

Is Parent-Offspring Conflict Sex-Linked? Freudian and Darwinian Models

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ABSTRACT Freud's Oedipal theory sees parent-offspring conflict as a within-gender rivalry, whereas most modern evolutionary models interpret it as a gender-blind disagreement about resource allocation. New analyses of family homicides and a critical review of prior evidence do not support the central Freudian claim of a same-sex contingency in parent-offspring antagonism during the Oedipal phase. Several errors of fact and interpretation in psychoanalytic theorizing about family relations are discussed. We argue that psychoanalysts mistake substantive conflicts between nonrelatives for symbolic manifestations of family conflicts.

The relationship between parents and their immature children is predominantly nurturant and benevolent, but it can be conflictual, too. Following Freud (1900/1953), psychoanalysts have generally interpreted parent-offspring conflict in terms of the sex-linked "Oedipus complex." Sexually interested in the opposite-sex parent, the toddler experiences antagonism to the same-sex parent as a rival. By contrast, behavioral ecologists generally follow Trivers (1974) in interpreting parent-offspring conflict as a reflection of discrepant views of the optimal allocation of parental resources, regardless of gender. A compari-

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son of these two perspectives raises two questions which we address in this article. Can a sex-linked parent-offspring conflict of the sort envisaged by Freud be reconciled with modern evolutionary (selectionist) theories? And are the phenomena of parent-offspring conflict in *Homo sapiens* in fact sex-linked?

The Oedipus Complex

Freud's theory of the Oedipus complex placed parent-offspring conflict and rivalry at the heart of human development and psychodynamics. For Freud and his successors, the infant's wish to monopolize the mother's nurturance produces a rivalrous antagonism with the father, which is exacerbated in young boys by the development of a precocious sexual interest in the mother as a desired mate. This evokes jealous hostility and threats of "castration" from the father, which in turn provoke anxiety and further hostility to the father (the Oedipus complex), which is resolved only after several years (in those lucky enough to resolve it at all) by the renunciation of sexual interest in the mother and "identification" with the father (Freud 1900/1953, 1910, 1913, 1923). In young girls, the Oedipal scenario allegedly takes a different course from about the age of 2, when a reversal of the infantile preference for the mother and aversion to the father occurs, so that the girl, too, fantasizes mating with the opposite-sex parent and resents the same-sex parent as a rival (Freud, 1925). The renunciation of this fantasy is not so urgent for girls, who are subject to less threat and hostility from the same-sex parent than are boys. As a result, girls resolve the Oedipal complex later and to a lesser extent than boys, if at all (and with the additional result that females do not develop so strong a "superego" as males, lacking an equivalent need to repress primitive libidinal impulses, Freud, 1924).

Various modifications of this theory, too numerous to review here, have been proposed by Freud's successors, particularly with respect to his treatment of female development. Nevertheless, there is a core idea retained by virtually all writers who have not rejected Oedipal theory altogether, and that is the ubiquity of certain mental phenomena in children, namely sexual interest in the opposite-sex parent and negative feelings toward the same-sex parent.

Freud's evolutionary reconstruction In *The Interpretation of Dreams* (1900/1953), Freud introduced his Oedipal theory of child psychosexual development without addressing the issue of evolutionary origins

In *Totem and Taboo* (1913), he proposed that the urge to kill one's father and copulate with one's mother was more than merely an immature stage of male psychological development. It was an urge that our ancestors had acted upon in adulthood. Freud was vague and self-contradictory about whether he imagined this "primal parricide" to have been a unique event or a recurring drama, but he was quite clear in his insistence that "the Deed" was a historical reality. Moreover, he proposed that this act of parricide was the foundation of the incest prohibition, of religion, and of culture.

This phylogenetic component of Freud's theory was never so well received as the ontogenetic, and indeed no such phylogeny as he envisaged is plausible in the light of subsequent discoveries. In constructing the primal parricide hypothesis, Freud endeavored to take account of contemporary knowledge and theory in cultural anthropology, motivational psychology, and animal behavior. All of these fields have changed since 1913, and many of his premises are now known to be wrong. One of Freud's central assumptions, for example, was that nonhuman animals, lacking culture, must therefore lack any sort of psychological disinclination to mate with close kin; he was wrong (Bateson, 1983, Harvey & Ralls, 1986). Freud believed that among our closest relatives, the anthropoid apes, newly mature males are driven from their natal troops by their fathers, and that patrilineal affiliation is a novel cultural feature of *Homo*; in fact, patrilineal social organization with female transfer between male kinship groups, although rare in mammals, characterizes chimpanzees and gorillas as well as ourselves and was therefore probably already characteristic of our anthropoid common ancestors (Wrangham, 1987, see also Tooby & DeVore, 1987). Freud accepted Frazer's allegation of a "universal horror of incest" and assumed further that "the horror of incest must be recognized as the root of exogamy" (1913, p. 122), in fact, many peoples consider incest more amusing than horrific, but mate exogamously nonetheless (Needham, 1971, van den Berghe, 1979). Freud supposed that the "classificatory" kinship systems of "savages" like the Australian aborigines entailed a less precise differentiation of their relatives than did the simple ego-centered kindred terminologies of Europeans, and that this was a vestige of an anonymous "horde"; in fact, Australian kinship systems are vastly more complex and differentiated than our own (Scheffler, 1978), and all primates discriminate more finely among their relatives than Freud supposed early people to have done.

