Sexual jealousy functions to defend paternity confidence and is therefore expected to be a ubiquitous aspect of male psychology. Several lines of evidence confirm this expectation.

Cross-cultural and historical reviews of adultery law reveal remarkable conceptual consistency: unauthorized sexual contact with a married woman is a crime and the victim is the husband.

We find male sexual jealousy to be the leading substantive issue in social conflict homicides in Detroit. A cross-cultural review of homicide indicates the ubiquity of this motive.

Social psychological studies of “normal” jealousy and psychiatric studies of “morbid” jealousy both suggest that male and female jealousy are qualitatively different in ways consistent with theoretical predictions.

Coercive constraint of female sexuality by the use or threat of male violence appears to be cross-culturally universal. Several authors have suggested that there are societies in which women’s sexual liberty is restricted only by incest prohibitions, but the ethnographies explicitly contradict this claim.

Key Words: Adultery; Double standard; Homicide; Sex differences; Sexual jealousy.

INTRODUCTION

In a species with internal fertilization, males cannot identify their offspring with confidence. This uncertainty of paternity is a selection pressure operating against the evolution of post-zygotic paternal investment (Trivers, 1972). In species in which paternal investment has nevertheless evolved, males may be expected to have evolved defenses against expending that investment for the benefit of unrelated young. Sometimes, young sired by other males are systematically exterminated, as in lions (Bertram, 1975) and some primates (reviewed by Hrdy, 1979) or are neglected, as in bluebirds (Power, 1975). Females betraying the possibility of prior fertilization are sometimes discriminated against as potential mates, as in doves (Erickson and Zenone, 1976). A more anticipatory line of defense is the jealous guarding of a female by her mate throughout her fertile period, as has been described in many animals (e.g., Beecher and Beecher, 1979). These various behavioral strategies raise the actors’ confidence of their paternity of those young in whose welfare they invest.

It is heuristic to consider human behavior from the same perspective (Dickemann, 1979b). It is the thesis of the present paper that there have evolved in Homo sapiens certain psychological propensities that function to defend paternity confidence. Manifestations include the emotion of sexual jealousy, the dogged inclination of men to possess and control women, and the use or threat of violence to achieve sexual exclusivity and control. We refer to this behavioral/motivational complex as male sexual jealousy.

“Fearful or wary of being supplanted; apprehensive of loss of position or affection” is a dic-
tionary definition of "jealous" (Morris, 1976). Jealousy is thus not defined according to particular behavior patterns, but as a particular experiential state. Behaviors as dissimilar as violence and vigilance may be manifestations of jealousy. The emotional content of jealousy may range from anger to fear to depression, so that jealousy seems no more readily defined as a specific emotion than as a specific behavior (see Hupka, 1981). For our purposes, jealousy may best be defined as a state that is aroused by a perceived threat to a valued relationship or position and motivates behavior aimed at countering the threat. Jealousy is "sexual" if the valued relationship is sexual.

Our focus on male sexual jealousy may seem arbitrary and sexist, but it can be justified both theoretically and empirically. Male sexual jealousy, by defending exclusive sexual relationships, functions to elevate paternity confidence. Females, on the other hand, are not susceptible to misidentification of young and misdirected parental care. Even where males do not invest paternally, they compete for the parental investment of females, a limiting resource for their own reproductive success (Trivers, 1972). It follows that while women may be expected to be jealous of their mates' allocation of attention and resources, they should not be so concerned with specifically sexual fidelity as men. That, in brief, is the theoretical rationale for our emphasis on males. The discussion to follow provides the empirical justification. We present evidence that male sexual jealousy has motivated numerous independent inventions of parallel legal strictures concerning female sexual liberty, and that male sexual jealousy is a leading motive in homicide and other acts of violence. We then review evidence that men and women may experience jealousy in qualitatively different ways. Finally, we consider the evidence that male sexual jealousy is—despite the persistence of claims to the contrary—a cross-cultural universal.

ADULTERY AND THE LAW

Whenever people codify law, it appears that they consider some limitation of sexual right and access beyond incest prohibitions to be an appropriate subject for legislation. This is not an obvious or trivial observation, for many social theorists have imagined that mankind must once have enjoyed a prehistoric sexual communism, and that sexual jealousy is a recent "cultural invention." Modern knowledge of animal behavior has exposed the naivete of such ideas; aggressive competition for females and the sequestering of mates from rival males are conspicuous male preoccupations in many species, including mammals. We know of no reason to doubt that males have competed jealously for females throughout hominid history. The strikingly similar legal restrictions on sexual behaviors that have been independently invented in various human societies reflect the fundamental conflict of reproductive self-interest that inevitably exists among male reproductive competitors.

Both cross-cultural and historical reviews of adultery law reveal a remarkable consistency of concept: sexual intercourse between a married woman and a man other than her husband is an offence. It is often viewed as a property violation. The victim is the husband, who is commonly entitled to damages, to violent revenge, or to divorce with refund of bride-price.

Hadjyannakis (1969) has reviewed the history of European adultery laws, which he suggests have moved only slowly and recently toward legal equality of the sexes. Ancient Egyptians, Syrians, Hebrews, Romans, Spartans, and other Mediterranean people defined adultery according to the marital status of the woman and punished both parties severely, often with death. The offending man's marital status was irrelevant. The first known legal provision concerning a husband's infidelity is to be found in a Roman law of 16 B.C., according to which a man lost the right to confiscate his wife’s dowry for adultery if he too was unfaithful. Male infidelity was not criminalized until 1810, and then in only a very limited way, when a French law made it a crime for a man to keep a concubine in his conjugal home against his wives' wishes. In 1852, Austria was the first country to institute legal equality between spouses, but even there the criminal code implicitly considered the cuckolded husband to be the offended party, by retaining a provision raising the penalties for adultery if the paternity of a subsequent infant was thrown into doubt.

