concubines and male slaves were also available for the pleasure of the Greek citizen, as were, to a much lesser extent, the charms of free women. The devaluation of virginity (for lovers rather than wives, of course) is evident in the following poem from the *Palatine Anthology:*

*You cherish your maidenhead*  
*Why should you care?*
God, every concrete act of intercourse was evil, with the result that every child, literally, could be said to have been conceived in the sin of its parents.53

Marital intercourse, though sinful, was justified provided that it was undertaken to increase the size of the Christian flock. But even then, enjoying the procreative act was viewed as a sin by many theologians—

the Christian sexual ideal being one of pleasureless reproductive intercourse. Although some later theologians acknowledged that a modicum of pleasure could be enjoyed without shame as long as the couple did nothing to impede the natural function of procreation, it remained a sin to engage in intercourse solely for pleasure. As historian Jean-Louis Flandrin explains:

There is a moment when the simple animal enjoyment, which is the pleasure of sex, drowns all other feelings; or so said the theologians. And many, including Pope Gregory the Great in the sixth century, believed that it was almost impossible to be pure after marital copulation. But what was certainly a mortal sin was to embrace one's spouse solely for pleasure. However, the nature of this sin—whether mortal or merely venial—underwent a transformation sometime around the end of the sixteenth century. Thus, when intercourse was undertaken for the satisfaction of concupiscence . . . it was thought to be a safeguard to marital faith which involved venial sin only. As a venial sin, the pleasure involved ranks with minor daily transgressions . . . and like other sins of its type, it was taken care of in the daily recitation of the Paternoster.54

The ideal of restraint in marital relations is further reflected in the belief of St. Jerome that it is scandalous for a husband to treat his wife the way he treats his mistress.55

The Canon Law is also very clear regarding the ultimate purpose of marriage: “The primary end of marriage is the procreation and education of children; its secondary end is mutual help and the allaying of concupiscence.”57 Thus, procreation secures the foundation for the institution of marriage itself, as well as providing the only licit justification for engaging in marital intercourse. Despite this ultimate emphasis on procreation, the Canon Law is not silent on the matter of pleasure. Indeed, the allaying of “concupiscence”—the lustful desire for pleasure—is cited as a secondary function of the marital sacrament. That is, marriage is provided, in part, so that men and women can exorcize their sexual lusts in a licit, morally sanctioned manner, via marital intercourse. Extramarital affairs were nevertheless common among medieval nobility.58

The Catholic Church’s prohibitions on prostitution, homosexuality, and masturbation are well-known, as perhaps is their scriptural basis:

Know ye not that the unrighteous shall not inherit the kingdom of God? Be not deceived: neither fornicators, nor idolaters, nor adulterers, nor effeminate, nor abusers of themselves with mankind.59

These prohibitions can be further understood in the context of a procreative bias. They may, in fact, be quite simply and concisely summarized by the admonition that “all nonprocreative sex is sinful.”

Lessons from the Past

Given the enormous disparity in how sexual behaviors have been conceptualized and practiced, it seems reasonable to propose that such behavioral forms are neither inherently sexual nor normative, but that they are instead abstractions (or permutations) of what we call “human sexuality.” This, of course, is not meant to minimize the critical significance of penile-vaginal intercourse for the survival of the species (or more precisely, for the furtherance of individual genes). Instead, it challenges the assumption that sexual behaviors must be functionally relevant to genetic replication—that is, that reproduction is the exclusive “natural” function of human sexuality.

Sex, evidently, is what we make it. If there is a single common denominator underlying human sexual expression, it’s pleasure, we would argue, not reproduction. In the modern era, in any case, sex is much more likely to be pleasurable than procreative. Nonprocreative sex is seemingly everywhere and everything. So much so that it is easier to define by negation: “Nonprocreative sex” encompasses those sexual activities that cannot result in conception. Nonprocreative sex therefore runs the gamut from infantile and prepubescent sexual explorations to postmenopausal and infertile geriatric sex. Sex at the wrong time of the month, or with a partner rendered permanently infertile, is also nonprocreative, as is sex that employs effective methods of contraception, including condoms, diaphragms, and “the pill.” Homosexual sex is clearly nonprocreative, but so are many of the activities in which heterosexuals engage, including masturbation, oral sex, anal intercourse, and yes, even passionate kissing. If it isn’t penile-vaginal intercourse, sans contraceptives, between two fertile individuals at the right time of the month, then it isn’t procreative sex. Clearly, then, very
little sex is of the procreative variety. And given the current population explosion, perhaps this is a good thing.

Preview of Coming Attractions

This book is divided into six broadly themed chapters, plus an epilogue, in addition to this brief introduction.

Chapter 2 (Sex as Procreation: Is That All There Is?) draws from a wealth of sources, including evolutionary theory, ethology, primatology, and the cross-cultural and historical records to argue that, despite years of repression and counterprogramming, it is time to acknowledge the simple truth that sex and reproduction are conceptually distinct. Sexual pleasure, not reproduction, provides the foundation for "sex" as it is commonly experienced. Reproduction, in fact, can reasonably be viewed as a by-product of pleasure. In this chapter we also show how sexual pleasure evolved as a means to ensure that people procreate, and consider the implications of humanity's too great success in this area. We then examine from a philosophical perspective the seemingly inane question of why pleasure feels good, and the limits of how good sexual intercourse can feel.

Given the extreme power of sexual pleasure, it is not surprising that people have attempted to regulate it and harness it for profit. In Chapter 3 (The Regulation and Marketing of Sexual Pleasure) we examine the manner in which sexual pleasure has historically been restricted and marketed. This chapter explicates the commoditization of sexual pleasure—as distinct from the regulation and privatization of reproductive rights and kinship—and proposes a novel explanation for the genesis of the sexual marketplace. We also reconsider Freud's views on the necessity of sexual regulation as a means to ensuring social stability, and suggest how prostitution and pornography might have arisen from related social compromises. Adam Smith, Friedrich Engels, and the ancient Sumerian epic, Gilgamesh, are all discussed.

In Chapter 4 (The Biology of Sexual Pleasure) and Chapter 5 (The Psychology of Sexual Pleasure) we investigate the nature of the "beast" that is sexual pleasure. In the first of these related chapters, contemporary research on genetics, hormones, and the brain are examined in relation to the broader issues raised in Chapters 2 and 3. Among the topics discussed are the nature of orgasm, evolutionary theories of female orgasm and homosexuality, the evidence for "pleasure centers" in the brain, and putative genetic and hormonal influences on sexual orientation. The conceptual foundations of "homosexuality"—as a theoretical construct—are also considered in cross-cultural perspective to determine what, if any, implications they have with respect to the ongoing search for a biological basis of sexual orientation.

Chapter 5 continues the discussion begun in the preceding chapter by considering how personality, cultural, and familial factors interact to determine a person's sexual beliefs and practices. Differences between individuals, genders, and cultures are examined in light of the physiological influences identified in Chapter 4. For example, given that the basic sexual anatomy is similar across cultures, how can female orgasm be viewed as a birthright in one culture and be completely unknown in another? Cultural relativity is also evident in how gender is conceptualized, as demonstrated by cultures in which a "third gender," neither male nor female, is socially recognized. The psychological bases for the myriad influences of culture on sexuality are discussed in depth. The discussion then turns to the phenomenology of memory, with particular attention paid to people's surprising inability to remember even relatively recent sexual experiences. Fetishes and Freud round out this chapter, which concludes with a discussion of sexual addiction and the implications of this conceptualization for sexual behavior in the age of AIDS.

The AIDS epidemic is surveyed from the conceptual vantage point of sexual pleasure in Chapter 6 (AIDS: The End of Pleasure?). We argue that AIDS discourse has been medicalized and sterilized for mass consumption and that the importance of sexual pleasure has been lost in the debate. Many people worldwide are willing, quite literally, to risk their lives for sex. As we show, this risk-taking, though seemingly irrational, can be justified within a cost/benefit framework that recognizes sexual pleasure as a valued commodity. A model for quantifying risk is presented in Appendix B, and model-based recommendations for decreasing the spread of AIDS are proposed. These models subtly reemphasize the central premise of this chapter: that the power of pleasure as a motivator for sexual risk-taking must be acknowledged, and must inform the interventions that we, as a society, undertake to combat the spread of AIDS.

In Chapter 7 (Porn: Tempest on a Soapbox) we examine the legal and historical foundations of the concept of obscenity, and the extent to which these foundations rely upon the identification of sexuality with reproduction. The chapter begins with an examination of the extensive links between the "anti-vice" crusades of the eighteenth and nineteenth centuries and then contemporary fears of masturbation and contraception. As we explain, similar fears of homosexuality have also found shelter under the antioscenity banner. More recently, a small group of
2. Sex as Procreation: Is That All There Is?