When these several misconceptions are removed, the need to postu-

late a uniquely human origin for incest avoidance and exogamy vanishes. Unbeknownst to Freud and his contemporaries, other male mammals, including our nearest relatives (see Pusey, 1980), exhibit no inclination to mate with their mothers, even when their fathers are dead, absent, or unknown, and even when they are sexually interested in unrelated females of the mother's age. Neither are the mothers interested in mating with their sons. These facts raise the question of whether incestuous motives are really so primal, ubiquitous, and problematic in ourselves, a question to which we shall return.

In addition to these problems of factual error, Freud's evolutionary imagination was hobbled by three major errors of conception. The first was his persistent adherence (Sulloway, 1979) to Haeckel's recapitulationism, the theory that evolution proceeds by compressing ontogeny and adding novel developments at its end so that immature creatures pass through a series of stages corresponding to the adult forms of their ancestors. The second was his equally persistent Lamarckian notion that experiences are transcribed to heredity. Freud's idea that a "primal" postpubertal conflict would be reenacted in toddlers arises logically from these false theories. Notwithstanding revisionist efforts to render Freud more palatable to subsequent fashion by making him an environmentalist rather than a nativist, this Haeckelian-Lamarckian vision remained essential to his entire theoretical edifice until his death (Sulloway, 1979, Wallace, 1983).

Related to these misconceptions but distinct from them was a third error in Freud's evolutionary theorizing. He never appreciated Darwin's central idea of *selection*—that the adaptive characters which survive and proliferate are those that promote "fitness" (reproductive posterity). The realization that fitness is the end to which complex traits are the means is the anchor that constrains plausible hypotheses about evolved adaptation. Without that anchor, Freud was free to postulate a diverse roster of arbitrary psychological needs and ambitions with no intelligible links to the individual's fundamental agendas. In *Totem and Taboo*, for example, he maintained that the "primal parricide" created an overwhelming guilt in its perpetrators, and that all of religion was attributable to "an attempt to allay that feeling and to appease the father by deferred obedience to him" (1913, p. 145). It apparently never occurred to Freud that a "filial sense of guilt" which created such problems would not evolve or be maintained by selection unless it were reproductively useful to those individuals who harbored it. Moreover, when Freud did consider the question of the utility of the psychological

processes he proposed, he considered them to be adequately explained as solutions to problems generated by the internal psychodynamics themselves rather than as solutions to external social and ecological problems. Repression, regression, reaction formation, and much else were interpreted as strategic means to the end of mere mental relief. Again, while such relief might plausibly be the proximal goal in an evolved motivational mechanism—the "off-switch" as it were—such a mechanism would not arise or be maintained by natural selection unless the means of achieving mental relief happened also to promote fitness, whereas Freud imagined that mental quiescence would be adequate reason for a trait to evolve, regardless of any costs that the trait's carrier might incur in time, energy, or risk. (Exactly the same problem continues to plague "functional" hypotheses in social psychology, Daly, 1988.) Despite Freud's several respectful citations of Darwin, his evolutionary theorizing employed only the pre-Darwinian ideas of continuity and vestige, omitting the essential Darwinian contribution, namely the concept of selection and its corollary reinterpretation of the essence of adaptation.

Selectionist Theories of Parent-Offspring Conflict

From an evolutionary perspective, parent-offspring conflict is initially perplexing. Natural and sexual selection shape the properties of living creatures to promote fitness, and offspring are the principal vehicles of one's fitness (though not the only ones, Hamilton, 1964). It is therefore generally the case that organisms have no higher priority than the production of young who survive to breed in their turn. Fitness per se is not, of course, a psychological goal in its own right, but we animals have evolved to value goals like food, sexual contact, and even personal survival because (and to the degree that) their attainment has constituted a means to the end of fitness in environments of evolutionary adaptation. As for specifically parental motives, the physiological and psychological mechanisms of "parental investment" (Trivers, 1972) deplete parental resources and expend the parent's very life in the organized strategic pursuit of maximizing the total "reproductive value" (expected future fitness) of progeny. Why, then, have parental motives not evolved such that they produce selfless behavior?

The answer resides in the genetic consequences of sexual reproduction (Trivers, 1974). A recently mutated rare allele in a parent's genome

has only a $\frac{1}{5}$ probability of being inherited by any given child, call this probability of sharing a focal allele by virtue of descent from a recent common ancestor r (the coefficient of relatedness, Wright, 1922). Outbred full siblings, like parent and offspring, are related by $r = \frac{1}{2}$. A half sibling is a relative of degree $r = \frac{1}{4}$ (if the parents who are different are themselves unrelated), as is a grandchild or a full sibling's child. From the parental perspective, then, two offspring of identical reproductive value have identical utility as vehicles of parental fitness, so that selection would favor cherishing them equally, whereas from either offspring's perspective, one's self is twice as "valuable" as one's sibling, in terms of expected contribution to oneself's fitness (or four times as valuable if one's sibling is only a half sibling, which may or may not be reliably assessable). It follows that the allocation of familial resources which would maximize parental fitness will seldom be identical to that which would maximize a particular child's.

This evolutionary model accounts for many features of family conflict (Alexander, 1974, Daly & Wilson, 1988c, Trivers 1974, 1985). Weaning conflict, for example, is one expected consequence. From the nursing child's perspective, the optimal magnitude and duration of parental investment exceed the optima from the parental perspective. Another expected consequence is that parents will perceive their offspring as unduly self-centered, and will encourage or coerce them to take a more benevolent interest in siblings and collateral kin than they are spontaneously inclined to do. A further consequence is that the end of dependency upon parental investments is likely to be a time for setting new "rebellious" personal priorities, as one seeks to define and pursue agendas more in accord with one's own interests than with those of one's parents (Slavin, 1985, Trivers, 1985).