Bullough (1976) reviewed materials for several other ancient societies: As among Mediterranean peoples, the woman's marital status defined the offence and the man's was never at
issue in Inca (p. 39), Maya (p. 42), Aztec (p. 44), Tigris–Euphrates (p. 53), Islamic (p. 216), and tribal Germanic (p. 350) law. African legal codes show the same asymmetry (e.g., Gluckman, 1965; Goldschmidt, 1967; Rattray, 1929; Sarbah, 1968; Seymour, 1970). Chinese (e.g., Lang, 1946; Bryan, 1925), Japanese (e.g., Pharr, 1977), and other Far Eastern legal traditions similarly codified a double standard in adultery, and, until the present century, permitted the offended husband violent revenge upon the guilty parties.

Besides criminalizing adultery, legal traditions commonly acknowledge that when adultery is discovered, a jealous rage on the part of the victimized husband is only to be expected. Jurists may then stipulate that cuckoldry justifies or at least mitigates responsibility for otherwise criminal violence. Even in English law, where homicide by cuckold has been much less condoned than in continental Europe and elsewhere, observation of the adulterous wife in flargante delicto has been considered a special provocation, reducing homicide to manslaughter of the “lowest degree . . . because there could not be a greater provocation” (Blackstone 1803, Book IV, pp. 191–192). American juries often decide that even a reduced charge is excessively harsh, and instead vote to acquit homicidal cuckolds altogether on the basis of the “unwritten law,” which is, according to Bouvier’s Law Dictionary, “a popular expression to designate a supposed rule of law that a man who takes the life of a wife’s paramour or a daughter’s seducer is not guilty of a criminal offence.” (The reproductive strategic rationale for “jealous” concern with the chastity of daughters is rather another matter from that of wives, as is further discussed on p. 19 below.) Vance and Wynne (1934) cite examples of juries acquitting on the basis of the unwritten law defense despite being explicitly instructed by the presiding judge to disregard this defense and to convict. The legal view of the normalcy of jealousy is perhaps best illustrated by Edward’s (1954) summary characterization of the “reasonable man” of common law: “. . . he is not impotent and he is not normally drunk. He does not lose his self-control on hearing a mere confession of adultery, but he becomes unbalanced at the sight of adultery, provided, of course, that he is married to the adulteress.”

The double standard is of course often extended to the issue of the legal right to divorce an adulterous spouse. However, many modern legal codes have abolished discrimination between the sexes on this point. It is of interest that legal equality in the right of divorce for adultery is not necessarily indicative of a lack of sex difference in the inclination to exercise that right. Kinsey et al. (1953), for example, reported that 51% of their divorced American male sample considered extramarital intercourse by their spouses to be a major factor in their divorces, compared to just 27% of divorced women—even though Kinsey’s male interviewees were in fact twice as likely to have committed adultery as were the female informants. A similar though less dramatic pattern is evident in a recent English survey: 24% of divorced men and 16% of divorced women reported an extramarital affair on their own parts during marriage, and yet 26% of divorced men and 18% of divorced women cited the partner’s infidelity as a factor in marriage breakdown (Thornes and Collard, 1979). Men seem to be less able or less willing than women to forget or forgive a spouse’s infidelity (see also Levinger 1966; Krupinski, Marshall, and Yule, 1970).

Why should men insist that the right of sexual access to a woman be exclusive? Why should a man wish to dispose of a wife who has committed adultery? Why should the conception of adultery as a property offense against a husband have suggested itself to legislators in such a diversity of human societies? One conceivable rationale for such jealousy might be fear of venereal disease (a motive that should apply to women as much as to men). Another is the uncertainty about paternity that adultery engenders.

Symons (1979, p. 242) points out that positing a major selective role for paternity uncertainty in the evolution of male sexual jealousy does not imply that paternity must be an overt or conscious concern of jealous men, any more than of any other sexually jealous male animals. This is true, but men are in fact much concerned with paternity, and the issue has often been raised as a justification for double standards. When James Boswell, for example, ventured to Samuel Johnson that “there is a great difference between the offence of infidelity in a man and that of his wife,” Dr. Johnson replied, “The difference is boundless. The man imposes no bastards upon his wife.” (Boswell, 1779, p. 1035). Many legal commentators have interpreted or justified adul-
tery laws on precisely the same basis. The preamble to French revolutionary adultery legislation, for example, argued the following:

It is not adultery per se that the law punishes, but only the possible introduction of alien children into the family and even the uncertainty that adultery creates in this regard. Adultery by the husband has no such consequences [our translation of Fenet, 1827, quoted by Hadjiyannakis 1969, p. 502].

The relationship between the cognitive suspicion (or knowledge) of nonpaternity and the emotional reaction of jealousy is deserving of study. Certainly case reports in the literature indicate that such cognitive factors can fan jealous rage. A dramatic example is this killer’s account of the events precipitating his wife’s death:

You see, we were always arguing about her extra-marital affairs. That day was something more than that. I came home from work and as soon as I entered the house I picked up my little daughter and held her in my arms. Then my wife turned around and said to me: ‘‘You are so damned stupid that you don’t even know she is someone else’s child and not yours.’’ I was shocked! I became so mad, I took the rifle and shot her [Chimbos, 1978, p. 54].

SEXUAL JEALOUSY AS A HOMICIDE MOTIVE: DETROIT, 1972

The homicide bureau of the Detroit police department investigated 690 nonaccidental homicides committed in 1972. By October, 1980, 512 of these cases were closed (which means that the police had identified a perpetrator to their own satisfaction, although a conviction or even a prosecution may not have been attained). Police files on all 690 homicides were examined in detail during 1973–1974 by M. Wilt, who coded cases with respect to 70 variables, including ages, sexes, victim-offender relationship, and a set of conflict typologies of her own devising (Wilt, 1974). We have added further codings, and have updated the data by examination of files completed since Wilt’s study.

Wilt categorized homicides as “crime-specific” (incidental to the commission of another crime, usually robbery) or “social conflict.” The 512 closed cases included 168 crime-specific homicides (32.8%), 339 social conflict homicides (66.2%), and 5 unclassifiable cases. Circumstan-
tial evidence suggests that a much larger proportion of the 178 cases remaining open are crime-specific, or, in other words, that although only 74.2% of the 690 homicides are closed, a considerably larger percentage of the social conflict cases are closed.