The ancient Romans liked the idea of nature. In fact, they liked it so much that they codified it as a principle, known as natural law. This principle distinguished the laws enacted by mere humans from the laws inherent in glorious nature. And just what did natural law encompass? The third century A.D. jurist, Ulpian, explained:

Natural law is what nature has taught all animals. This law is not unique to the human race but common to all animals born on land or sea and to birds as well. From it comes the union of male and female which we call marriage, as well as the procreation of children and their proper education [educatio]. We see in fact that all other animals, even wild beasts, are regulated by an understanding of this law.¹

The notion that nonprocreative sex was “unnatural” or a “crime against nature” was quickly co-opted by the still coalescing Christian Church,² and by the middle of the thirteenth century was explicitly incorporated into orthodox Christian doctrine. Thus, Saint Thomas Aquinas argued that nature designed semen and ejaculation to create children and thereby perpetuate the species. To expend semen for any purpose other than reproduction was “contrary to nature”³ and was therefore sinful. Saint Thomas identified four activities as particularly abhorrent: masturbation, bestiality, homosexual copulation, and heterosexual coitus in other than the Church-mandated “missionary” position.⁴

Though it now sounds quite archaic, one of the most heinous sins of all (even within the sacred bounds of the marital union) was engaging in...
sex for the sake of pleasure. According to the Church, intercourse was to be performed with as little emotion as possible. However, since it was recognized that some enjoyment of the physical accompaniments of the “sexual act” was unavoidable, St. Paul counselled abstinence for followers wishing to remain pure. And for those unable to control their animal lusts, there was always marriage:

It is good for a man not to touch a woman. Nevertheless, to avoid fornication, let every man have his own wife, and let every woman have her own husband. . . . I say therefore to the unmarried and widows, It is good for them if they abide even as I. But if they cannot contain, let them marry: for it is better to marry than to burn.  

It was not until the late sixteenth century that the Church legitimized sexual pleasure for husbands and wives—provided, of course, that procreation remained the aim of the sexual union, and that no contraceptive methods were employed. Nonprocreative sex, however, remained taboo.

Roman and Christian writers were not the only ones to advocate a primarily procreative role for sexuality. Plato’s Laws, for example, suggested that sex should be limited to spouses, and engaged in solely for the purpose of reproduction. Plato also distinguished the pleasures of same-sex intercourse from those of procreative sex between a man and a woman, the former of which he considered “unnatural.”

On the other hand, despite lofty proclamations extolling the “naturalness” of procreative sex, there is ample evidence of the prevalence of nonprocreative sex in the ancient world. The practice of depicting the pleasures of sex—either explicitly (in word) or implicitly (in artistic form)—is nearly as old as the written and pictorial record. Gilgamesh and other stories from the ancient world proclaim and extol the ecstasy of nonprocreative sex. In Western culture this form of erotic expression reached its zenith in the classical Greek aesthetic. In addition to the musings of Plato and Aristotle, a wide variety of Greek authors and artists addressed themselves to the theme of sexual pleasure. Included in the gamut of Greek texts and art-forms are gynecological treatises, vase paintings and poetry, plates, sculpture, mosaics, and drama (e.g., Aristophanes’ Lysistrata).

Sexual themes are also represented in abundance in the poetry and art of ancient Rome. The Latin epigrammatic poet Martial, for instance, catalogs a variety of heterosexual pleasures thusly:

Last night the soft charms of an exquisite wore
Fulfilled every whim of my mind,

Yet, despite the tales told by ancient art and artifacts, and by contemporary (i.e., twentieth century) tomes heralding the widespread prevalence of nonprocreative sex (e.g., the Kinsey volumes), reproductive sex still reigns supreme in the public and private consciousness as the nonpareil, “natural” function of human sexuality. Evidence of its sovereignty is readily apparent in the continued legislation against “sodomy” in the United States and elsewhere, in the popular idealization of woman as mother, in the existence of restrictions on contractual marriage, in prevailing theological doctrines, and so on. Even today, procreation is still assumed to be the premier biological function—and the ideal expression—of human sexuality.

However, in this chapter we would like to suggest that, despite popular ideology and declarations to the contrary, procreation is neither the sole, nor even the principal, function of human sexuality. In support of this blasphemy we provide a different interpretation of the biological and social record—one that is shaped by such diverse influences as Latin poetry, ancient Greek art, and observations of nonhuman primates.

Thus, although the evolutionary function of sex is certainly the continuation of the human species (or at least the genes of particular individuals), procreation is hardly the only, or even the dominant, meaning of sexuality in contemporary Western society. This is not to deny that in some cases men and women have sex to conceive children. Rather, we wish to emphasize the obvious fact that reproduction is not the only—or even the most popular—reason for engaging in sex. In particular, we deny the implication, arising from the view of procreation as the only legitimate rationale for sex, that forms of sexual expression other than penile-vaginal intercourse are somehow immature, unnatural, or evolutionarily maladaptive.

Just How Natural Is Nonprocreative Sex?

We begin by considering data from the animal world: in particular, nonhuman primates. It is often presumed (quite erroneously) that humans are the only intelligent, social, or conscious inhabitants of this planet. Nonhuman animals are viewed as glorified robots, governed
are believed to be the closest extant relatives of Bonobos may be distinguished from their chimpanzee cousins by whom they shared a common ancestor a mere 3 million years ago. (The bonobo and the chimpanzee their respective branches of the evolutionary tree having diverged “only” 3 million years ago. The bonobo and the chimpanzee are believed to be the closest extant relatives of Homo sapiens, with whom they shared a common ancestor a mere 10 million years ago. Bonobos may be distinguished from their chimpanzee cousins by their more graceful builds, paler lips, and their turn-of-the-century coiffures. As bonobo expert Franz de Waal observes: “[Bonobos have] long, fine, black hair so neatly parted in the middle that you would swear each individual spends an hour a day in front of the mirror.” Bonobos display a rich social life, in which they employ verbal, facial, and gestural forms of communication. They also appear to be somewhat less aggressive than common chimpanzees.

The relevance of these primates to the current discussion is this: like their human relatives, bonobos enjoy a diverse sexual repertoire, including oral-genital sex, masturbation, intergenerational (adult-juvenile) sex, and so on. In the words of de Waal, “bonobos behave as if they read the Kama Sutra, performing every position and variation imaginable.”

One species-characteristic behavior that merits additional comment is the genital contact known as “G-G rubbing” observed between pairs of females. In G-G rubbing, female bonobos rub their vulvas together with approximately the same rhythm as that of a male thrusting during intercourse. (In the male analog of this isosexual behavior, “mutual penis rubbing,” one male lies on his back while another thrusts against him.)

Sexuality serves a variety of purposes among bonobos, ranging from conflict avoidance and resolution, to providing empathy and support, in addition to the obvious function of procreation. Furthermore, unlike chimpanzees, gorillas, and other nonhuman primates, bonobos often mate face-to-face, “missionary style.”

In summary, if “natural” is defined as “present in or produced by nature,” as it is in our dictionary, then given humankind’s primate heritage, nonprocreative sexuality cannot properly be considered unnatural.

Sex: It’s Not Just for Procreation Anymore!

One might argue (and many have) that nonprocreative sex—including, but not limited to, masturbation, oral sex, and sex between persons of the same gender—is evolutionarily maladaptive because it does nothing to further the lineage of the individuals involved and, in many cases, “wastes” energy and precious resources such as sperm. Men, for example, have been admonished against “spilling their seed” by authorities ranging from the Christian Church to such vocal individuals as singer/reactionary/orange-juice-peddler Anita Bryant. (In ancient Persia, a punishment of 800 lashes awaited any man who “involuntarily” emitted his seed.)

Incidentally, the widely cited biblical reference to the spilling of seed...
(Genesis 38:9) does not refer to masturbation, but instead to the practice of "coitus interruptus." The verse in question reads:

And Onan knew that the seed should not be his; and it came to pass, when he went unto his brother's wife, that he spilled it on the ground, lest that he should give seed to his brother.

In this verse, Onan breaks the Hebrew law of the levirate by intentionally spilling his seed rather than impregnating the wife of his deceased brother. However, the fact that this is but an unfortunate misreading of Genesis has done nothing to stop the onslaught of admonitions against masturbation, or "onanism" as it is sometimes called. Nor has it prevented the introduction of singularly bizarre remedies for preventing autoerotic stimulation (to be discussed further in Chapter 7). In 1870, for example, the prestigious British medical journal *The Lancet* advised "guarding the penis for a time against improper manipulation" by "keeping up slight soreness of the body of the organ... sufficient to render erection painful." Presumably, this was necessary to avoid the insanity inevitably produced by excessive "manipulation" of this popular body part.

