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Civilization and Its Discontents revisited: Freud as an evolutionary biologist

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Recent scholarly work has emphasized the importance of evolutionary theory as an element of Freud's thought. This paper compares the evolutionary logic of *Civilization and Its Discontents* with modern evolutionary logic, as represented by human sociobiology. Some of Freud's arguments are quite modern, but although they were consistent with the evolutionary theory of his time, his arguments in many cases depart radically from a modern viewpoint. Moreover, a modern viewpoint would lead to the rejection of several of the psychic mechanisms proposed by Freud to explain human behavior. Nevertheless, the ultimate evolutionary questions that Freud posed are of continuing interest and must be answered by any theory of behavior. Moreover, some of the theory used by modern sociobiologists to explain human behavior is formally similar to the arguments used by Freud.

Introduction

One of the advantages of the development of a new synthetic theory in the behavioral sciences is that it allows one to look at previous theories through different lenses. Sociobiological theory is a recent synthesis of evolutionary thought regarding behavior and will be used here to discuss some aspects of Freudian theory. The theories of Freud are particularly interesting in this regard, since Freud, like the sociobiologists, emphasized the importance of sex in human behavior. Moreover, Freud not only developed theories regarding the proximate mechanisms of behavior, but was also deeply concerned with what modern theorists term ultimate evolutionary questions. Sulloway (1979) has shown the deep and pervasive influence of Darwinian thought on Freud, and discussion of the evolutionary context of Freud's thought retains importance because of the tremendous influence in literature and the arts Freudian thought has had.

Although several of Freud's ideas on proximate mechanisms have been shown to be compatible with modern evolutionary theory (Leak & Christopher, 1982), it will be argued here that, although there is much that is quite modern about the presentation, the lack of a modern evolutionary theory resulted in some major confusions, confusions which I believe are of independent interest. However, although the mechanisms proposed by Freud as solutions to ultimate evolutionary problems do not square with contemporary theory and data, the basic structure of his arguments is often remarkably modern, and his concerns have to be addressed by any theory of behavior. *Civilization and Its Discontents* (1930) will be the major source of Freud's ideas discussed here.

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This work represents Freud's longest and most ambitious disquisition on ultimate evolutionary questions; and coming towards the end of his career, it represents what are presumably his last thoughts on these subjects.

Culture versus the individual: The suppression of sex

One of the central themes of *Civilization and Its Discontents* derives from what Freud saw as a basic and irreconcilable conflict between the individual and the group. It is only by regulating and indeed suppressing the instincts of the individual, particularly the sexual instinct, that civilization can occur.

Before discussing some of the theoretical issues raised here, it is of interest to describe some of Freud's self-described 'conjectures' on how this state of affairs may have arisen. In chapter IV of *Civilization and Its Discontents*, Freud supposes that human evolution resulted in the formation of family units and that the members of the family unit helped one another. Such a supposition accords well with both anthropological studies, as well as kin selection theory. He also proposes that human sexuality changed from being periodic to continuous.

> When this happened, the male acquired a motive for keeping the female, or, speaking more generally, his sexual objects, near him; while the female, who did not want to be separated from her helpless young, was obliged, in their interests, to remain with the stronger male.

Such an account is admirable from a sociobiological viewpoint for its emphasis on the self-interest of the proposed motivation. Moreover, continuous sexual receptivity may indeed be one of the proximate mechanisms leading to greater family ties, along with concealed ovulation and affective bonding (Alexander, 1979). Such a state of affairs could result in natural or cultural selection for prolonged consort arrangements between females and males, who could then be more certain of their paternity. Moreover, the idea that there may be sex differences in the proximate mechanisms involved is strikingly modern. Female reproductive strategy is thought to include attempts to obtain paternal investment in her offspring (Hrdy, 1981), and the idea that affective ties between parents and children are an important source of motivation is a cornerstone of the ethological theory of attachment (Bowlby, 1969, 1973).