‘‘Social conflict’’ homicides were then divided by Wilt into four categories, atheoretically derived from a preliminary reading of a hundred cases, and the cases were further subclassified according to the applicability of various typological descriptive statements. The four principal categories she called “jealousy conflict” (58 cases, 19.0% of those 306 classified), “business conflict” (13 cases, 4.2%), “family conflict” (99 cases, 32.4%), and “argument between friends, acquaintances or neighbors” (136 cases, 44.4%). The first two categories concern the substance of the dispute and were given classificatory priority; remaining cases were then categorized according to the relationship between the victim and offender and further subclassified according to a large number of substantive issues represented by one or a few cases each. Of interest in the present context is the fact that jealousy appears to be the most frequent substantive issue in social conflict homicides in this sample (and there is reason to believe—see Other Homicide Studies, below—that sexual jealousy is a motive in many more homicides than police records reveal).

The 58 jealousy conflict cases are summarized in Table 1 according to the denouement and the identity of the jealous party. Another interesting classification of these cases concerns the role of a third party: In 40 of the 58 cases, police evidence included an explicit accusation of infidelity or a sexual rivalry. These are what

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<th>Table 1. Sexual Jealousy Conflicts Leading to Homicide—Detroit, 1972</th>
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<tr>
<td>47 Cases Precipitated by Jealous Male</td>
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<tr>
<td>16 killed female for infidelity</td>
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<tr>
<td>17 killed rival male</td>
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<tr>
<td>9 killed by accused female</td>
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<tr>
<td>2 killed by accused female’s kin</td>
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<tr>
<td>2 killed homosexual male for infidelity</td>
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<td>1 killed bystander accidentally</td>
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some criminologists have called "love triangle" cases. In 30 such cases the jealous party was male and in 10 female. In the other 18 cases, it is not clear that any particular third party was involved or even suspected by the jealous individual: one person is simply known to have taken exception to the other's terminating the relationship. These cases show an even greater sex difference, with 17 such homicides precipitated by jealous men and only 1 by a jealous woman.

The distinction between a woman's adultery and her wanting to end the relationship altogether illustrates two related but discriminable reproductive strategic considerations underlying male jealousy. Only the former places the man at risk of misdirected parental investment in another man's offspring. The commonality that has led most researchers to lump these as "jealousy" cases appears to reside in the aggressively proprietary attitude of the jealous party, who considers both adultery and desertion as loss of his exclusive rights over his wife. More ultimately, the important commonality is that the man loses control of female reproductive capacity and hence loses ground in the reproductive competition between men.

OTHER HOMICIDE STUDIES

Criminologists in the United States and elsewhere have regularly found sexual jealousy to be a leading homicide motive. Wolfgang (1958), for example, studied police records on 588 Philadelphia homicides and proposed 11 principal motive categories accounting for 92% of the cases. The most frequent was "altercations of relatively trivial origin," a catchall category of arguments that accounted for 36% of 560 classified cases. The second leading motive was "domestic quarrels" (15%, most of these being spousal disputes with the sources of contention little elucidated). "Jealousy" ranked third (12%). Similarly, in West's (1968) study of homicides in Manhattan, sexual jealousy was the third-ranking motive after "unrestrained rage in the course of quarrels" and crime-related murders. Jealousy ranked second to trivial altercations in a Baltimore study (Criminal Justice Commission of Baltimore, 1967), and second to domestic quarrels in a study of modern Navajo cases in Arizona (Levy, Kunitz, and Everett, 1969). Similarly, jealousy has ranked third as a homicide motive behind "quarrels" and "robbery" in studies in England and Wales (Gibson and Klein, 1961) and Scotland (Gillies, 1976). Other European studies have also noted the prevalence of the jealousy motive (e.g., Sessar, 1975; Horoszowski, 1975).

It may well be that jealousy is even more often at issue than these studies indicate. In collecting information on "motives," the police are primarily concerned to reconstruct the events immediately preceding the homicide. Accordingly, the account of a spousal homicide may begin with a burnt supper. Similarly, the descriptions of "altercations" between young men generally contain considerable detail about weapons produced and threats exchanged, but often leave the substantive issues unspecified. Perhaps many of these unexplained conflicts are at least partly jealousy conflicts.

Our Detroit sample included 80 homicides in which the victim and offender were spouses, including common-law relationships (victims were 44 husbands and 36 wives). Twenty three of these (28.8% of spousal homicides) were "jealousy conflicts," according to Wilt's classification. Yet, studies utilizing more information than is generally to be found in police files have unearthed a much higher incidence of sexual jealousy cases among spousal homicides. Guttmacher (1955), a court-appointed psychiatrist in Baltimore, reported on 36 consecutive family homicides, 31 of which were spousal, and tabulated "apparent motivational factors" on the basis of his interviews of the perpetrators; while the data are presented ambiguously, it appears that as many as 25 of 31 spousal homicides (of which the wife was the victim in 24) were motivated by sexual jealousy.

Similarly, Chimbos (1978) intensively interviewed the perpetrators (29 men and 5 women)
in 34 Canadian spousal homicides. He reported that the main source of conflict in the marriage was said to be "sexual matters (affairs and refusals)" in 29 (85.3%). Twenty two couples (64.7%) had separated at least once due to infidelity and reconciled. And although Chimbos nowhere breaks down infidelity by sex, there are 13 allusions to it in quotations from male offenders, all concerning female infidelity, and 4 allusions from female offenders, all of which again concern male accusations of female infidelity. (In one of these cases, the accusations were mutual.) Six "typical" cases, four perpetuated by men and two by women, are described in detail, and in all six, the husband accused the wife of infidelity (on good evidence) immediately before the act.

Thus, both of these studies, utilizing information beyond that to be found in police files, suggest that male sexual jealousy may be the major source of conflict in an overwhelming majority of spousal homicides in North America.