Masturbation was also believed to diminish the sexual incentive for men (and women) to marry; the desire for marital sex presumably being lost "when by this means they appease their lustful appetites." Moreover, the pleasure that accompanies the ejection of semen was itself considered an abomination:

The intrinsic malice of pollution [meaning self-induced orgasm of any kind] consists most probably in the intense sexual enjoyment and satiation of pleasure, occurring outside the legitimate bond of matrimony, which the effusion of seed produces—and not only nor principally in the voluntary frustration of the seed itself. Reason requires its prohibition, for if this pleasure, which nature only permits to entice men into matrimony, were to be lawful outside of it, men would avoid the married state... and the natural and legitimate propagation of the species would be defeated. [However,) the effusion of semen would be legitimate for medical purposes if only it could be achieved without causing pleasure.

One of the most persistent rationales for the condemnation of masturbation is a misguided belief in the omnipotence of sperm, for "sturdy manhood... loses its energy and bends under too frequent expenditure of this important secretion." An especially novel means of conserving "this important secretion" was practiced by male members of the Oneidan sect, a utopian community founded in New York in the middle of the nineteenth century. Oneidan men were taught that orgasm drained them of vital fluid, enervating the body and the spirit. They were therefore instructed to practice a peculiar form of male continence in which ejaculation, but not intercourse, was avoided.

In Western cultures sperm-depletion anxieties can be traced back as far as Hippocrates and the fifth century B.C. However, such beliefs are not restricted to the Western world. For example, men on the island of Yap in the South Pacific believe that too frequent ejaculation causes physical weakness and increases susceptibility to certain diseases. Similarly, in the Taoist tradition of ancient China, the expenditure of semen was believed to entail a corresponding loss of masculine yang essence. (We shall return to this topic in Chapter 7 when we consider masturbation and its relationship to pornography in greater detail.)

But is sperm really a resource in need of strict conservation? While the typical male expels billions of spermatozoa with each ejaculation, the reservoir is quickly refilled, with a return to full potency in about two days. Furthermore, men produce sperm continually throughout their postpubertal lifetimes, usually ceasing only in extreme old age (or at the time of death). It is therefore hard to see how the spilling of limited quantities of the male seed could threaten the survival of the human race. In contrast, the ovum is, in many ways, a limited, nonrenewable resource, the capacity for egg production being essentially fixed at birth. Few women, however, endeavor to ensure that no egg falls unfertilized; nor have the moral practitioners advanced this neglected cause.

Of course, if all of a man's sperm are "spent" in nonprocreative activities, then his genes will not be passed on—at least not directly—a situation that might be considered individually maladaptive in that it violates the evolutionary imperative to propagate one's genes. Exclusive homosexuality, and the lack of offspring it nominally implies (ignoring modern biomedical marvels such as artificial insemination), could be considered maladaptive in this restricted sense (however, see Chapter 4). Yet for the majority of people who engage in nonprocreative sex (and the majority of people do engage in nonprocreative sex), these activities in no way diminish the capacity to reproduce themselves and their genes should they desire to do so. Although the total number of sexual experiences in a person's lifetime is clearly bounded, it is also very large; furthermore, only a very small proportion of these experiences need result in pregnancy for the human race to reproduce itself.

Moreover, the fact that some sexual activities cannot lead to conception should not be held against them, so to speak. No woman has ever
become pregnant from playing basketball, attending the opera, or dancing, yet seldom are these activities proscribed for that reason alone, at least in modern times. (Throughout its history the Christian Church has periodically attempted to ban all pleasurable activities, including dancing and attending the theater,\textsuperscript{39} Perhaps in doing so the Church merely sought to err on the side of caution by eliminating all activities that could reasonably precede sex. Taken too literally, this often prompted some rather absurd prohibitions—on baths, wine, and so forth.)

Why, then, is nonprocreative sex held to a different standard than other "reproductively safe" activities, such as skiing, movie going, or swimming in public? We have already dismissed the argument that views nonprocreative sex as wasting a limited natural resource. Provided that pregnancy is a possible outcome of at least some sexual encounters (and even with modern contraceptive methods, many such opportunities continue to exist), procreation will occasionally occur. We have also argued, based on evidence garnered from observations of one of humankind's closest relatives on the evolutionary tree, that nonprocreative sex cannot properly be considered "unnatural" if "natural" is accorded its customary meaning (if a "dumb animal" like the bonobo can engage in oral-genital sex, how unnatural can it be?\textsuperscript{40}). Of course, according to Church teachings, people should be able to rise above such bestial instincts in pursuit of loftier spiritual ideals.

Perhaps nonprocreative sex is taboo because the behaviors themselves are "perversions" of the "natural" function of the sexual apparatus (which, of course, is implicitly construed as reproduction). This view was succinctly expressed by Dr. Lyttleton (a headmaster at Eton, a prestigious English boys school), who said: "All exercise of a bodily faculty for the sake of pleasure and except for the purpose for which the faculty was given is wrong."\textsuperscript{41} Notice that the fault here lies not with the pleasure one feels, but with the reason one feels it. It is all right to enjoy coitus (sans contraceptives, of course), but only if one's purpose is to create another young lad to bolster Eton's rolls, or a lass to rule the Commonwealth. Similar application of this principle to other bodily functions would condemn kissing (which is a perversion of the natural gustatory function of the oral cavity) and simple caressing (since this pleasure is certainly a violation of the "proper" function of the touch receptors of the skin, whatever that function might be). The absurdity of this position should be clear. Furthermore, if as claimed here, the elicitation of pleasure is a main function of human sexuality, then the preceding argument is effectively disarmed. That is, perhaps pleasure is itself "a purpose for which the faculty was given."

If our views are correct, then it follows that nonprocreative sex should be conceptually divorced from issues of reproduction. This very thing may, in fact, be occurring on an evolutionary time scale. As one moves up the phylogenetic ladder, beginning with the most primitive of unicellular animals, reproduction bifurcates into asexual and sexual forms. Indeed, Ina Jane Wundram suggests that the distinction between reproduction and sexuality can be traced back as far as the protozoa, which exhibit a "sexual-like behavior that is not followed by reproduction."\textsuperscript{42}

Presumably, sexual reproduction is beneficial to the more advanced species because genetic mixing provides diversity, and therefore greater adaptability to changing environments, as well as a mechanism for avoiding harmful mutations.\textsuperscript{43} In asexual schemes (e.g., cloning), if something goes wrong, and this error continues to get duplicated, reproductive havoc will prevail. Sex, that many splendored thing, prevents this unfortunate scenario by constantly creating new genetic types.

To take this model a step further, we suggest that sexual reproduction itself has bifurcated in the higher primates (such as bonobos and humans). In these species, sex and reproduction are no longer synonymous, but instead are differentiated in both form and function. "Reproduction" now consists of male-female vaginal intercourse between fertile individuals, at the right time of the month (ovulation), and without the interference of contraception. "Sex," on the other hand, encompasses everything else. Since sex is now divorced from reproduction, it is free to serve other beneficial functions among the higher primates, including facilitating bonding, enhancing group cohesion, promoting conflict resolution, and so on. In many ways, nonprocreative sex is now closer in meaning to hugging and kissing than to baby-making intercourse. Nevertheless, society insists on viewing all sexual activity through the foggy filter of reproduction and the "survival value" of these behaviors. Need this be so?

By way of contrast, consider, for example, eating. It, too, is crucial for the survival of the species, but the customs and food preferences of different cultures seldom address the "survival value" of eating. All preferred diets are ultimately imperfect, and instead reflect cultural tastes and available resources. Many Americans who eat a traditional high-fat, high-protein diet are horrified by the sparse diet of the Japanese, not to mention the witchety grub-loving cuisine of Australian Aborigines. Yet, whether cooked or raw, feral or cultivated, the actual choice (or preparation) of food has little relevance to survival; instead, it is the nutritional balance underlying those choices that matters. Similarly, the actual man-
ner in which various people express their sexuality merely reflects current fashion or custom, and has little relevance to the survival of the species.

Furthermore, since human beings are extraordinarily fertile, and since the biggest problem facing us is over-not underpopulation, we have enormous freedom and flexibility, as a species, to express all kinds of behaviors that are functionally related to sexual pleasure, because even without an express intent to reproduce, people will be fruitful and multiply, if only by chance. This conclusion follows from several considerations, including the extreme pleasure people derive from sexual intercourse, the long duration of female fertility and male potency, and the not insignificant failure rates of even the best modern contraceptive devices. As long as large numbers of people continue to enjoy heterosexual intercourse—and we see no reason to suggest that this will cease to be the case any time soon—babies will continue to be born, and humanity's status as "lord and master over the dominions of Earth" will remain secure.

Finally, we would like to suggest that nonreproductive sex may actually be advantageous for the species as a whole. The argument, which follows, is based on the simple observation that too much reproductive sex is as great a threat to the survival of the species as is too little. At this juncture humankind can ill afford to continue increasing the population and depleting the natural resources of Earth. Because nonreproductive sex offers alternative avenues of sexual expression that, by definition, cannot increase the number of human inhabitants of this planet, such activities may help mitigate the threat of extinction from overpopulation.