In attempting to explain the origin of continuous sexual receptivity, Freud proposes that continuous sexual receptitivity arose with the adoption of an upright posture. This in turn resulted in a diminution of the olfactory senses and greater emphasis on vision, which is able to maintain continuous sexual arousal rather than the 'intermittent' arousal produced when olfaction was the key sexual stimulus. By rising above the ground, the genitals which were previously concealed 'were now visible and in need of protection, and so provoked feelings of shame in him (p. 39, note 1). This sequence of events would bring humans to the threshold of civilization.

Such a proposal indicates that although Freud can on occasion come fairly close to modern evolutionary logic, at times his speculations depart quite radically from a modern viewpoint. A modern viewpoint would emphasize ways in which the proposed behavior conforms to the reproductive interests of the two sexes. There is no biological reason why one sense rather than another would be better adapted for the cues associated with sexual receptivity, but even if this were the case, one wonders what factors inherent in human genitalia would result in shame at their sight, and what sort of ultimate level evolutionary logic could be applied here.

Freud then states that the final step over the threshold of civilization occurred when the father of the primitive family was killed by his sons—the primeval Oedipal scene.

Here, he refers to his previous work *Totem and Taboo* (Freud, 1913). The argument in *Totem and Taboo* begins by explicitly rejecting the position now held by many sociobiologically oriented writers, i.e. that the ultimate cause of the incest taboo is the maladaptive consequences of inbreeding and that the proximate cause involves the experience of living together in close family units. [See Alexander (1979), and van den Berghe (1983) for reviews of the evidence.] This view was advanced by Westermarck (1906–1908) and is criticized by Freud who notes that there is no evidence for the detrimental nature of inbreeding and by asserting that the proposed proximal mechanism is unlikely because

> [A] biological instinct of the kind suggested would scarcely have gone so far astray in its psychological expression that, instead of applying to blood relatives (intercourse with whom might be injurious to reproduction), it affected persons who were totally innocuous in this respect, merely because they shared a common home (p. 123).

However, as the above references document, there is in fact considerable modern evidence for both these propositions. For example, Shepher (1978) found that children growing up together on the Kibbutz did not engage in sexual relations, and Wolf (1968) found that children who were betrothed at an early age in Taiwan and lived together as children were not sexually well-adjusted as adults. Moreover, there is in fact considerable evidence that inbreeding in humans does have detrimental effects (van den Berghe, 1983; Cavalli-Sforza, 1977).

This point of view essentially robs *Totem and Taboo* of its *raison d'être*. Nevertheless, several other aspects of the argument in this volume are of interest because they parallel modern concerns. Like modern sociobiologists, Freud builds his theory on the fundamental importance of sexual competition. He quotes approvingly a passage from Darwin's *The Descent of Man* (1871) which describes the competition of males for females that Darwin believed to have been characteristic of primitive humans. As with many animal species, these primitive human males were conjectured to be polygynous and to engender rivalry with other males. Freud then supposes that this competition occurred within the family, that it resulted in the murder of the father by the sons as a group, and that this act was followed by remorse due to the ambivalent feelings of the sons toward the father. As a result of this remorse, the sons resigned their claim to the women who had been set free by the murder. As a result of the prohibition of sexual competition among the brothers, a stronger more cohesive social organization was possible:

> Though the brothers had banded together in order to overcome their father, they were all one another's rivals in regard to the women. Each of them would have wished, like his father, to have all the women to himself. The new organization would have collapsed in a struggle of all against all, for none of them was of such over-mastering strength as to be able to take on his father's part with success. Thus the brothers had no alternative, if they were to live together, but . . . to insitute a law against incest, by which they all alike renounced the women they desired and who had been the chief motive for dispatching their father (p. 144).

This then shows that the beginnings of society and morals 'converge in the Oedipus complex' (p. 156).