Students of homicide in other cultures also report numerous sexual jealousy cases. Lobban (1972), for example, read court records of homicide cases in the Sudan, and reported that sexual jealousy was the leading motive category, accounting for 74 of the 300 male-offender cases (24.7%). Tanner (1970), in a Ugandan study, found sexual jealousy/adultery cases the most frequent homicides after robbery and property disputes. Bohannan (1960) collated trial information on 533 homicides among the Tiv, Soga, Gisu, Nyoro, Luyia, and Luo in British colonial Africa. (We have ignored his Alur sample because of a lack of information on motives.) His capsule descriptions identify 91 (19.1%) as cases of sexual jealousy, adultery, or disputes over a wife's leaving her husband, and it must be noted that, as in America, most cases were attributed to "drunken arguments" and the like, with the contentious issues unspecified. Of 70 wives killed by their husbands, at least 32 (45.7%) of the attacks involved sexual matters, with 18 for adultery, 11 for leaving their husbands, and 3 for refusing sex. Only four husbands were killed by their wives, none because of the man's adultery, leaving the woman, or refusing sex (although one woman was killed by an irate wife for adultery with the offender's husband, and three women killed co-wives).

Several studies of homicide among aboriginal people in India, where 99% of offenders are men, again implicate sexual rivalry and jealousy. Among wives killed by their husbands, three Munda cases included one for adultery and one for the woman's desertion of her husband (Saran, 1974), three Oraon cases included one for adultery and two for desertion (Saran, 1974), eight Bhil cases included one for adultery and four for desertion (Varma, 1978), and 20 Maria cases included six for adultery, three for desertion, and two for refusing sex (Elwin, 1950). Thus the majority of cases in each society was precipitated either by male accusations of adultery or by the woman's leaving or rejecting the husband. In each of these studies, about 20% of the male–male homicides were, furthermore, due to rivalry over a woman or to a man's taking offence at advances made to a daughter or other female relative.

**SEXUAL JEALOUSY AND WIFE-BEATING**

It is worth noting the prevalence of sexual jealousy as a motive in nonfatal wife-beating, as well as in homicide. Miller (1980), for example, interviewed 44 battered wives seeking refuge in a women's hostel in Windsor, Ontario. Twenty four women (54.5%) reported that jealousy was one of the reasons why their husbands assaulted them. The only other reasons as frequently cited were the husband's drinking (29), arguments over money (28), and conflicts over children (24). Eleven of the 44 women acknowledged actual infidelity on their parts as a cause of their husbands' violence.

Whitehurst (1971), also in Windsor, attended 100 court cases involving couples in litigation over the husband's use of violence upon the wife. He reported, without quantification, that... "at the core of nearly all the cases... the husband responded out of frustration at being unable to control the wife, often accusing her of being a whore or of having an affair..." Rounsvile (1978) interviewed 31 battered American women in hostels and hospitals, and reported that "jealousy was the most frequently mentioned topic that led to violent argument, with 52 percent of the women listing it as the main incitement and 94 percent naming it as a frequent cause." (p. 21) Finally, in a study of 60 battered wives who sought help at a clinic in rural North Carolina, Hilberman and Munson (1978) report that husbands exhibited "morbid jealousy" such
that “leaving the house for any reason invariably resulted in accusations of infidelity which culminated in assault” (p. 461) in an astonishing 57 cases (95%).

We have studied a 6-month sample of 362 case reports by the London, Ontario, Family Consultant Service. A representative of this service accompanies the police officer on each family crisis call demanding police intervention (Jaffe and Thompson, 1978). In addition to helping resolve the crisis, the consultant completes a standard form at every intervention. In 55 of the 362 cases (15.2%), accusations of infidelity were aired to the family consultant. These included 26 of 244 (10.6%) cases in which the police call had not been precipitated by an assault, compared to 29 of 118 assault cases (24.6%) and, more specifically, 28 of 82 wife-beating incidents (34.1%).

Though wife-beating is often inspired by a suspicion or fear of sexual infidelity, it is also often the product of a more general jealousy. Battered women commonly report that their husbands violently object to the continuation of old friendships, even with other women, and indeed to the wives’ having any social life whatever (e.g., Dobash and Dobash, 1979; Rounsville, 1978; Hilberman and Munson, 1978). In extreme cases, men may refuse to let their wives go to the store unescorted, and such husbands run the risk, in the Western world, of being psychiatrically diagnosed as “morbidly” or pathologically jealous (e.g., Shepherd, 1961; Mowat, 1966; Lagache, 1947). Yet there are societies in which such constraint and confinement of women are considered normal and laudable (see, e.g., Dickemann, 1979a, 1979b, 1981).

We propose that men in all societies experience some inclination to restrict the social intercourse of their mates, and that this generalized jealousy is an evolved attribute that must be understood as an anticultoldy (confidence of paternity) and sexual competition tactic. Several authors have pointed out that male domination of women is by no means a cross-cultural universal (see, e.g., Roger, 1975). We acknowledge cultural differences in the power relations between the sexes but do not consider such variations contrary to our thesis. Obviously societies vary in the degree to which men exercise effective control of women, and female economic autonomy is undoubtedly a major determinant of the degree to which women must succumb to male domination. But however autonomous the women, men still strive to exert what control they can, and there can be little doubt that fear of male violence constrains the behavior of countless women the world round. There are several societies in which dangerous male jealousy has been alleged to be absent, but we present evidence below (see Jealousy in Sexually Liberal Societies) that these claims are exaggerated.

HOW DO THE SEXES DIFFER?

We have documented a cross-culturally consistent sex difference in sexual jealousy homicides. But, after all, homicide is generally a male activity: 82% of the offenders in our Detroit sample were male, and most studies of homicide in other societies indicate even larger male majorities. So are men more jealous than women or are they simply more violent in this sphere, as in all spheres?

This question seems hardly to have been addressed, but there is some evidence of sex differences in the quality of jealousy, differences that appear consonant with the idea of sex differences in reproductive strategy.

Sociobiologists would expect male jealousy to be more specifically focused upon the sexual act than female jealousy (see also Symons, 1979, pp. 240–246). This is because the reproductive threat in a wife’s infidelity lies in the risk of alien insemination, whereas the reproductive threat in a husband’s infidelity lies more in the risk of lost resources. Some students of homicide, with no such theoretical axe to grind, have observed just this sort of sex difference. After remarking the prevalence of male sexual jealousy as a homicide motive in the Sudan, for example, Lobban (1972) remarks, “not infrequently co-wives have disputes between them but curiously this is not usually traceable directly to sexual jealousy but to other usually economic factors” (p. 21). Chimbos (1978), in his study of spousal homicides in Canada, observed that a “typical technique is to attack the spouse’s deviations from the culturally approved sex role ideal. . . . A wife may accuse her husband of being a poor breadwinner. . . . A husband may accuse his wife of being . . . promiscuous . . . “” (p. 47). Social psychological studies of “normal” jealousy and psychiatric studies of pathological
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("morbid") jealousy also bear on the question of sex differences in the quality of jealousy.