The role of gender in parent-offspring conflict According to Trivers's (1974) model, and contra Freud, the conflict of interests between parents and toddlers has little or nothing to do with the child's sex. The bone of contention is the allocation of parental investments, and daughters and sons alike have been selected to covet more than the parents have been selected to offer. Most subsequent evolutionary theoretical explorations of parent-offspring conflict concur (Bull, 1985, Charnov, 1982, Feldman & Eshel, 1982, Macnair & Parker, 1978, 1979, Metcalf, Stamps, & Krishnan, 1979, Parker, 1985, Parker & Macnair, 1978, 1979, Stamps & Metcalf, 1980).

There are, however, some other evolutionary models which treat off-

spring gender as consequential Trivers and Willard (1973) proposed that circumstances may sometimes dictate that daughters are better fitness prospects than sons, and at other times the reverse, leading to an adaptively facultative parental discrimination in the treatment of immature daughters versus sons. This theory has received support that is taxonomically sporadic, but occasionally quite convincing (Clutton-Brock & Iason, 1986, Hrdy, 1987, 1988, for human applications, see Betzig & Turke, 1986, Dickemann, 1979, Smith, Kish, & Crawford, 1987, Voland, 1984). However, any circumstantial reason why one or the other sex might be preferred will generally impact similarly upon fathers and mothers, providing no reason to expect a contingency between the sexes of parents and offspring in conflict. So although the Trivers-Willard model does provide a reproductive strategic rationale for differential treatment of sons and daughters, even in infancy, it still does not predict anything like "Oedipal" conflict.

Other evolutionary models come closer to the Oedipus idea, specifically proposing a preference for opposite-sex young because the prospective costs of same-sex rivalries at maturity mean that opposite-sex offspring offer a better expected fitness return on parental investments even before the rivalries with same-sex young materialize. Clark (1978), for example, proposed that mothers might prefer sons over daughters in those mammalian species in which sons disperse while daughters remain to compete with their mothers for limited local resources, and she suggested that this explained male-biased sex ratios at birth in the particular prosimian primates she was studying (see also Silk, 1983). (Local competition between same-sex siblings might also incline parents to invest preferentially in the sex that competes with its siblings less, but as in the case of the Trivers-Willard model, mothers and fathers should then exhibit the same discriminations, and no contingency between parent's sex and offspring sex would be expected, Taylor, 1981.)

Liberg and von Schantz (1985) suggested that the question of which sex tends to disperse farther from the natal area before breeding is decided by parental pressures, with fathers expelling sons, their future reproductive competitors, in polygynous and promiscuous mammals but not in monogamous species. They called this proposal "the Oedipus hypothesis" (Note, however, one crucial difference from Freud's Oedipal theory, namely that reproductive competition between father and son is hypothesized to exist only over unrelated females and not the mother.) Unfortunately, as Marks and Redmond (1987) have argued,

the mammalian data do not seem to match the hypothesis. In the case of the anthropoid apes and ourselves, Liberg and von Schantz's Oedipus hypothesis is precisely contradicted in that all species are to some degree polygynous and yet females disperse more than males. What is left out of this theory (and Freud's) is any recognition of the utility of same-sex relatives, who are not only fitness vehicles in their own right, but one's principal allies in social conflicts, too.

At present, then, no evolutionary model has been constructed which would provide a selectionist (adaptational) rationale for the Oedipal phenomena described by Freud. Is his description accurate?

Sexual Attraction to the Opposite-Sex Parent?

Freud's analysis of the pre-Oedipal period sounds much like Trivers's evolutionary analysis of conflicts over weaning and birth intervals. However, his Oedipal phase (about ages 2 to 5 years, see Freud, 1923) is harder to reconcile with the idea that selection creates adaptive motives and strategies. Why evolve to lust after one's mother, if by so doing one risks arousing one's father's ire? One's mother is hardly of an appropriate age to constitute an ideal mate anyway (Symons, 1979), not to mention the problem of inbreeding depression (Charlesworth & Charlesworth, 1987, Freire-Maia & Elisbao, 1984), a cost of consanguineous matings which is presumably the reason why so many animals have evolved means of avoiding them. In the circumstances in which we evolved, with neither milk animals nor agricultural products, children nursed for several years and went through weaning conflicts as late as age 5 (Lozoff, Brittenham, Trause, Kennell, & Klaus, 1977). It follows that a family conflict typology which is supposed to be characteristic of weaned 2-year-olds could not, in any case, be "primal."

Rather than positing the Oedipus complex from a priori or theoretical considerations, Freud claimed to have discovered it naturalistically by its manifestations in clinical experience. This claim has been defended vigorously by his followers, and it is crucial. Although Freud's "phylogenetic fantasy" of a primal parricide can be rejected with confidence, his ontogenetic account might yet be true, but its plausibility must rest upon its correspondence with observable phenomena rather than its consistency with a discredited theoretical edifice.