The possibility of co-operation among the brothers is interesting in that it essentially proposes the evolution of an egalitarian process by which the members of a group agree to forego sexual competition with each other. Groups in which sexual competition does occur are asserted to be unstable due to internal strife, so that the evolution of groups

without internal sexual competition would occur. This is a group selection argument, but one which has the merit of proposing a specific problem which sexually competitive groups would develop. Here, one would have to propose that within an originally sexually competitive group, non-competitive genes could spread. Such a situation is formally similar to the problem of altruism, since genes that are individually disadvantageous because they inhibit sexual competition would lead to greater group stability. Most theoretical treatments of group selection have concluded that group selection could only occur under very restricted conditions and, in particular, only with high extinction rates for groups. [See, for example, the reviews by Wilson (1975) and Williams (1981).] Recently, however, models have been developed which do not involve high extinction rates for demes (Uyenoyama, 1979; see also Williams, 1981). Thus, the possibility mentioned by Freud is a real one and indicates that Lamarckian inheritance, believed by Freud to be the mechanism by which instinctual repression was acquired by later generations (Sulloway, 1979), is not required by the structure of the argument. Freud, then, is proposing two possible mechanisms for the acquisition of this characteristic, one of which is a modern possibility.

However, there is ample evidence that sexual competition among males did not end with the arrival of civilization, that such competition was exogamous rather than incestuous, and that intra-group sexual competition does not lead to a fatal instability. Regarding the first point, Freud states that civilization depends heavily on the psychic energy derived from the suppression of sex, and the high-water mark of sexual suppression has been attained by the most advanced form of civilization, that of Western Europe. Sociobiological theory predicts, however, just the opposite state of affairs. In the absence of egalitarian social controls (see below), the greater productivity of more economically advanced societies should be associated with greater sexual competition. This occurs because with increasing production in human societies, there is the possibility of increased variance in the control of resources, as individuals are able to control valuable resources or exploit the production of others. [See MacDonald (1983) for a detailed argument.] Since females are the limiting reproductive resource in the system due to their limited reproductive capacity compared to males, individual males who are able to control large amounts of economic resources are expected to be polygynous, i.e. to turn this economic advantage into an advantage in Darwinian fitness by controlling females and having large numbers of children. Thus, the economically most advanced societies should also be characterized by the greatest degree of sexual competition. Contrary to Freud, human evolution, characterized by increasing productivity, should be typified by increased sexual competition, not the reverse.

There is considerable evidence that the sociobiological prediction is closer to the available data. Van den Berghe (1979) found a general association between increasing production and the occurrence of polygyny in human societies. Societies at the low end of productivity, the hunter–gathering societies thought to be the prototype for human evolution, tend to be monogamous, suggesting evolution for a high degree of paternal investment. At the opposite end of the scale of economic production, intense sexual competition is possible and occurred in many agriculturally advanced societies, as for example in classical Chinese civilization, where wealthy males controlled large numbers of females. The possession of the number of wives and concubines typical of such males is an economic impossibility in societies without a similar level of economic productivity. [See MacDonald (1983, 1986) for a detailed discussion.]

Many of the clan societies discussed by Freud in *Totem and Taboo* are also characterized by intense sexual competition, and indeed many of the rituals described in the book

would appear to be rites which reinforce kinship ties in such societies. Paige & Paige (1981) have shown that increasing production is associated with greater incidence of fraternal interest groups, i.e. groups of related males who defend valuable resources. Females in such societies become a valuable economic resource, and the economic production of the males is directly associated with their ability to control females. An economically successful male is able to have several wives and is able to provide for his sons, so that early marriage and polygyny are possible. The families who are unable to compete economically are gradually absorbed on unfavorable terms by the successful families.