"Normal" Jealousy

American men and women do not appear to differ in their likelihood of admitting to jealousy. Among 66 male and 102 female college students in a study by Bryson (1976), only one subject reported that she had never felt jealous. Bringle et al. (1977) likewise did not find significant sex differences in reported jealousy between the sexes. Nor did Weghorst (1979), in a field study in which jealousy was induced by "flirtatious" experimental confederates.

But although both sexes experience jealousy, just what they experience evidently differs. Bryson (1976, 1977) found several sex differences in subjects' descriptions of the feelings associated with jealousy. Shettel-Neuber, Bryson, and Young (1978) had students describe their own probable behavior in a jealousy-inducing situation portrayed on videotape. Men considered themselves likelier to become angry, drunk, threatening, and aroused than did women, and likelier to start going out with others. Women, on the other hand, were likelier to anticipate crying, feigning indifference, or striving to increase their attractiveness. Teismann (1975) solicited the reactions of American undergraduate dating couples to a hypothetical jealousy-inducing situation and reported that men focused on possible sexual contact of their partner with the rival male while women were primarily concerned with their boyfriends' expending time, money, and attention upon the rival female.

Weghorst's (1979, 1980) field experiment also produced evidence of behavioral sex differences in response to a standard manipulation designed to induce jealousy. Confederates of the experimenter approached couples, sustaining eye contact with the opposite-sexed subject, then spoke to that person, apparently mistaking him or her for someone familiar, while studiously ignoring the like-sexed partner. Observers recorded the behavior of the subjects and then accosted them for a debriefing and short interview. Women who reported feeling jealous were less likely to look at or speak to the female confederate than were those who reported not feeling jealous, whereas in men, self-reported jealousy was instead predictive of looking at the confederate. "Jealous" women were also more likely than the "nonjealous" to fixate their partners immediately after the encounter, whereas men showed an opposite difference. These results are at least suggestive that the sexes differ not just in violence but in milder behavioral manifestations of jealousy as well.

"Morbid" Jealousy

A number of psychiatrists have described cases of "morbid jealousy," a condition of obsessive concern about suspected infidelity. The suspicion may or may not be delusional, but is in any case generally reinforced by much irrational "evidence." Shepherd (1961) summarized 81 English cases, 63 men and 18 women. One man had murdered his wife and three had attempted murder. Thirty two of the 63 men (51%) had physically assaulted the accused spouse, compared to 1 of 18 women (6%). Vauhkonen (1968) summarized 55 Finnish cases, 37 men and 18 women, and reported that 20 men (54%) and 6 women (33%) behaved "threateningly" towards their spouses. Lagache (1947) reported on 50 French cases. Twenty two of 28 men (78.6%) and 12 of 22 women (54.5%) told the psychiatrist of contemplating murder and 5 of the men and 3 of the women had actually killed.

Despite a preponderance of male patients in all studies of morbid jealousy, the true relative incidence in the two sexes cannot be estimated. If morbidly jealous men are not more numerous but are more violent than women, they are therefore likelier to become involuntary psychiatric patients. Conversely, a diagnostic bias increasing the apparent proportion of women among those afflicted is also conceivable, since male psychiatrists may be less likely to consider socially normative male concern with spousal infidelity pathological than comparable concern in women. In any event, jealous men are more often dangerous.

Given the overall sex difference in homicidal violence, there is some evidence that jealousy still disproportionately motivates men to kill, in comparison to women. Mowat (1966) reported that 57 of 473 insane male murderers (12.1%) in Broadmoor were diagnosed as morbidly jealous, compared to 5 of 150 insane female murderers (3.3%). Similarly, some criminologists' homicide samples (e.g., Harlan, 1950; Bohannan, 1960) show a larger sex difference in jealousy cases than in total homicides (although our De-
troit sample does not—82% of the 512 homicides were committed by men and 81% of 58 jealousy cases were attributed to male jealousy).

COERCIVE CONSTRAINT OF WOMEN

Since the review of adultery law, our discussion has been primarily individualistic: how do individual men exploit the threat of violence to control their wives? But there are furthermore many socially sanctioned modes of coercive constraint, more conventional than legal, that function as anticuckoldry tactics. Practices ranging from the foot-binding of Chinese women, through Indian purdah, to the veiling, chaperoning, and literal incarceration of Mediterranean women who have been discussed by Dickemann (1979b, 1981), who convincingly argues that they must be understood as confidence-of-paternity mechanisms. It appears that wherever there is significant variance in the resources controlled by individual men, those of high status have striven to parlay their resources and power into polygynous monopolization of women (whether wives or concubines) and have been concerned to “protect” their women from potential rivals. At the same time, a young woman’s genealogical kin have been just as concerned with her chastity as is a husband or suitor, since families wishing to marry their daughters to high-status men have competed partly by public guarantee of their women’s virtue (and partly economically by dowry competition; see Dickemann, 1979a, 1981).

Failed virginity tests at wedlock may lead to annulment, permanent unmarriageability, and disgrace for the rejected bride’s family. There is a large anthropological literature on the subject of “honor and shame,” mostly but not exclusively concerning Mediterranean countries (e.g., Peristiany, 1966; Pitt-Rivers, 1977; Campbell, 1964; Hayes, 1975; Kressel, 1981). These concepts embrace a number of aspects of moral rectitude and reputation, including bravery versus cowardice and high versus low birth, but most authors agree that the most essential component of familial honor is female chastity. A man can gain or lose honor by his deeds and by the deeds of his kin, though lost honor is not easily or quickly regained. A woman, however, can only lose honor for herself and her kin by unchaste or immodest behavior. For her, lost honor can never be regained. A woman thus has numerous male relatives whose honor is bound to her chastity. Their threats and vigilance over her virtue may be as constraining as any jealous husband could be. Not infrequently, men salvage some of their lost honor by killing an unchaste wife, sister, or daughter (and the male seducer). Shrinking from such vengeance may even add to their dishonor (Kressel, 1981; Safilios-Rothschild, 1969a, 1969b).