But this claim of a naturalistic discovery is a dubious one. The classic cases cited in its support, such as that of "little Hans," exhibit no straightforward manifestations of either sexual interest in the opposite-

sex parent or hostility to the same-sex parent. In the 1909 edition of *The Interpretation of Dreams*, Freud conceded that "disguised dreams of sexual intercourse with the dreamer's mother are many times more frequent than straightforward ones" (p. 398), and offered one "typical example of a disguised Oedipus dream." The dreamer was sexually involved, in both the dream and in reality, with another man's wife (pp. 398–399), and the rationale for inferring a symbolic link to the dreamer's own parents was this: "[H]is hostile wishes towards her husband were concealed behind demonstrations of affection which were derived from his memory of his relations with his own father in childhood" (p. 399). As Sulloway (1979) has noted, Freud and his followers have alternatively claimed both that Oedipal phenomena are transparently abundant in clinical materials and that only the cognoscenti can discern them, according to the requirements of particular debates. It is at least a tenable position, then, that Freud's detailed description of the Oedipal succession of psychological events in young childhood was derived primarily from the logic of his Haeckelian-Lamarckian theories and hardly at all from clinical observation.

Dreams or fantasies of sex with one's mother or father seem almost entirely to have been collected from postpubertal individuals and imputed to the same people as toddlers. Nor can the problem for Oedipal theory that is presented by this paucity of direct evidence of childhood sexual interest in the opposite-sex parent be obviated merely by finding some less equivocal anecdotes. The claim of Oedipal theory is much stronger than that some toddlers lust after their parents. It is that all normal ones do so. The evidentiary onus upon such a claim is heavy. Manifestations of that lust should be reliably elicitable from normal children in the Oedipal phase by some specified procedure, but no such procedure has been proposed. Systematic studies of young children's knowledge and attitudes concerning sexual matters provide no hint that children's sexual interests are in any way directed to the parents (Goldman & Goldman, 1982).

So whence the view that children lust after their parents? The testimony of children themselves seems to have had little or nothing to do with its development. What Freud encountered in his practice was adult patients' recollections of infantile sexual molestation by parents or parent substitutes, and he initially took the stories at face value, asserting that sexual victimization in childhood was the cause of psychiatric problems in adulthood (Freud, 1896). This euphemistically labeled "seduction theory" met a harsh professional rebuff, and Freud even-

tually reinterpreted his patients' stories as fantastic manifestations of their repressed wishes (an "insight" generally credited with launching his revolutionary psychodynamics) Why Freud abandoned his belief in "seduction" and its psychological sequelae has been the subject of fascinating speculations (Masson, 1984, see also Balmory, 1979/1982, Miller, 1984), but whatever the answer, it is no longer conscionable to disbelieve and blame the victims in the face of modern awareness that the sexual abuse of children is no fantasy

Parental templates for later mate choice? There is, however, some empirical support for one corollary of Oedipal theory Freud (1910) maintained that sexual interest in the opposite-sex parent, although unrequited, manifests itself in later life as a sexual preference for people reminiscent of the early love object, and there are some recent supportive data Jedlicka (1980) found that people born of mixed marriages tend to marry into the ethnic group of the opposite-sex parent more often than into that of the same-sex parent Wilson and Barrett (1987) found that the men with whom teenage girls professed to be in love were reported by the girls to match their fathers in eye color more often than their mothers

If such effects are genuine, how are they to be interpreted? One possibility is that we have evolved by natural selection a strategy of using parental phenotypes as partial criteria in mate choice The rationale for this conjecture is a body of recent theoretical and empirical work suggesting that plants and animals could sometimes promote their fitness by mating with those more genotypically, and hence phenotypically, like themselves than the average potential mate (Bateson, 1983, Price & Waser, 1979, Shields, 1982, Thornhill & Shields, 1990) If so, then strategies for choosing mates of a moderate degree of relationship to oneself may have evolved Bateson (1982) found that Japanese quail chose first cousins over either siblings or unrelated birds (all the stimulus birds being unfamiliar as individuals), and interpreted this preference as indicative of adaptive mate choice If it is indeed adaptive to choose mates of intermediate genetic similarity to oneself, the observed features of one's parents could be useful mate choice criteria Cooke (1978) showed that snow geese, a species in which individuals of either sex may be "white" or "blue," tend to mate with birds whose plumage color matches that of those who reared them (but he did not assess whether the opposite-sex parent's color was especially preferred) It appears, then, that the distinctive features of parents may indeed become

mate choice criteria, but it is important to note that the theory and the data are consistent in indicating that the most preferred mates are not the closest relatives

The idea that one acquires a template of the ideal mate during early exposures to family members may explain both the alleged tendency to be attracted to father and mother figures, and the better documented tendency to choose as mates persons phenotypically like oneself ("assortative mating", Vandenberg, 1972) Furthermore, it might explain Russell, Wells, and Rushton's (1985) finding that the magnitude of such assortment is positively correlated with the heritability (degree of parent-offspring concordance) of the trait Russell et al consider this to be evidence that people attend selectively to relatively heritable traits in choosing mates, but the effect would follow without any such selectivity if one were choosing matches not to oneself but to one's parents, since parents will more often match oneself on the more heritable traits (Daly, 1989) But be that as it may, a positive attraction to parental characteristics in potential mates is not the same thing as lusting after one's parents

Conflict With the Same-Sex Parent?