Oral Sex as a Form of Birth Control

In 1798, the English economist and clergyman Thomas Malthus published (anonymously) his first version of "An Essay on the Principle of Population." Over the next twenty-eight years he completed four subsequent editions, and in 1830 he provided a synopsis of his thesis titled "A Summary View of the Principle of Population." Malthus' theory of population dynamics is quite simple. It presumes a discrepancy between the rate of population growth and the resources necessary for subsistence. According to Malthus, whereas population increases geometrically (e.g., 1, 2, 4, 8, 16, ... ), food and other relevant resources only increase arithmetically (e.g., 1, 2, 3, 4, 5, ...), producing an ever-widening gap. Some mechanism is therefore necessary to keep population growth consonant with the resources essential for subsistence.

This essay has had an extraordinary impact upon the progression of science. From the time of its inception to the present, it has provoked continuous debate and scrutiny. Perhaps most important, Malthus' essay also proved instrumental to one of the most momentous theories in the history of science—natural selection. Charles Darwin recalls:

One day something brought to my recollection Malthus' Principle of Population. ... I thought of his clear exposition of "the positive checks" to increase ... which keep down the population. ... It then occurred to me that these causes or their equivalents are continually acting in the case of animals also; and, as animals usually breed much more rapidly than does mankind, the destructions every year from these causes must be enormous in order to keep down the numbers of each species, since they evidently do not increase regularly from year to year, as otherwise the world would long ago have become densely crowded with those that breed most quickly. ... Why do some die and some live? And the answer was clearly, that on the whole the best fitted live. From the effects of disease the most healthy escaped; from enemies the strongest, the swiftest, or the most cunning; from famine, the best hunters or those with the best digestion; and so on. Then it flashed upon me that this self-acting process would necessarily improve the race, because in every generation the inferior would inevitably be killed off and the superior would remain—that is, the fittest would survive. Then at once I seemed to see the whole effect of this. ... The more I thought over it the more I became convinced that I had at length found [as a consequence of reading Malthus] the long-sought-for law of nature that solved the problem of the origin of species."

The fortuitous impact of Malthus' work on Darwin is all the more extraordinary when one realizes that it had the identical—though independent—impact upon the co-founder of the theory of natural selection, Alfred R. Wallace. Wallace also notes:

The most interesting coincidence in the matter [i.e., the simultaneous discovery of natural selection], I think, is, that I, as well as Darwin, was led to the theory itself through Malthus—in my case it was his elaborate account of the action of "preventive checks" in keeping down the population of savage races to a tolerably fixed but scanty number. This had strongly impressed me, and it suddenly flashed upon me that all animals are necessarily thus kept
down—“the struggle for existence”—while variations, on which I was always thinking, must necessarily often be beneficial, and would then cause those varieties to increase while the injurious variations diminished.\textsuperscript{46}

Although Malthus was by no means the first author to emphasize the exponential power of population growth, his essays codified the extraordinary implications of human fertility. These implications include the extent to which “misery” (e.g., war, pestilence, famine, etc.) functions to keep this power in check, as well as the very real possibility that the human population could exceed the resources required for subsistence. As the world becomes more and more overburdened with a rapidly expanding human population, it certainly seems reasonable to examine whether nonprocreative sex constitutes an essential (or “natural”) extension of the Malthusian “preventative checks” on population growth.\textsuperscript{47}

The explosive nature of human population growth is strikingly illustrated in the following quotation by Paul and Anne Ehrlich. They observe that:

Our own species, \textit{Homo sapiens}, evolved a few hundred thousand years ago. Some 10,000 years ago, when agriculture was invented, probably no more than 5 million people inhabited Earth—fewer than now live in the San Francisco Bay Area. Even at the time of Christ, 2,000 years ago, the entire human population was roughly the size of the population of the United States today; by 1650 there were only 500 million people, and in 1850 only a little over a billion. Since there are now well past 5 billion people, the vast majority of the population explosion has taken place in less than \textit{a tenth of one percent} of the history of \textit{Homo sapiens}.\textsuperscript{48}

The deleterious effects of the world’s current population explosion are readily apparent: rapid deforestation and desertification, widespread famine, global warming, and so on. Moreover, the myriad adverse consequences of overpopulation are intricately intertwined. The increased utilization of scarce energy resources required by the growing population results in more and more pollution, which facilitates global warming. Global warming, in turn, creates crop failures, coastal flooding, desertification, water shortages, general stress on the ecosystem, and so on, all of which stimulate conditions favorable to the occurrence of widespread famine.\textsuperscript{49}

One further implication of the ever-growing global population (which is expected to double by 2050\textsuperscript{50}) is that people are engaging in all too much reproductive sex. That is, whether by design, accident, or some combination thereof, there is more than enough reproductive intercourse to ensure the continuation of the species. This should not be surprising. All that is required for humankind to reproduce itself is for each individual, on average, to raise to childbearing age one or more reproducitively viable offspring. In other words, if only a handful of a man’s billions of sperm successfully fertilize eggs, they will have more than fulfilled their collective purpose—to propagate their host’s genes.\textsuperscript{51} Similarly, only one-half of one percent of each woman’s eggs would need to be successfully fertilized to ensure the continued expansion of the human race (ignoring abortions, miscarriages, and other complications).\textsuperscript{52}

The inescapable conclusion arising from these considerations is that reproductive sex now actually \textit{threatens} the survival of the human race via the destruction of the planet wrought by excessive overpopulation.\textsuperscript{53} Returning to Malthus’ thesis, perhaps nonprocreative sex could (and does) act as a “check” on population levels by diverting sexual energies away from activities that would otherwise increase the number of human inhabitants of Earth. In this somewhat limited sense, oral sex (for example) can truly be considered a contraceptive activity.

These ideas are neither new, nor necessarily restricted to humans. Aristotle’s \textit{Politics}, for example, suggests that during severe food shortages in ancient Crete, men were encouraged to have “intercourse with males” to reduce the threat of further overpopulation.\textsuperscript{54} In a nonhuman analogy, the incidence of male-male sexual behavior in caged rats has been observed to increase with overcrowding, suggesting a possible substitution of the nonprocreative for the procreative.\textsuperscript{55}

Of course, if too much energy were diverted into nonreproductive sexual activities—so that procreative sex became a rarity—then alternate forms of sexual expression would cease to be advantageous for the human race. However, such a scenario seems extraordinarily unlikely given how extraordinarily pleasurable sexual intercourse\textsuperscript{56} and orgasm are (as a consequence, how often they are repeated), how long the human female is typically fertile (approximately thirty-seven years), and the tremendous number of sperm each human male is capable of producing. Indeed, if the current exponential rate of population growth is any guide, humans are a bit too fertile.

Thus, in a nutshell, our argument is that nonprocreative sex is advantageous for the species as a whole, provided that it remains an adjunct to penile-vaginal sex and does not entirely supersede it. In a somewhat analogous vein, although Sigmund Freud considered nonreproductive
sexual activities such as oral-genital and anal-genital stimulation to be "perversions" (a term arising, no doubt, from a view of nonprocreative sex as a perversion of the "natural instinct" to reproduce), he further held that such activities were pathological only if "instead of appearing alongside the normal sexual aim and object...it ousts them completely and takes their places in all circumstances." The "perversions" thus become pathological only when practiced to the exclusion of "normal" sexual activities (i.e., heterosexual coitus). In much the same way, nonprocreative sex is advantageous to the species as a whole only so long as it remains a complement to—rather than a replacement for—reproductive sex.58

An additional consideration bearing on the primacy of reproduction in human sexual relations is the percentage of human sexual behavior devoted exclusively to procreation. Naturally, this percentage varies by cultural group and historical period. Certainly, in a liberal atmosphere, with contemporary life spans and modern methods of contraception, procreation represents a small fraction of sexual expression—especially when viewed from earliest infantile masturbation to geriatric sexuality. It therefore seems rather odd that a behavior that is so limited in practice should be considered the sole natural function of human sexuality.

Although reproductive sexual intercourse is the instrument whereby the survival of the species is ensured, it constitutes but a small portion of modern human sexual experience. On the other hand, it seems readily apparent that the primary basis for human sexual expression and intimacy is sexual pleasure, whether the desire is ultimately expressed as hetero- or homosexual intercourse, mutual masturbation, or some other form of intimacy. Reproduction may therefore be viewed as a by-product of sexual pleasure, since pleasure provides the incentive for engaging in reproductive sex and its nonprocreative counterparts. Penile-vaginal intercourse is thus no more "natural" or "unnatural" than any other sexual activity.