The societies discussed by Dickemann prevent unauthorized sexual conduct primarily by the claustration of women and by the threatened consequences of lapses of virtue. In addition, many societies resort to genital mutilation to destroy the sexual interest and even the penetrability of young women. Hosken (1979) has reviewed various practices that are commonly subsumed under the misleading label of “female circumcision.” These range from partial through complete clitoridectomy to surgical removal of most of the external genitalia and the suturing shut of the labia majora (infibulation). Hosken documents the continued existence of these practices in 23 countries extending across Northern and Central Africa, as well as in Arabia, Indonesia, and Malaysia. She estimates that more than 65 million women and girls presently alive in Africa have been “circumcized.” Although various hygienic and religious justifications are proposed by apologists for these practices, it is clear that control of female sexuality is the real goal:

Infibulation makes sexual intercourse impossible . . . . Infibulation is performed to guarantee that a bride is intact—the smaller her opening, the higher the brideprice. She is often inspected before marriage by the husband-to-be or his female relatives. Infibulation also occurs spontaneously by adherence of the wound especially where an extensive operation is performed. Women who are infibulated have to be cut open to allow penetration, and more cuts are needed for delivery of a child. Wives, traditionally, are re-infibulated, for instance in the Sudan, after a baby is born; and when the child is weaned, they are opened again for intercourse. During her reproductive life, a woman used to go through this process with each child; and in some areas it still continues today. The decision rests with the husband who has several wives.

It is reported that women often demand re-infibulation after delivery to make intercourse more pleasurable for the husband. A woman must please sexually, or she may be divorced, which means loss
of her children, loss of economic support, and disgrace to her family. It is reported that some men have their wives re-infibulated when they leave home for extended periods [Hosken 1979, p. 2].

JEALOUSY IN SEXUALLY LIBERAL SOCIETIES

Several authors have suggested that there are at least a few societies that utterly lack either double standards of sexual morality or male resentment of wives' extramarital sexual activity or both. We believe that such authors exaggerate cultural diversity and thus present distorted summary descriptions of the ethnographic record. At the risk of being tedious, we therefore think it worthwhile to refute several prominent examples case-by-case. We shall consider in turn cross-cultural reviews by Whyte (1978), Stephens (1963), and Ford and Beach (1952), as well as certain arguments by Leacock (1980).

Whyte

Whyte (1978) reviewed Human Relations Area Files information for a sample of 93 societies, 75 of which he was able to code for the existence of an extramarital double standard. He claimed that whereas 32 (43%) exhibited the double standard, penalizing wives more severely for adultery than husbands, 41 (55%) treated men and women equally, and 2 (3%) actually exhibited "an extramarital double standard favoring females," because "when caught in the act the male is subject to a more severe penalty than the female" (p. 70).

The two societies to which Whyte attributed this reversal were Gilyak and Gilbertese. However, his interpretation is based on a simple misunderstanding. The Gilyak and Gilbertese are indeed reputed by the Human Relations Area Files sources to treat adulterous men more harshly than women, but the familiar double standard prevails.

Gilyak. "A stranger caught in flagrante delicto with a married woman is slain at the scene of the crime . . . The woman suffers less in such cases. They beat her thoroughly . . . But all this concerns only cases involving a married woman. Sexual relations with an unmarried woman or with a widow, if it is with the permission of the woman, do not provoke any reaction . . ." (Shtemberg, 1933, p. 227-228).

Gilbertese. "The ramage [matri-or patrilineal descent group] on whose land a man lived was expected to seek vengeance on his behalf if he was killed or if someone seduced his wife, and to defend him if he had committed one of these crimes himself. An adulterer caught in the act was killed immediately, but if an interval had elapsed between a crime and its discovery, the offended party could usually be persuaded to accept compensation . . ." (Lambert, 1966, p. 653).

There is no indication in the Human Relations Area Files materials on either of these societies that the male adulterer's marital status is in any way relevant. The crime is unauthorized sexual contact with a married woman, an offense against the property rights of a husband. The characterization of these two societies as having a reversed double standard misses this point, and indeed Whyte's characterization of numerous other societies as egalitarian is similarly mistaken.

Stephens

Some authors have suggested that husbands make no effort to restrict their wives' sex lives in certain societies. A list of exemplary cases of such societies is given in Stephens (1963). He initially states that 12 of 39 societies in his sample "permit adultery," but it is clear from the materials quoted that this is often so only in special limited circumstances, and that double standards persist. Stephens himself cites examples of violent treatment of adulterous wives in some of his twelve "permissive" societies. However, there are four societies, namely Baiga, Lesu, Marquesas, and Toda, for which Stephens makes the much stronger claim that "there seems to be little if any bar to any sort of non-incestuous adultery" (p. 251). However, Stephens's own sources simply do not support this characterization.

Baiga. Elwin's (1939) informants' tales abound with sexual intrigue and violent reactions. An old man recalls that in his boyhood, before Baiga had much contact with other peoples, "no one ever laughed with another man's wife. If they did they were thrust through
with a spear in the chest” (p. 139). A woman recalls her husband’s ruse to entrap her with a lover whom he then attacked with a blazing log, and her husband’s later application of chilis to her vagina to punish her for flirting (p. 142). Another man recalls being beaten by an irate husband and his friends (p. 14). And so forth.

Lesu. According to Powdermaker (1933), it would be abnormal for a young wife in Lesu not to have numerous affairs, and moreover, husbands are reported to accept all their wives’ children as their own. However, it would be wrong to conclude that biological paternity is a nonissue. Powdermaker reports that wives are concerned to avoid extramarital impregnation, and furthermore that if “an unmarried woman becomes pregnant her lover is under no obligation to marry her, and takes no responsibility for any issue. First, he does not know if the child is really his, as the woman has probably had several lovers . . .” (p. 246). As for violent sexual jealousy, Powdermaker describes wife-beating as a punishment for adultery in both case histories (p. 249) and folk-tales (pp. 249–250).