The second component of the Oedipus complex is antagonism toward the same-sex parent How is one to detect and measure it? Attempts to find direct expressions of such sex-biased antagonisms have consistently failed If anything, children in the Oedipal phase tend to prefer the same-sex parent, and do so no less than the older children presumed by Freudians to have resolved the complex (Goldman & Goldman, 1982) Freudians dismiss such evidence as irrelevant since the antagonism is supposed to be repressed (Kline, 1972), and insist that, as in the case of the hypothesized sexual feelings, one must rely upon indirect or symbolic manifestations But the evidence here is no more supportive Fisher and Greenberg (1977) reviewed many such studies in an attempt to answer the question "Do we find, as Freud would predict, that during the Oedipal phase each sex feels relatively positive toward the opposite-sex parent and negative toward the same sex parent?" (p 178) Despite their enthusiasm for the theory, they concluded that they could offer no "real answer to this crucial question" The results were hopelessly mixed

But the research strategy is in any case unsatisfactory How is one to know that one's measures tap feelings toward the father or mother

at all, when their overt content has nothing to do with parents? Simpson (1935), for example, assumed that children's expressed "liking" for men and women in pictures would reveal their preferences for their mother or father, in fact, both sexes generally preferred the women, and since the adults portrayed were strangers, an obvious explanation is that strange men really are more dangerous and more appropriately feared than strange women, regardless of the child's sex. Similarly, Hall (1963) considered agonistic encounters with male strangers in male dreams to be symbolic of antagonism with one's father, and the prevalence of such encounters to be a demonstration of the Oedipus complex. As Eysenck and Wilson (1973) have remarked, this and Hall's other results are all readily accounted for by the commonsensical theory "that the mind in sleep does not cease to be active, and that this activity, shown in dreaming, continues to be concerned with problems of everyday life" (p. 123). Hostile male strangers are real-world threats, vastly more likely to do the dreamer serious harm than is his father (Daly & Wilson, 1988a).

Male sexual rivalry is not evidence for Oedipal conflict Just as the evidence for incestuous urges in the Oedipal phase consists mainly of their presumed vestiges in adulthood, so too are adult phenomena the most frequently cited manifestations of Oedipal rivalry. Psychoanalytic writers since Freud have regularly treated adult manifestations of sexual competition, rivalry, and jealousy as evidence for the theory.

Melford Spiro's *Oedipus in the Trobriands* (1982) is a case in point. The book is a spirited and ingenious refutation of Bronislaw Malinowski's famous claim that the Oedipus complex was absent among the matrilineal Trobriand Islanders. Although the significant adult male in a Trobriand boy's life was his mother's brother rather than his father, Spiro discerned numerous manifestations of Oedipal conflict. As one "prediction" from "Oedipal theory," Spiro proposed "that men would wish to possess women attached to other men and would be jealously possessive of the women to whom they themselves are attached." His argument is that "the son's wish for an exclusive relationship with his mother is frustrated by his powerful father," leading to "a repressed Oedipus complex" that "promotes attempts to undo this defeat, by reconstituting such a triangle in adulthood" (pp. 101-102). No one will be surprised to learn that this prediction of male sexual rivalry was confirmed.

But the evolutionary and ontogenetic forces producing male sexual

rivalry are not Oedipal. Predominantly maternal nurture is a general characteristic of Mammalia with the result that the male pursuit of fitness consists largely of maximizing mating contacts and sequestering mates from rival males (Low, 1978, Trivers, 1972). Male mammals from bull seals to billy goats behave as if they "wish to possess females attached to other males" while being "jealously possessive of the females to whom they themselves are attached." The ontogeny of this ubiquitous mind-set has nothing to do with frustration of "the son's wish for an exclusive relationship with his mother" by his father. Father has bade mother farewell long before their son was even born.

The general point is that male sexual rivalry is endemic to the 4,000 or so species of the class Mammalia, whereas father-son interactions of any sort are rare and secondarily derived. It is therefore absurd to maintain that such rivalry constitutes evidence for a particular developmental theory in which paternal influence is crucial.

Castration anxiety Another supposed confirmation of Oedipal theory is Hall and van de Castle's (1965) finding that men exhibit more symbolic manifestations of "castration anxiety" in their dreams than do women. They conclude their discussion by conceding that

the results may be accounted for by other theoretical positions. For example, the greater incidence of injuries and accidents in male dreams may merely reflect the nature of the activities in which they engage in waking life as compared with the activities of women. It is believed that men engage in more dangerous activities and take more risks than women do. If this is the case it might be expected that their dreams would be in accord with their waking life experiences. On the other hand, if they do in fact take more chances and risk physical harm, this raises the question of why they do. It does not suffice, we feel, to say that they have adopted the role which "society" has fashioned for them. Why has "society" created such a role and why do boys acquiesce in being shaped to the role? *Ad hoc* explanations of findings, in any event, are not very satisfying (p. 28).

There is, of course, nothing *ad hoc* about the proposition that males are more preoccupied with injuries than are women because they are more often injured. However, Hall and van de Castle are quite right to ask why such sex differences should exist and to reject as vacuous the answer that "society" makes it so. Evolutionary theory provides a thorough and well-confirmed account of the reasons for the variable magnitude

and direction of sex differences in violence and risk-proneness in different species (Daly & Wilson, 1988a, Darwin, 1871, Trivers, 1972, 1985, Wilson & Daly, 1985), and again these reasons have nothing to do with the specific relationship of father and son

Hall and van de Castle's (1965) results in support of Oedipal theory are in any case trivially necessitated by their methodology. Exactly symmetrical dreams (e.g., "a male dreams that he is a woman" versus "a female dreams that she is a man") were scored as manifestations of "castration anxiety" or "penis envy" according to the sex of the dreamer, and then the sex difference in these scores was treated as a meaningful empirical result. Although Eysenck and Wilson (1973) pointed out this fatal flaw, the study has continued to be cited as strong evidence for Freud's theories (Fisher & Greenberg, 1977, Liebert & Spiegler, 1982). Note too that positive or negative affect was not relevant to Hall and van de Castle's scoring, the central constructs might just as fairly have been labeled "vagina envy" and "penis anxiety."