While the ultimate (i.e., evolutionary) function of sex is clearly reproduction and the furtherance of the genes, the preceding arguments suggest that sexual pleasure is, in some sense, primary, in that it provides the incentive for sexual expression, and hence drives evolution. Pleasure is the motivator that gets people to "do it"—both reproductively and nonreproductively. Rather than being the function of sexual pleasure, perhaps the continuation of the species is instead merely a by-product of the pleasurability of sex.

It remains, however, to specify more precisely the manner in which sexual pleasure ensures reproduction, and to explain how this superlative mechanism came into being. To do so will first require a brief digression through evolutionary theory and its relation to sexual pleasure.

The Evolution of Sexual Pleasure, Part I

Current evolutionary thought suggests that any heritable trait that increases the reproductive success of those who possess it will tend to increase in proportion within the gene pool. It is easy to see how this would work. As an example, suppose that extraversion, considered as a character trait, is strongly associated with reproductive success. Therefore, extraverted people will have more children who grow to maturity and themselves reproduce than will less outgoing individuals. Furthermore, suppose that extraversion is heritable (i.e., that the children of extraverted people will tend likewise to be extraverts). An extraverted couple would then have extraverted kids, and lots of them, who in turn would produce numerous extraverted grandchildren, and so on. Provided that less extraverted people have fewer children, and that there is no difference in survival between introverts and extraverts, the proportion of extraverts in the population would steadily grow with each generation.

Clearly, then, nearly any trait that increases the frequency of reproductive sexual intercourse between a man and a woman will increase in prevalence, provided that it is heritable, because such a trait increases reproductive fitness (i.e., number of viable offspring) almost by definition. (Examples of pathological traits that simultaneously increase copulatory behavior and decrease reproductive fitness can, of course, be devised.59)

One promising candidate for such a fitness-enhancing trait is the capacity for intense sexual enjoyment. It stands to reason that in our evolutionary past individuals who experienced greater pleasure in sex were more likely to seek it out, and were therefore likely to have more offspring than did people who did not enjoy sex as much. Then, provided that a differential capacity for sexual pleasure is heritable (which seems a reasonable assumption since this capacity is largely a function of human physiology), the proportion of the population that found sex very pleasurable would have steadily increased with each generation. The pleasurability of sex is thus an evolved adaptation that facilitates reproduction. In other words, sex is pleasurable so that people will have sex.

Even granting that sex should be better than a poke in the eye with a sharp stick, does this really explain why sex feels so good? That is, does it actually need to feel that good for people to repeat it? Wouldn't they...
continue to engage in sex if it only felt “pretty good”? Most people enjoy repeating behaviors, such as drinking an ice-cold beer, that feel “pretty good.” Not great, like sex, but clearly pretty good (especially after a long, hot day working around the house). The question is, given a high fertility rate and a penchant for repeating “pretty good” behaviors, why isn’t “pretty good” good enough?

The reason, we believe, is that there are many disincentives that work against reproductive sexual behaviors. For one thing, intercourse is a dangerous activity; not so much now, but in the evolutionary past—tens of millions of years ago—when the mechanism of sexual pleasure probably first evolved. These dangers ranged from the violence that might be necessary to procure and retain a mate, to the increased vulnerability to attack experienced during intercourse itself. Sexually transmitted diseases and various infections posed additional threats to those engaging in sexual intercourse. The danger was even greater for women, who faced the possibility of pregnancy and attendant complications, including maternal death, infertility, and miscarriages. All of these perils made intercourse a precarious proposition for our distant ancestors.

However, we need not invoke such horrendous possible consequences as maternal death during childbirth to understand the monumental power of sexual pleasure. Perhaps observing or experiencing menstruation or natural childbirth was a sufficient disincentive for the less pleasurably inclined. If the prevalence of menstrual taboos is any indication, men (and perhaps women, too) often have adverse reactions to normal genital functions. In the Judeo-Christian tradition, for example, menstruation is viewed as a “curse”—God’s punishment on all women for Eve’s transgression in the Garden of Eden. In Victorian America, menstruation fears were manifested in the belief of physicians that menstruation made women weak, diseased, and dependent, and even caused temporary insanity in more emotional women. The contaminating effects of menstrual blood are also feared by Sambia men in New Guinea. Heterosexual intercourse is nevertheless highly valued: “While most [Sambia] men regard coitus with some trepidation, and the act itself is laden with shame... [they] generally regard it as intensely exciting and pleasurable (and no less so because it is dangerous).”

Furthermore, despite the joys of conception and maternal bonding, childbirth is a painful and messy process that is not for the faint of heart. The experience of childbirth is, at least in theory, yet another disincentive to penile-vaginal sex. Again, what might offset this disincentive? The answer, of course, is an extraordinarily powerful drive for sexual pleasure. As Freud observed, “women who conceive without pleasure show later little willingness to endure frequent childbirths, accompanied as they are by pain.”

Pleasure also provided an incentive for our ancestors to seek sexual partners even when distance, competition, and other hardships prevailed. The capacity for intense sexual pleasure ensured their participation in sex, despite a plethora of disincentives.

Obviously, however, there is (and was) a limit to how good sex can feel, or more precisely, to how much energy can be expended in the pursuit and enjoyment of sex. Deleterious consequences may result if too much time and effort are expended in the pursuit of sex because reproduction, after all, is only one of several evolutionarily significant activities. Resources must also be allocated to procure food by hunting or foraging; to ensure the safety of oneself and one’s family or other social unit; to find adequate shelter; and so on. A delicate balance is required between reproduction on the one hand, and survival (including the survival of offspring) on the other. Millions of years of evolution have arrived at just such a balance. Like the baby bear’s porridge in the tale of Goldilocks, the pleasure that modern Homo sapiens feel is neither too hot nor too cold—it is, instead, just right.

The Evolution of Sexual Pleasure, Part II

To summarize: The evolutionary function of sexual pleasure is to encourage humans to engage in penile-vaginal intercourse, and thereby to propagate their genes. People have sex because it feels good, not necessarily because they consciously desire offspring. The mechanism of pleasure is an evolutionary adaptation that solves the motivational problem of ensuring that sex takes place despite its myriad drawbacks. Sex, after all, is time consuming, messy, and dangerous. And these costs must have been magnified many times over for our ancient protohuman ancestors. Pleasure, though, made sex worthwhile. It provided the benefit needed to offset the sizable costs associated with intercourse, such as time and energy expenditures, vulnerability to attack, the dangers of pregnancy and childbirth, and so on. Natural selection therefore favored those who experienced greater pleasure in sex because they tended to invest more of their energies into the pursuit of sex, and hence begat more offspring, many of whom inherited copies of the enhanced pleasure-seeking genes.

For animals other than primates, sexual pleasure seems relatively less important. Although the question of whether or not dogs and cats truly enjoy sex can never be answered definitively, the point is really rather moot. Regardless, pleasure is not the primary reason that dogs and cats
have sex. Instead, the sex lives of canines and felines are controlled by hormones and pheromones, and are restricted to temporally limited periods of female fertility and sexual receptivity.

Unlike other species, human females don't have specially delineated periods of sexual receptivity (estrous), and males don't respond mechanically to scents emitted by copulable females. People are not ruled by hormones, but instead by lust—that is, by the pursuit of pleasure. Why? What advantage does the mechanism of pleasure (viewed as a motive force) confer upon the individual, in comparison with the seemingly obsolete hormonal solution?

The principal advantage of the pleasure mechanism is freedom. Freedom from a fixed hormonal schedule. As a motivational system, hormones are quite rigid. When a male dog, for example, encounters the scent of an estrous female, his mating behavior "program" takes over and nothing, including fences, doors, and busy highways, will keep him from locating and copulating with his paramour. The costs may be high, but he has no real choice; with hormones it is either now or never. Nor can the female control her costs: She can become pregnant only when in estrus, but she cannot choose the timing of these periods of fertility.

For men and women the reproductive imperative is restrained by logic and reason. Sexual pleasure may be sublime, but it is hardly worth dying for. For the most part (though significant exceptions occur), logic and reason dictate whether and when sexual encounters will take place. In this "rational" model (explored further in Chapter 6), the decision to engage in sex is undertaken after a careful (though largely unconscious) analysis of the costs and benefits ("utility") of sex, versus the utility of abstaining. Pleasure is reduced to a single factor in a complicated cost-benefit analysis. In theory, this decision procedure allows the costs of sex to be minimized while the benefits are retained. Clearly, a large cerebral cortex is required for such complex decision making.

The preceding rational model is idealized, of course. Not all sexual decisions are rational from a purely utilitarian standpoint, and many of the costs and benefits are largely intangible, or at the very least, unquantifiable. Nevertheless, the point we wish to make is that the mechanism of pleasure affords humans (and perhaps other apes as well) an unprecedented degree of control over their sexuality. This freedom, in turn, provides a superior solution to the problem of maximizing sexual benefits while simultaneously minimizing attendant costs.