Marquesas. “When a woman undertook to live with a man, she placed herself under his authority. If she cohabited with another man without his permission, she was beaten or, if her husband’s jealousy was sufficiently aroused, killed . . .” (Handy, 1923, p. 100).

Toda. This was a polyandrous society, but men persisted nevertheless in considering women property. Prince Peter (1963) describes “a supreme Toda council known as the noim . . . Its most important business appears to be the settling of disputes arising out of the custom of stealing wives from other men, and of deciding the amount of compensation due to the injured party . . .” (p. 252). Although women enjoyed unusual sexual freedom, men still used violence to control them: adultery with a non-Toda was considered grounds to cut off a wife’s hair, beat her publicly, and terminate the marriage (p. 260).

There is no question that these are four societies in which women enjoy an unusual degree of sexual freedom. Yet the ethnographies contain evidence for each of the four that men sometimes react violently to their wives’ dalliance and that the risk of violence due to male sexual jealousy is a very real “bar” to adultery.

Ford and Beach
Ford and Beach (1952) make a claim very similar to Stephens’s. They considered that in 7 of the 139 societies in their sample, “the customary incest prohibitions appear to be the only major barrier to sexual intercourse outside of mate-ship. Men and women in these societies are free to engage in sexual liaisons and indeed are expected to do so provided the incest rules are observed” (p. 113). The seven are Dieri, Gilyak, Hidatsa, Lesu, Masai, Toda, and Yap, and in every case the ethnographic materials indicate that the above quotation overstates the degree of sexual liberalism. We have already discussed Gilyak, Lesu, and Toda, and brief notes on the other four follow.

Diere. The Dieri of southeast Australia practiced a system of multiple marriages, and a woman was usually sexually available to several men (Howitt, 1904). This did not amount to freedom to engage in sexual liaisons at will. Adultery of a wife with a man other than her classificatory husbands was “a personal matter to be revenged by the injured husband” (Howitt, 1904, p. 321), and bloodshed in sexual jealousy disputes between men is recounted as legend (p. 800) and as fact (p. 186). Women who regularly received men in their husbands’ absence were “hated and despised” as “breakers of marriage” (p. 187).

Hidatsa. Lowie (1917), who chose not to distinguish Hidatsa and Crow in his discussion of extramarital relations, related that cuckolded husbands might physically attack the wife or offending man, despite societal disapproval of such violence. According to one of his informants, “I was never foolish or bad, my husband knew it and never got angry. Some husbands nearly killed their wives because they went with other men” (p. 47).

Masai. Maguire (1928) and other sources on Masai affirm that men have access to wives of their age-class mates (barring a fairly extensive group of relatives) and that husbands are obliged to offer this hospitality. It is therefore of interest that Masai are one of several peoples in whom low confidence of paternity is associated with an emphasis upon the avun-
cular relationship as the appropriate channel for male investment in children (see Naskapi-Montagnais, below). Once again, it does not follow that incest rules are the only major barrier to sexual freedom, nor that Masai men refrain from using violence to preserve at least some degree of sexual exclusivity. In the case of adultery with a man outside the husband's age-class, "should he be caught in the act, the friends of the cuckold tie him up at the kraal door and he is beaten . . ." (Maguire, 1928, p. 16). Uninitiated lads are restricted in sexual relations by further specific barriers besides the incest rules and age-class rules: They must also avoid married women and "such young girls as are attached to men in the warrior classes" (Leakey, 1930, p. 188).

Yap. "Although extra-marital relations are permitted with the explicit permission of the spouse, adultery, where no permission has been granted, and it seldom is, is disvalued and condemned and constitutes legitimate grounds for divorce and equally legitimate grounds for a beating when the wife is the adulterer. Adultery is spoken of and may be dealt with as a 'theft'; it is classified along with the theft of personal goods, coconuts and so forth." (Hunt et al. 1949, p. 92). The same authors furthermore cite cases of violent attacks by cuckoldos upon the offending men, while Muller's (1917) informants told him that the cuckold's legitimate response was still more violent before European contact: having caught his wife in flagrante delicto, "the one deceived had the right to kill her and the adulterer or to burn them in the house" (p. 229).

Leacock

In a recent paper Leacock (1980) attacks socio-biologists "who assume Western norms for sex-linked behavior to be universal, and who ascribe them to biologically based drives" (p. 465). She relies heavily on Whyte's (1978) review as evidence that an absence of double standards is widespread and common. Whyte's argument is invalid, as we have explained above, but Leacock also makes a novel suggestion based upon her familiarity with Montagnais-Naskapi and other Iroquois materials. She believes that double standards were introduced by Europeans to peoples previously lacking them, and that European values had already contaminated native practices (by the mid-19th century in the case of the Iroquois) before any anthropological investigations were begun.

Leacock's principal source for the claim that early Montagnais lacked double standards of sexual morality is a 17th century Jesuit, Paul LeJeune, who wrote with moral outrage of the lack of extramarital strictures. LeJeune's (1634) reports seem to us entirely typical of the ethnocentric moralising of Christian missionaries. He thought the Montagnais "very lewd" and a "vile and infamous people" (p. 136), apparently more for their speech than their behavior. His diatribe hardly constitutes evidence of a lack of double standards.

Be that as it may, some evidence can be cited that Naskapi-Montagnais men experience and manifest jealousy much as do men in other cultures. Lips (1947), working with a relatively remote group of nomadic Naskapi apparently little touched by European influence, reported that whereas adultery is not subject to punishment or damages, persistent adultery may lead the husband to "reprimand or even beat his wife" (p. 471). In another context, Lips quotes an informant on a case in which a chieftain ordered a man's toenails pulled out for "either adultery or the beating of other people's children" (p. 403). The case had occurred long before and the informant could no longer confidently recall the nature of the offense, but the very suggestion that it might have been adultery speaks for a severe view of the matter. Further indications that male sexual jealousy and associated violence are not alien to Naskapi-Montagnais psychology are to be found in legends. A collection edited by Desbarats (1969) includes tales of a father who expelled his son on suspicion of the son's attempting sexual relations with the father's new wife (pp. 6–12), of a widow who slept with her dog until a new man moved in, whereupon the rejected dog killed her (pp. 2–3), and of a woman who concealed an affair from her husband and was eventually punished supernaturally (pp. 14–15).