Like Hall and van de Castle (1965), Fisher and Greenberg (1977) were encouraged by what they saw as strong empirical support for the concept of castration anxiety. But the evidence they reviewed consists entirely of sex differences in the frequency of referring or alluding to bodily injuries (not necessarily to self, nor to the genitalia, nor with anxious affect). Since males more than females specialize in inflicting injuries, as well as suffering them more, it is again absurd to treat such phenomena as evidence for father-son conflict.

Apart from the dubious proposition that boys and girls alike would prefer to have male organs (and that this preference is endemic to human development rather than culturally peculiar) is the question of how small children interpret morphological sex differences. Central to Freud's account of psychosexual development is the proposition that toddlers of both sexes develop the theory that girls have been "castrated." The direct testimony of children lends no support to this premise (Goldman & Goldman, 1983, Kreidler & Kreidler, 1966). It, too, seems to be a proposition demanded by Freud's theory rather than a "naturalistic discovery."

Homicide as a conflict assay An "assay" of the degree of conflict or hostility in one relationship as compared to another with greater face validity than the manifestations considered thus far is the frequency with which antagonisms erupt into unequivocal violence. The violent manifestations of conflict least contaminated by biases of detection or

reporting are the lethal ones. Filicides and parricides can thus be used as an assay of parent-offspring conflicts.

Two objections to such an assay can be raised. The first is that homicides are so extreme and abnormal that they cannot accurately reflect patterned variation in the conflicts within normal families. Well, yes, filicides and parricides *are* "abnormal", in fact, they are likelier to be found insane than any other homicides (Daly & Wilson, 1988a). Nevertheless, their rates of occurrence vary systematically with a variety of situational and demographic factors (other than those here), which are theoretically predicted determinants of the intensity of parent-offspring conflict (Daly & Wilson, 1988b). Homicide is a proven conflict assay both within and without the family (Daly & Wilson, 1988a, 1988b).

A second objection to the use of homicide data in the present context is that parent-offspring homicides in the Oedipal phase are filicides, not parricides, and thus do not reflect the child's antipathy toward the parent. Two partial answers to this objection suggest themselves. The first is that insofar as parental violence is to any degree reactive, systematic gender biases in children's attitudes toward the parents are likely to be reflected in parental reactions thereto. The clinical cases which are presented as illustrative of the Oedipus complex (e.g. "little Hans", Freud, 1909) often contain clearer evidence of the father's negative reaction to the son's Oedipal manifestations than of the son's antipathy to the father. The second response is that Freud himself initially postulated castration anxiety as a rational response to genuine threat from a powerful father (1913). Granted, the subsequent accounts of the Oedipus complex by Freud and his followers can be interpreted as postulating that this paternal threat is a pure fabrication (whether by the mother who would discourage masturbation or by the child's own imagination). However, if that were so, there would remain no rationale for Freud and other psychoanalytic writers' frequent citations of historical and anthropological records of paternal acts ranging from circumcision to actual filicide as somehow demonstrative or illustrative of the theory.

If Freud's scenario were valid, we propose that a same-sex contingency in manifestations of parent-offspring conflict during the Oedipal phase should be evident in the actions of parents and offspring alike. According to Trivers's evolutionary model, by contrast, no same-sex contingency would be expected in cases involving young children, although such a contingency might appear around puberty.

Tables 1 and 2 present cross-tabulations of killer's sex by victim's sex

Table 1
Parent-Offspring Homicides in Canada, 1974-1983

Offspring stage	Victim's sex	Killer's sex		
		Male	Female	
Infantile (age 0-1) ^a	Male	24	53	$\chi^2(1) = 0.6, ns$
	Female	17	50	
	% Male	58.5	51.5	
Oedipal (2-5)	Male	21	21	$\chi^2(1) = 0.0, ns$
	Female	27	27	
	% Male	43.8	43.8	
Latency (6-10)	Male	21	19	$\chi^2(1) = 0.9, ns$
	Female	10	5	
	% Male	67.7	79.2	
Circumpubertal (11-16)	Male	28	9	$\chi^2(1) = 0.0, ns$
	Female	14	4	
	% Male	66.7	69.2	
Adult (≥ 17)	Male	104	8	$\chi^2(1) = 10.1,$ $p < 0.1$
	Female	47	15	
	% Male	68.9	34.5	

Note: Homicides are cross-tabulated by sex of killer and victim and by offspring age. Table entries are numbers of victims; 13 cases in which both parents were charged are excluded. All cases in which the child was 10 years old or less are filicides. Circumpubertal cases include 31 filicides and 24 parricides, while adult offspring cases include 26 filicides and 148 parricides. Only after puberty is there a same-sex contingency in parent-offspring violence.

a: Age is given in years.

in samples of parent-offspring homicide cases. The Canadian sample (Table 1) consists of 365 filicides and 172 parricides out of a total of 6,559 homicides between 1974 and 1983. Every homicide known to Canadian police forces is reported on a standard form to the federal agency Statistics Canada (see Daly & Wilson, 1988a, for extensive discussion and analysis of these data). The Chicago sample (Table 2) consists of 195 filicides and 87 parricides out of a total of 12,875 homicides between 1965 and 1981, for further discussion and analyses of this data set, see Block (1987).