More generally, pleasure—not just sexual pleasure, but any of various visceral pleasures—provides the basis for learning via reinforce-

ment. Pleasure reinforces behaviors that are worth repeating. Many forms of pleasure reward behaviors that enhance the survivability of the individual (such as eating ripe rather than immature or spoiled fruit), whereas sexual pleasure enhances the survivability of the species at the expense of individual survivability. In other words, pleasure, like natural selection, rewards adaptive behaviors. However, the two mechanisms differ greatly in temporal scale: Whereas pleasure provides nearly immediate gratification, evolutionary "rewards" are affected over tens, hundreds, and thousands of generations.

Pleasure also provides a primitive categorization mechanism, and a concomitant, evolutionarily advantageous, compression of information. Thus, people need not be biologically "programmed" separately to enjoy the taste of ripe bananas, oranges, apricots, and so on. Instead, they are programmed to like sweet things. The simple rule is "eat things that taste good (i.e., provide gustatory pleasure), and don't eat things that don't." A laundry list of the edible versus the inedible is unnecessary; edibles, by and large, taste good, so a simple rule to eat whatever tastes good suffices. With regard to sex, the rule apparently is, "if it feels good, do it." Hence, if there is a category, it must include all sex, not just procreative sex.

Finally, and highly speculatively, pleasure and its close relative, pain, combine to form a natural system of morality. Although we agree with Kant that notions of "right" and "wrong" are not inherently sensible, pleasure and pain nevertheless provide a moral code that is sympathetic to evolutionary concerns. By this we mean only that if the pleasurable and the painful define behavioral categories to be sought and avoided, respectively, then those animals that let pleasure and pain guide their behavior should have an evolutionary advantage over those that do not. Evolution, in this sense, rewards the moral.

The Two Types of Pleasure

In order to consider the evolution of sexual pleasure further, it will be helpful to distinguish between two types of pleasure: First, the pleasurable erotic feelings elicited by stimulation of the genitals or other erogenous zones (especially during intercourse), and second, the intense pleasure of orgasm. These two types of pleasure will be referred to here as fore-pleasure and orgasmic pleasure (the term "fore-pleasure" is originally due to Freud and clearly reflects the central importance of orgasm in his theory of sexuality—all other pleasures are merely anticipatory). These two pleasures are obviously distinct, and if, as suggested earlier,
sexual pleasure is evolutionarily adaptive, one might wonder which of the two types shoulders the greater motivational burden. In the extreme form one might even ask, "Is orgasmic pleasure necessary?"

This question is motivated by the observation that the genital stimulation that accompanies penile-vaginal intercourse is exquisitely pleasurable for most people; so much so that orgasm is often delayed as long as possible to maximize fore-pleasure.\(^7\) Indeed, the relatively long time required for human males to ejaculate (compared with other primates) could be an adaptation meant to maximize fore-pleasure.\(^7\) Of course, the longer sex takes, the greater the costs to the participants (in terms of vulnerability, time, and energy expenditures). Shorter sex should therefore be favored by natural selection. Perhaps the greater pleasure enjoyed during prolonged intercourse is sufficient to counteract this negative pressure. That is, in our evolutionary past, maybe those who took longer experienced greater pleasure, hence engaged in intercourse more frequently and had more children. It might seem, therefore, that fore-pleasure alone would be sufficient to ensure that sexual behaviors get repeated.

This being the case, it is not immediately clear what function (if any) is served by orgasm. (Only male orgasm is considered here; the female counterpart is discussed in Chapter 5.) As noted in the introduction, orgasm and ejaculation are conceptually, anatomically, and physiologically distinct phenomena, despite their usual temporal coincidence. Theoretically, there is no obvious reason why orgasm—particularly its pleasurable aspects—should accompany the ejaculation of sperm. Indeed, if the genital stimulation of intercourse is pleasurable enough, and if such stimulation eventually induces ejaculation—which it usually does—then the necessity for pleasurable orgasm is undermined.

This theory is fine, as far as it goes, but it neglects the second half of the observation with which this discussion began—namely, that male orgasm is often delayed to maximize fore-pleasure. One of the most efficient ways for men to stave off orgasm is simply to stop having sex for a time, and resume only after a near return to physiological normality. This technique, in theory, be repeated indefinitely, with the result that ejaculation need never occur. Fortunately for the species, however, ejaculation is usually accompanied by the ecstasies of orgasmic pleasure. The intense pleasure of orgasm provides the necessary reward for a job well done (the fact that orgasmic pleasure is infinitely more intense than the preceding fore-pleasure is also consistent with this explanation). Orgasmic pleasure, hence ejaculation, is thus a goal to strive for, rather than a pleasure-dampening nuisance. For this reason, it is a neces-
sary component of the male sexual response. Of course, ejaculation is not automatic; fore-pleasure is required to ensure continued stimulation until orgasm. Thus, both orgasmic pleasure and fore-pleasure contribute to the ultimate goal of ejaculation.

But penile-vaginal intercourse isn't the only form of sexual expression that's pleasurable—nonprocreative sexual activities are enjoyable too. How, then, can sexual pleasure ensure that people reproduce? In other words, if people can experience all the gains of sex without any of the disincentives, why should they run the risk of possible complications arising from intercourse? (This question is especially relevant to women, for whom the risks are much greater.) Many people, for example, engage in masturbation as a form of self-pleasuring. Because masturbation has none of the possible adverse consequences (e.g., acquiring a sexually transmitted disease) associated with more social activities such as oral, anal, or vaginal intercourse, one might wonder why more adults haven't adopted it as their sole source of sexual pleasure.

Why indeed? First, despite a paucity of data on the subject, it seems safe to suggest that for most people masturbation is not as physically or emotionally satisfying as other sexual options.\(^7\) So, there may be a trade-off associated with interpersonal sex: greater threat of complications in exchange for increased pleasure and emotional satisfaction. But why penile-vaginal intercourse, with its attendant pregnancy-related risks, rather than oral or anal sex? Again, it is possible that differences in the pleasurable ness of these activities, or simply the desire for variety, explains why most individuals do not eliminate coitus from their sexual repertoires. Penile-vaginal intercourse is also the most egalitarian, and, in the missionary position, the most intimate of commonly practiced heterosexual activities. Intercourse might therefore serve to strengthen the emotional bond between sexual partners, as discussed further in the following section.

All this may be true, but perhaps an even more parsimonious explanation exists. A simple solution to the conundrum of why people (and other animals) continue to engage in penile-vaginal sex, despite the risks, is to assume that masturbation, oral, and anal sex are just unanticipated concomitants of the evolution of sexual pleasure, that, because they do not interfere too greatly with reproductive behaviors, have not been eliminated through the callous machinations of natural selection. Our theory, in its entirety, is then as follows. Sex is pleasurable to ensure that people engage in reproductive behaviors despite the sometimes substantial risks that these behaviors entail. But the pleasurable nature, relying as it does on both physiological and psychological processes,
cannot be restricted to purely reproductive behaviors, and for this reason a wide range of sexual activities can be enjoyed. This enjoyment is fine as long as it does not interfere with the propagation of genes, hence the regeneration of the species.

We have thus come full circle, returning to the arguments with which this chapter began. Because sexual intercourse is so pleasurable, and humans are so fertile, conception is bound to occur at a rate sufficient to ensure the continuation of the human race, even if other activities are enjoyed as well.

The Multiple Functions of Sexual Pleasure

Before concluding this evolutionary discussion, however, we should mention an alternative theory of the utility of sexual pleasure. In his influential (though greatly criticized) book, The Naked Ape, British naturalist Desmond Morris suggests a different, though somewhat complementary, purpose for the plausibility of sex. Morris proposes that the primary function of sex is to facilitate the bonding of males and females in pairs, rather than to ensure procreation. In this scheme sexual pleasure is relegated to encouraging pair-bonding in much the way that it supports procreation in the theory outlined earlier. Morris observes that "the vast majority of copulation in our species is obviously concerned, not with producing offspring, but with cementing the pair-bond by providing mutual rewards for the sexual partners." The mutual rewards being, presumably, the pleasurable sensations that accompany sex.

While we agree that reproduction is no longer the principal rationale for "the vast majority of copulation in our species," we also consider the experience of sexual pleasure to be a goal unto itself. Although there can be little doubt that such pleasuring yields as a secondary gain the strengthening of the emotional bond between mated couples, we wish to emphasize that neither reproduction nor sexual pleasure demand such a bond in order to operate. Strictly speaking, pair-bonding cannot be the primary function of sexuality; in fact, in many instances evolution would favor promiscuity, at least for males. To paraphrase a slogan currently in vogue, "he who dies with the most offspring wins." It is immaterial whether or not those offspring were conceived within the bounds of a monogamous relationship, their existence is all that matters. (Additional doubts about Morris' pair-bonding hypothesis are raised in Chapter 4.)