Biological paternity is furthermore not such a nonissue as Leacock implies. Lips (1947) remarked that "if an illegitimate child is born after an act of adultery, the husband may or may not
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leave his wife . . .’ (p. 471). And LeJeune himself wrote ‘. . . they prefer to take the children of their sisters as theirs, rather than their own, or than those of their brothers, calling in question the fidelity of their wives, and being unable to doubt that these nephews come from their own blood’ (LeJeune 1634, pp. 136–137). This is, incidentally, the earliest clear statement we know suggesting a relationship between avuncular inheritance and poor confidence of paternity, a link that has provoked much interest in recent literature (see especially Alexander 1974; Kurland, 1979; Gaulin and Schlegel, 1980; Flinn, 1981).

We remind the reader that the eleven societies here discussed—Baiga, Dieri, Gilbertese, Gilyak, Hitada, Lesu, Marquesas, Masai, Naskapi-Montagnais, Toda, and Yap—are all cases that have been selected not by us but by others arguing for the nonuniversality of either double standards or restrictions on extramarital sexual activity. Although all eleven unquestionably lie at the permissive end of a distribution of human societies, the ethnographic materials provide evidence that men use violence or its threat to restrict female sexual liberty in every case. This is all the more remarkable in view of the necessary incompleteness of the ethnographic record. Consider how easily an observer might sojourn in our own society and, in the absence of mass media, fail to remark domestic violence as a reaction to adultery. Yet Masumura (1979) found accounts of wife abuse in almost 90% of a sample of 86 societies, and of wife abuse precipitated specifically by sexual jealousy in more than half.

DIVERSITY AND UNIVERSALITY

Male sexual jealousy appears to be a cross-culturally universal trait, then, but we should like to know a great deal more about variability between and within cultures. Is cultural variation in paternal investment in putative offspring directly related to the prevalence and vehemence of male jealousy, or is the emotion instead causally severed from its supposed function as an anticuckoldry device? Might we expect men in avuncular societies to be less jealous, since they do not invest in putative offspring, or should they be just as jealous as elsewhere because they are still competing with other men? Do different societal norms of sexual exclusivity condition men to be more or less jealous? And is there sufficient heritable variation between individuals that birth control, female participation in the work force, and other social changes might effect an imminent natural selective change in the trait? Variability is not belittled by an evolutionary approach to jealousy, which instead suggests numerous hypotheses about probable correlates of such variability.

So why worry about cross-cultural “universality”? A universal attribute is manifested across the gamut of human societies and technologies, and that is presumptive evidence that the attribute characterized prehistorical human societies as well. If the attribute is one with plausible effects upon survival and reproduction—male sexual jealousy psychologically linked with the threat of violence, for example—then it can be expected to have been subject to natural selection, a process that tends toward optimization of the trait by elimination of maladaptive extremes. We expect human nature to be adaptive, at least in historical environments, although maladaptation to recent developments (e.g., since the advent of agriculture) may be manifest. This expectation is not generally considered controversial when physiological functions are under consideration, but many balk at extending it to psychological functions. The logic seems to us irrefutable—human nature, including human psychology, must have an evolutionary history and an adaptive logic.

We consider social science a quest to describe and explain human nature. This characterization does not mean we adopt the nature side of “nature versus nurture,” a dichotomy we reject. Consider that the most environmentalistic socialization theorists, who profess that man has no nature, would be distressed by evidence that their theories lack cross-cultural generality. They therefore also can be said to seek a general description of human nature at some level of abstraction.

If a descriptive statement about human behavior has very broad validity, then that is prima facie evidence that the statement is formulated at a level appropriate to the description of human nature. If the statement applies here but not there, willy-nilly, then generality must be found at some higher level of abstraction. That is why we think it worthwhile to refute the allegation that scattered societies manifest “no bar to any
sort of nonincestuous adultery." If there were really a number of societies in which men graciously accepted female sexual freedom, then we could not propose "male sexual jealousy" as an aspect of human nature without major qualification.

However, we eschew a strict universalist criterion in this argument. A blind man or an aphasic does not expunge vision or articulateness from the description of human nature. A strict universalist criterion is furthermore theoretically unsound insofar as it rests implicitly upon the false dichotomies of innate versus acquired and biology versus culture. "Inevitable patriarchy," "ineradicable jealousy," and the like are rhetorical nonsense. No human attribute can fairly be called ineradicable. The problem is one of ontogenetic engineering—simple in principle however intractable in practice. In principle, it might be possible to socialize a child to whatever set of arbitrary values, but if one were to engineer an ontogeny that could eradicate attribute X, this achievement would have no bearing on the claim that attribute X is an evolved aspect of human nature with such and such adaptive significance.

In any case, male sexual jealousy is a robust phenomenon across existing ontogenetic and cultural diversity. Contrast these two ethnographers' descriptions.

**Hidatsa/Crow.** "If a man eloped with a married woman, the husband might whip the adulterer, who was not permitted to strike back, and would make it hard for his wife after taking her back. But the jokers would make fun of the husband for his actions. Apparently the proper or at least ideal course was for the husband to let his wife go without protest" (Lowie 1917, p. 47).

**Greek.** "The wife's infidelity . . . brings disgrace to the husband who is then a Keratás—the worst insult for a Greek man—a shameful epithet with connotations of weakness and inadequacy. . . . While for the wife it is socially acceptable to tolerate her unfaithful husband, it is not socially acceptable for a man to tolerate his unfaithful wife and if he does so, he is ridiculed as behaving in an unmanly manner" (Safilios-Rothschild 1969b, pp. 78–79).

Obviously Hidatsa/Crow and Greek social norms are poles apart. The former is a society in which male jealousy is shameful, and social pressure is directed toward its suppression. The latter is a society in which the absence of male jealousy would be shameful, and social pressure is directed toward its violent expression. Yet the emotional response is present in both societies. Such evidence of the psychic unity of human-kind rebuts that extreme environmentalist position that considers particular cultures to be the wellsprings of human passions. Male jealousy cannot be understood as an arbitrary product of a specific social history. It is instead a predictable product of evolution.

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