The data match Trivers's model better than Freud's. Among ten 2×2 tables, the only significant same-sex contingency involves Canadian

Table 2
Parent-Offspring Homicides in Chicago, 1965-1981

Offspring stage	Victim's sex	Killer's sex		
		Male	Female	
Infantile (age 0-1) ^a	Male	19	28	$\chi^2(1) = 0.1, ns$
	Female	16	18	
	% Male	54.3	60.9	
Oedipal (2-5)	Male	14	17	$\chi^2(1) = 0.1, ns$
	Female	12	11	
	% Male	53.8	60.7	
Latency (6-10)	Male	4	8	Fisher exact, <i>ns</i>
	Female	2	1	
	% Male	66.7	88.9	
Circumpubertal (11-16)	Male	5	5	Fisher exact, <i>ns</i>
	Female	4	3	
	% Male	55.6	62.5	
Adult (≥ 17)	Male	67	10	$\chi^2(1) = 0.1, ns$
	Female	33	6	
	% Male	67.0	62.5	

Note: Homicides are cross-tabulated by sex of killer and victim and by offspring age. Table entries are numbers of victims. All infantile and Oedipal phase cases are filicides, latency cases include 14 filicides and 1 parricide, circumpubertal cases include 6 filicides and 11 parricides, and adult offspring cases include 40 filicides and 76 parricides. In no phase is there a same-sex contingency in parent-offspring violence.

a: Age is given in years.

adult-offspring cases. There is not a hint of any such contingency during the Oedipal phase in either sample.

By and large, except in the case of infanticides the killers are mostly male, and so are the victims. Fathers are much likelier to become parricide victims than mothers, and sons are somewhat likelier to be filicide victims than daughters. Combining both samples, sons outnumber daughters as victims by 124 to 101 in infancy, 52 to 18 in the latency phase, 47 to 25 circumpubertally, and 189 to 101 as adults, but not in the Oedipal phase (73 to 77). Since filicides occur predominantly at the hands of impoverished parents, the sex bias in infancy might be considered to support Trivers and Willard's (1973) prediction of discrimination against sons under poor resource circumstances in effectively polygy-

nous mammals (see also Volland, 1984) For further discussion of sex differences in homicide victimization and perpetration, both within and without the family, see Daly and Wilson (1988a)

Conflicts with nonrelatives are genuine and not merely symbolic of conflicts with parents In attempting to interpret conflict within the family, Freud was conceptually at sea Failing to recognize that Darwinism identifies the underpinnings of self-interests, he postulated arbitrary psychological needs in an ad hoc manner The anchor that eluded him and continues to elude virtually all his followers is the insight that the ultimate function of evolved psychological mechanisms is the promotion of fitness Lacking this insight, psychoanalytic writers regularly misinterpret genuine conflicts of interest as nonadaptive symbolic manifestations of "primal" conflicts (Stephens, 1962) Here, for example, is an excerpt from a recent review of Oedipal and related themes in Indian folklore

Relations of Mother and Daughter

I have not yet found striking and explicit tales of a mother's rivalry with her own daughter, but one could cite numerous tales of stepmothers tormenting or exiling their stepdaughters, and cruel mothers-in-law trying to kill or harm daughters-in-law Demonic mother-goddesses, ogresses, stepmothers and mothers-in-law are mother-figures specializing in the terrible aspects of mothers toward daughters (Ramanujan, 1983, p 251)

Considering the well-known role of mothers-in-law in Indian bride burnings, it seems disingenuous to interpret tales of their mistreatment of their daughters-in-law as merely symbolic More generally, what Ramanujan fails to recognize is that people related by marriage, such as mothers-in-law and stepmothers, have genuine relationship-specific conflicts of interest with their daughters-in-law and stepdaughters, conflicts which greatly surpass those between mothers and daughters

Consider step-relationships (Wilson & Daly, 1987) Their essence is that they are formal analogues of genetic links In stable dyadic relationships between unrelated animals, reciprocity is carefully monitored by both parties, and failures thereof are resented as exploitative (Taylor & McGuire, 1988, Trivers, 1971, Wilkinson, 1984) Parents, by contrast, willingly endure a chronic and cumulating imbalance in the flow of phenotypic benefits, this is hardly surprising when one considers the Darwinian truism that creatures evolve to expend their very lives

enhancing the expected fitness of descendants. Parental investment is a valuable resource and parental psyches have evolved to allocate it discriminatively (Daly & Wilson, 1988c). So what of the stepparent? People enter into relationships in which they incur some obligation to play parent to someone else's children as part of the bargain of establishing a new mateship, the children enter into the prospective stepparent's marital decision as a cost, not a benefit (Becker, Landes, & Michael, 1977, White & Booth, 1985). Pseudoparental obligations are often overtly resented (Ambert, 1986, Messinger, 1976)—even benevolent, affectionate stepparents are unlikely to derive the same emotional rewards from their unreciprocated labors as genetic parents (Duberman, 1975). One consequence is that violence is enormously more frequent in step-relationships than in the corresponding blood relationships (Daly & Wilson, 1985, 1988a, Wilson & Daly, 1987, Wilson, Daly, & Weghorst, 1980).

Contra Ramanujan and other psychoanalytically oriented folklorists, then, Cinderella stories need hardly be interpreted as symbolic of the malevolence of genetic mothers. Like Hall and van de Castle's (1965) dreams of hostile strangers, their explicit content matches reality more closely than their alleged symbolic content.