In the same vein as the previous quote from The Naked Ape is the following from Kinsey et al.: "No appreciable part of the coitus, either in...
manufactured identity categories based on sexual orientation. In America, gay means much more than simply male sexual preference for men as opposed to women—it is indicative of enhanced freedom, self-esteem, and acceptance. Peer acceptance is also critical to adolescents’ assessments of self-worth. Teenagers everywhere use sex to advertise their status as mature individuals, and thereby their independence from parents. Finally, for many people the emotional and physical release experienced during orgasm decreases tension and irritability. Of course, the pleasurable ability of sex further enhances, and very likely underlies, these additional functions, which are thus secondary benefits of the evolution of sexual pleasure.

The Qualia of Life

Unfortunately, the evolutionary focus of the previous sections omits a critical, perhaps even the most important, aspect of what pleasure really is. Pleasure is a feeling, a sensation, a subjectively experienced phenomenon. And this fact, it turns out, engages some rather intractable philosophical questions.

As an introduction to the dilemma posed by the inherently subjective nature of pleasure, consider the dubious proposition that animals (other than humans) are incapable of feeling pleasure. According to this view, although a dog may actively seek out his master and beg to be petted, and may roll his eyes and act as though in heaven while having his belly rubbed, he feels no pleasure; he only behaves as though he did.

Is such a situation plausible? On the one hand, we are tempted to respond without hesitation with a resounding No! Anyone who has spent any significant amount of time around animals, from mice to elephants, cannot seriously entertain the notion that they have no feelings. On the other hand, there is no proof that such is the case, and there never can be, given the subjective nature of the experiences in question. At best, we can analogize, and attribute pleasure, pain, and consciousness to other species according to how similar they are to humans. That other great apes are conscious is indubitable; that dogs and cats feel pleasure and pain is also fairly certain; and so on down to insects, to which people typically, though unscientifically, deny consciousness.

In The Expression of Emotions in Man and Animals, Charles Darwin reports the following observations:

With the lower animals we see the same principle of pleasure derived from contact in association with love. Dogs and cats mani-
festy take pleasure in rubbing against their masters and mistresses, and in being rubbed or petted by them. Many kinds of monkeys, as I am assured by the keepers in the Zoological Gardens, delight in fondling and being fondled by each other, and by persons to whom they are attached.91

And, of course, many primates also experience pleasures that are specifically sexual.92

Although most readers are probably inclined to grant consciousness to dogs, cats, sheep, and apes, it nevertheless remains conceivable that these animals lack a subjective inner life. Perhaps a simple thought experiment will help make this clear. Imagine a humanlike robot—a perfect simulation in every respect—that behaves in every situation and in every way like a human, but that nevertheless feels neither pleasure nor pain (nor anything else, for that matter). It does react as though it felt these sensations—for example, when it accidentally burns its hand, it quickly pulls it away from the source of heat, possibly shaking it and cursing wildly while doing so—and, like a human, it tends, all things being equal, to seek experiences known to be associated with pleasure and to avoid those connected with pain. In other words, its behavior, vis-à-vis pleasure and pain, is entirely indistinguishable from that of a human being, but it doesn’t really feel the pain or enjoy the pleasure.

Clearly, the plausibility of such a robot depends on whether or not the functional mechanisms of pleasure and pain are truly separable from the subjective feelings that accompany them. (To introduce a bit of philosophic jargon, the subjective feelings and sensations associated with pleasure and pain shall hereafter be referred to as qualia.) Although it is clear from their behavior that dogs experience the functional manifestations of pleasure and pain, we can never know whether they also experience the associated qualia.

The question posed earlier, asking whether the qualia of pleasure and pain can be separated from their functional role, their “syndrome[s] of most typical causes and effects,”93 is hardly novel. Related questions of the nature of the relationship of mind to body have troubled philosophers dating back at least to Aristotle. The most famous “resolution” of this problem, of course, is Descartes’ suggestion that all substances belong to one of two basic classes: the physical or the mental. Descartes maintained that the mind and the brain are fundamentally different types of entities: the mind is mental substance, characterized by thinking, believing, and so on, whereas the brain is physical substance, the defining quality of which is that it occupies space. According to Descartes, despite being radically different kinds of substances, the mental and the physical nevertheless interact with each other, as when a belief that it’s hot (a mental event) causes someone to open a window (a physical event).

Many people intuitively believe, like Descartes, in some form of dualism, in which the physical and the mental, though fundamentally different, interact through as yet undiscovered mechanisms. The nature of the posited interaction is problematic, however. As Princess Elizabeth inquired in 1643: “How can the [mind] of man, being only a thinking substance, determine his bodily spirits to perform voluntary actions?”94 This and similar difficulties have led most modern scientists to reject dualism in favor of materialism, which posits the existence of only a single (physical) substance.95 According to materialism, mental states are simply brain states, although the form that this equivalence assumes is the subject of continuing debate (for example, is pain always a particular brain state, or just some brain state?). Thus, in this view the mind arises from the functioning of the physical brain. However, the existence of qualia—for example, the way pain feels, as distinct from its functional role—presents a special challenge to materialism.

In dualistic terms, the functional basis of pleasure and pain is unarguably physical, being composed of skin and pain receptors, nerves, neurons, brain centers, and so on. The associated qualia, on the other hand, are intrinsically mental. This is not to say that qualia are necessarily divorced from the physical realm. The opposite is almost certainly true—qualia, it seems, arise from physical processes; pleasure and pain may very well be the subjective correlates of the firing of certain neurons in the brain. Though not entirely uncontroversial, this much is relatively unproblematic. However, difficulties arise when one attempts to explain how mental phenomena, such as qualia, can have physical effects, such as causing a particular behavior. A basic tenet of materialism, and one with which most scientists would heartily agree, is that the cause of a physical effect must itself be physical. It follows from this that qualia cannot have physical effects (such as influencing behavior) unless they are themselves physical entities. For this reason, various flavors of materialism attempt either to abolish, ignore, or reduce qualia to the physical events from which they arise.

The most common materialistic detour around the problem of qualia is simply to deny the causal efficacy of qualia. In this view, qualia are held to be merely epiphenomenal. That is, qualia are assumed to be mere by-products of physical events in the brain, and to possess no causal powers distinct from the brain events themselves. The counterintuitive nature of this claim is readily apparent. Most people believe
that when they touch a hot stove, it is the feeling of pain that causes them to withdraw their hand. The pain seems to play an integral, causative role in the behavioral sequence. Nevertheless, according to many materialistic theories, the pain cannot be causally efficacious. Instead, the pain arises as a by-product of some brain event, such as the one that initiates the behavioral act of withdrawing the hand from the hot stove.

However, the existence of qualia is, we believe, both self-evident and evolutionarily significant. The preceding sections presented a simplified account of the evolution of sexual pleasure, viewed as a mechanism. To reiterate: Pleasure is adaptive because it provides a nonrigid motivational system for ensuring evolutionarily advantageous behaviors. People have sex because it feels good. The question is why it feels good. To return to the canine and robot examples, couldn’t people respond appropriately without feeling pleasure? Intuitively, the answer is no. But we can do better than this.

It is commonly assumed that consciousness (including pleasure and pain) is an adaptation, shaped over the millennia by the forces of natural selection. Suppose this is true. Suppose, in particular, that qualia have an evolutionary history of their own. What, then, is the adaptive significance of qualia?

To examine this issue, assume that a "qualialess" robot of the sort described earlier has been constructed. In fact, assume that a whole society of these superrobots has been produced, the first two—one "male" and one "female"—by humans, and the remainder by an unspecified form of artificial sexual reproduction that, like human reproduction, is subject to the forces of natural selection. Or, if you like, imagine a race of creatures identical to humans in every way but one: They do not experience the qualia of pleasure and pain. Now leave these two races—ours and the qualialess one—and return after 10 million years of evolution by natural selection. Has one race won out over the other?

If there truly were an evolutionary advantage to qualia, one might expect the human race to have dominated, perhaps even obliterated, the qualialess race. But is this really a reasonable expectation? Remember that both races react identically to pleasurable and painful stimuli and situations; their behavior is in all instances and details identical. However well adapted one race is to its environment, the other should be equally so. Whatever qualities one might capitalize on to increase its fitness, so might the other one. Thus, ignoring random effects, there should be no difference in survival or reproduction, hence neither race should predominate over the other in this mock evolutionary competition.

The ineluctable conclusion is that if qualia are truly evolutionarily adaptive, they must be more than merely epiphenomenal, they must be causally efficacious in motivating behavior. That is, pleasure and pain necessarily have behavioral consequences. This really is not surprising. A trait must have some causal efficacy to be evolutionarily advantageous. Furthermore, this result confirms the intuition that the way pleasure and pain feel plays an important role in determining behavior. Pleasure and pain derive their status as motive forces from the feelings that accompany them. A sensationless pain is not a pain. There would be no reason to avoid it; hence, it would have no behavioral consequences. The functional roles of pleasure and pain demand that they be felt.