The names of relationships created by marriage, such as "stepfather" and "mother-in-law," are not unique in their metaphorical extension of the categories of genetic kinship terminology. Consider, for example, the circumstances in which men address unrelated men as "brother." People the world around use kin terms metaphorically to elicit solidary feelings by their evocation of the genuine commonalities of interest among genetic relatives and to manipulate social expectations and entitlements (Alexander, 1974, Chagnon, 1982, 1988a, Fredlund, 1985, Johnson, 1987, Thornhill & Thornhill, 1987). An especially advantageous ploy, where feasible, is to evoke submission as well as solidarity by assuming the fictive status of the "father." According to van den Berghe (1985)

If power is to be justified (so as to be more readily exercised), the aim of power must be hidden or denied. The best denial of the effect of power is that oppression is in the best interest of the oppressed. Paternalism mimics the genuine *concern* of the parent for the child, which is founded on the real overlap of interest inherent in genetically based nepotism, and thus hides the overwhelmingly conflictual basis of the ruler-subject relationship. Paternalism models itself on a relationship of genuine *dependence* and incapacity, in which the

helpless child's survival and well-being is contingent on adult care, and extends it to a situation in which the dependence is *reversed*. The ruler who parasitizes the subject disguises parasitism as altruism (p. 262)

Freud turned this manipulative metaphor on its head by imagining that the subjects make their ruler into a symbolic father to satisfy their own (guilty) psychological needs.

Psychoanalytic writers who speak of the "sons" wishing to slay the "fathers" and take possession of the "mothers" are deceived by the manipulative rhetoric of paternalism. When the powerful targets of a young man's hostility, resentment, and rebellion don the cloak of fatherhood in a self-serving attempt to command obedience and respect, the rebel's antagonism is misconstrued as being directed against his actual father! The issue here is more than merely academic. By interpreting protest and rebellion as a reaction to "unresolved" primal conflicts rather than as a response to exploitation and injustice, psychoanalysts assert the victim's irrationality and deny the legitimacy of his or her grievances. Oedipal theory thus serves as a weapon of authoritarianism.

CONCLUSION

Freud apprehended conflict and ambivalence in the relation between parent and child. His Oedipal theory constituted a bold attempt to characterize and explain the family conflict he had discovered. By showing that parent-offspring conflict is an expected consequence of sexual reproduction, Trivers's evolutionary model offers a seeming explanation of Freud's discovery, so that several authors have considered the two analyses to be mutually reinforcing (Badcock, 1986; Leak & Christopher, 1982; Slavin, 1985).

But the mere fact that parent-offspring conflict exists is not support for Oedipal theory. Freud's account contained both a description of a hypothesized ontogeny and a phylogenetic reconstruction. For reasons outlined earlier, the phylogenetic part of the theory (the "primal parricide") can be rejected. As for the ontogenetic theory, an essential premise is that infantile filial affection is the isomorphic precursor of mature sexuality, as the caterpillar is to the butterfly. Whether this is so remains conjectural. The scientific investigation of such continuity in behavioral and psychological development, analogous to structural differentiation in embryology, is difficult at the best of times because be-

havioral output is *discontinuous* (Kruijt, 1964) Hypothesized structural continuities between developmental stages can be verified by partitioning stages ever more finely, but one cannot always elicit behavioral manifestations of allegedly continuous psychological substrates at will, the allegation that what we see now is the new modified version of what we saw earlier is a plausibility argument based on subjective similarity But however plausible or implausible we may find the hypothesis of a covert thread of continuity from infantile suckling to adult libido to be, Freud's theory again claims much more Oedipal experiences in childhood are alleged to be the direct antecedents of normal versus abnormal sexual orientations and practices, among other things (Freud 1919, 1922) Comparative considerations render Freud's scenario implausible The quality of father-son interactions in infancy is supposed to play an essential role in the development of such normal male attributes as heterosexual orientation, sexual rivalry, and jealousy, and yet these attributes are endemic to Mammalia, whereas father-son interaction is sporadic in its taxonomic distribution and secondarily evolved (Psychoanalytic ideas about the development of sexual orientation are in any case poorly supported by the human data, see Freund & Blanchard, 1983, Hockenberry & Billingham, 1987, Siegelman, 1974)

In criticizing Freud's account of father-son conflict, we do not deny that fathers and sons may become sexual and reproductive rivals when the latter reach maturity But by then, it is no longer the mother who is the object of their rivalry Men frequently command limited familial resources, and may delay their sons' initiations into manhood in order to continue their polygamous marital careers or forestall the sons' succession to power (Boone, 1988, DUBY, 1977, Goody, 1966), concern that the sons may become sexually interested in the father's junior wives also causes tension (LeVine, 1965) It would appear, then, that Freud collapsed two distinct father-son conflicts into one an early conflict which is indeed a sort of "rivalry" over how the mother's reproductive efforts are to be expended, though not a sexual rivalry, and a later rivalry that is sexual but is not over the mother (Hartung, 1982, 1985) Moreover, insofar as father and son (or other close relatives) may eventually become rivals, that rivalry is tempered by the fact of their specific relationship to one another, not exacerbated thereby There is no more formidable force in prestate societies than "fraternal interest groups" of patrilineal relatives (Chagnon, 1988b, Daly & Wilson, 1988a, Paige & Paige, 1981) The other side of the coin is that the most intense, dangerous, and substantive of conflicts are those between nonrelatives

According to Oedipal theory, children's antagonisms with their parents are grounded in fantasy rather than in genuine conflicts of interest. Other later conflicts with nonrelatives are interpreted as symbolic "actings out" of Oedipal conflicts and, by implication, as less real. These ideas are irreconcilably at odds with a Darwinian understanding of sociality, and with the pervasiveness of nepotistic solidarity in human affairs.

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