Unfortunately, because qualia are inherently subjective, how pleasure and pain feel cannot be captured in any physical description. As Thomas Nagel explains in his seminal essay, "What is it Like to be a Bat?":

The subjective character of experience... is not captured by any of the familiar, recently devised reductive analyses of the mental, for all of them are logically compatible with its absence. It is not analyzable in terms of any explanatory system of functional states, or intentional states, since these could be ascribed to robots or automata that behaved like people though they experienced nothing. It is not analyzable in the causal role of experiences in relation to typical human behavior—for similar reasons. Even if the physiology of pleasure were to turn out to be no more complicated than the firing of a few neurons in the limbic lobe of the brain, a complete description of the phenomena of pleasure—as people experience it—would remain elusive.

To summarize the argument once again: If the qualia of pleasure and pain are evolutionary adaptations, then they must be causally effective. In humans, at least, the capacity to experience the sensations associated with pleasure and pain is a necessary prerequisite for exhibiting the appropriate behaviors (including pleasure seeking and pain avoidance); that is, the qualia play a causal role in eliciting appropriate behaviors. Thus, according to this argument (and assuming its premises) mental phenomena such as qualia must be able to influence physical behavior, as suggested by Descartes but refuted by most right-thinking modern scientists.

Naturally, there are a number of ways to avoid this somewhat unsavory conclusion. One could, for example, insist that the qualia themselves did not evolve, but simply are, and always have been. However, given the intricate connection between qualia and the behavioral mechanisms of pleasure and pain (which most surely did evolve), this seems a rather untenable position. A more promising approach is to argue that
qualia are the intrinsically mental constituents of a physical property. According to this theory, any robot that exactly mimics human responses to pleasure and pain must necessarily experience the associated qualia, so that the behavioral/functional roles occupied by pleasure and pain are inseparable from the qualia. A robot that displayed the appropriate behaviors but lacked the associated qualia would be an impossibility, much as heat (a property) is a necessary concomitant of molecular motion (a behavior). Although this view seems plausible enough, it is somehow unsatisfying, and seems to beg the question at hand: Why should pleasure be associated with evolutionarily adaptive behaviors?

Perhaps, as Nagel suggests, there are facts beyond the reach of human concepts. If so, it is likely that the nature of mind-body interactions is one such fact.

**Childhood, Leisure, and Sexual Pleasure**

If sexual pleasure is an evolved adaptation in humans, that is, if people are hardwired for pleasure, one may ask when the associated behaviors manifest themselves. The answer is, in infancy and early childhood, as amused (or aghast) parents can attest. Like smiling and laughter, interest in genital stimulation begins early, and for most people, never entirely fades. We believe, consistent with Freud’s theory of human sexuality, that childhood sexual feelings, interests, and motivations are naturally heterogeneous, or “polymorphously perverse” (meaning that all sexual possibilities are open), because childhood is a time for exploring the world, including the proximal world of the flesh. As puberty unfolds, however, the drive for sexual pleasure is intensified and, according to Freud, the aim of the “sexual instinct” (or libido) shifts from self-pleasuring to the consummation of reproductive activities. (This shift is especially noticeable in postpubertal males as an increasing emphasis on orgasm and ejaculation.)

If heterogeneous sexual pleasure is overtly manifested in childhood because of the freedom of exploration and the absence of procreative pressures and constraints, what happens to polymorphous perversity as adulthood melts into adulthood with its attendant responsibilities? The answer, we believe, is evident in the circumstances that characterize childhood: exploration, leisure, and the absence of adult responsibilities. We propose, somewhat in defiance of Freud, that when these conditions extend into adulthood, so does sexual heterogeneity. Historically, as societies developed and citizens’ lives became both safer and comparatively less arduous, heterogeneous (e.g., oral, anal, genital) sexual pleasure was incorporated into adulthood to a much greater degree than it previously had been. In many cases, favorable circumstances prevailed for only a subclass of society, as would be predicted by the differential opportunities for leisure. In late eighteenth/early-nineteenth century Hawaii (before the arrival of the Christian missionaries), for example:

The sexual conduct of the hereditary aristocrats, who lived in or close to the political centers, was noticeably different from that of the commoners who, as agriculturists, fishermen and artists, resided and labored apart from the chiefly courts. By our standards the entirety of Hawaiian society was sexually very permissive, but at the courts erotic pastimes figured prominently in the lives of the leisured nobles. Sexual liaisons, both heterosexual and homosexual, were freely formed and just as freely broken off. A somewhat analogous situation existed in ancient Greece, where numerous outlets for heterogeneous sexual pleasure existed for male citizens (though not entirely absent, fewer such outlets existed for women). For men, both heterosexual (female) and homosexual (male) prostitutes were available as sexual partners, as were slaves of both genders. We presume that these particular options were viable, in part, because male citizens in ancient Greek society had ample leisure time. And what is the best model of idyllic leisure? Childhood, of course.

Because childhood is a natural time for heterogeneous sexual pleasure, it seems reasonable that ancient Greeks citizens would co-opt aspects of childhood (i.e., heterogeneous) sexuality into their conception of leisure. In many respects, this suggestion mirrors Thorstein Veblen’s notion of leisure. For example, because of the prevalence of slaves and noncitizens for “demeaning work,” plus the subjugation of women to perform these duties, male citizens in ancient Greece could remain conspicuously exempt from all useful employment. They therefore had plenty of time for nonproductive activities and could emphasize intellectual or aesthetic pursuits as “serviceable evidence of an unproductive expenditure of time.” Perhaps heterogeneous sexual pursuits were utilized as tangible evidence of the nonproductive consumption of time.

This is not to suggest that ancient Greek citizens were the first consumers of heterogeneous sexual pleasure, nor particularly prone to these pursuits. Indeed, we propose that heterogeneous sexual pleasure has been pursued in varying degrees by humans of all geologic ages, as suggested by the sexual behavior of our primate relatives. However, the burdens of adulthood usually relegate such pleasuring to childhood. Only when cultures minimize the burdens of adulthood—as, for example, in
ancient Greece—can leisure be created, thereby permitting (though not guaranteeing) some form of heterogeneous sexual pleasuring.

The particular form (or the absence) of heterogeneous sexual pleasure is largely determined by the existing cultural milieu—meaning that leisure is not invariably associated with polymorphous sexual pleasure, although leisure provides the opportunity for it. (In any case, such pleasuring is always an extension of "natural" childhood sexuality.) One of the reasons that leisure does not invariably produce childlike, heterogeneous sexuality in adulthood is the presence of cultural rules and regulations that seek to restrain sexual expression.

As human beings form groups, regulations are needed to foster cooperation, settle disputes, maximize resources, provide safety, and so on. Unfortunately, sexual pleasure is ripe for regulation because it is critical to kinship, marriage, childrearing, and related concerns, and because it profoundly affects the manner in which adults spend their time.

Historically, if one group or another wants to control how adults spend their time (leisure or otherwise), or to maximize their numbers, a first step is to implement sexual restrictions in service of these goals. Under such a system two conditions typically prevail. First, work, societal duties, and so on take priority in adulthood; second, sexual intercourse within marriage is strictly enforced, and concomitantly, alternative expressions of sexual pleasure are tabooed. Because sexual pleasure is so inherently appealing (or frighteningly intoxicating, depending on one's viewpoint), these rules and restrictions are necessarily punitive and repressive, so as to offset the magnificent power of sexual pleasure.

3.
The Regulation and Marketing of Sexual Pleasure

In William Blake's famous poem *The Marriage of Heaven and Hell*, he challenges the sanctimony of libidinous restraint—particularly as evidenced in Milton's *Paradise Lost*. Blake warns:

> Those who restrain desire, do so because theirs is weak enough to be restrained; and the restrainer or reason usurps its place & governs the unwilling.¹

This poem provides a particularly fitting introduction to the regulation of sexual pleasure and the questions it evokes. Such as the most basic query: Why do we restrict and encumber this many splendored thing? And why do we consider ourselves so noble when we do? Blake's poem reaffirms the vitality of passion and desire, and the creative acts they inspire. Desire provides a counterpoint to oppression, the virus of regulation and restraint.

Is restraint invariably viral? Obviously not. Even where the pursuit of sexual pleasure is concerned, the necessity for restraining and regulating violent and nonvolitional acts (e.g., rape and other forms of sexual abuse) is nearly universally endorsed. Thus, it becomes important to understand how, and why, restraint is implemented en masse, as well as how it is internalized by individuals, as both a decision-making process and an emotional reaction. Such is its importance that Freud made sexual restraint (and the tension, neuroses, and anxiety they engender) the cornerstone of his theory of the human psyche. Ultimately, this tension appears as the psychosexual equivalent to Newton's third law of