The second point to be made is that the paradigm of sexual competition in human societies is exogamous, not incestuous as Freud thought. In all the cases of sexual competition described above, males compete for females who are at best distantly related, and in general unrelated. There is no reason at all to postulate an Oedipal scene as 'perhaps the most drastic mutilation which man's erotic life has in all time experienced' (Freud, 1930; p. 104), both because there is no evidence and no contemporary theoretical reason to suppose that sexual competition was ever incestuous, and because there is every reason to suppose that human erotic life survived the early stages of human evolution quite well, although an important sex difference should be mentioned. In societies with intense sexual competition, the erotic life of successful males is restricted only by political and economic considerations. However, as females become an ever more valuable sexual resource, there is increasing emphasis by males on female chastity, and great precautions are often taken to assure the virginity of females and the paternity rights of the males who invest in the females (Paige & Paige, 1981; Hrdy, 1981; Alexander, 1979; MacDonald, 1986). Thus the sexual life of females is often quite restricted compared with males—the familiar double standard.

Finally, regarding the question of the stability of sexually competitive societies, there is indeed evidence that such sexual competition can lead to instability, but this has clearly not prevented sexual competition. This would suggest that, if indeed such instability is an adaptive disadvantage, the amount of disadvantage was not sufficient to force group selection for lack of intra-group sexual competition. Paige & Paige (1981) show that the strong fraternal interest group societies are highly unstable. Fissioning is a continuous process as groups split off from each other in order to further their economic and reproductive self-interest. The expected associations between wealth, political power, and the control of females are a prominent feature of such groups, but without centralized political control, fissioning and feuding are endemic as individuals attempt to establish themselves in large kinship groups with a low average degree of genetic relatedness. In societies where centralized political control has been achieved, however, much more stability is possible and this is quite consistent with intense sexual competition. For example, in classical China dynastic families could maintain a huge reproductive advantage for hundreds of years by retaining centralized political control (MacDonald, 1983).

Having said all this, it should be noted that, although Freud's evolutionary logic does not square with contemporary theory or data, he is facing a difficult issue in human sociobiology. If the evolutionary logic applied above is correct, we would expect very intense sexual competition in pre-industrial Western Europe and that such competition would increase as productivity was increased with the industrial revolution. But Freud describes the situation in his day, quite correctly, I believe, as follows:

> (H)eterosexual genital love, which has remained exempt from outlawry, is itself restricted by further limitations, in the shape of insistence upon legitimacy and monogamy. Present-day civilization makes it plain that it will only permit sexual relationships on the basis of a solitary,

indissoluble bond between one man and one woman, and that it does not like sexuality as a source of pleasure in its own right and is only prepared to tolerate it because there is so far no substitute for it as a means of propagating the human race (Freud, 1930; pp. 104–105).

Freud perceived, correctly I will argue, that the present day situation represented a leveling phenomenon and tried to account for this phenomenon with the Oedipal scene discussed above. The result of this event was a sexually egalitarian social situation, in which the brothers suppressed their sexuality due to their grief over killing the father and the benefits of co-operation.

The thesis, then, is that monogamy in the West is the result of social controls which have the effect of leveling reproductive success and dissolving the strong associations between control of resources and reproductive success seen in so many societies. [See MacDonald (1983) for a detailed discussion.] It should be acknowledged that there are two sociobiological theories as to the origins of monogamy in the West. Van den Berghe (1979) and Alexander (1979) have argued that monogamy in the West is essentially an adaptive reaction to the industrial revolution. In such a highly competitive environment, it is an advantage for males to restrict their reproduction and concentrate on raising very few, highly competitive individuals. Monogamy is thus adaptive, because individuals with only one wife will be able to concentrate their resources on a few, highly competitive offspring.

Such a position is incorrect for several reasons, most importantly because there is no evidence for the K-selection argument given and because monogamy and its associated Christian ideology long predated the industrial revolution in the West. Moreover, such an account ignores the coercive aspects of monogamy in the West, an aspect which Freud was well aware of. Monogamy in the West has been associated with a wide range of social controls and religious ideologies which often resulted in the control of individual sexual behavior. Many examples of such controls could be discussed, ranging from battles between kings who wanted to practice polygamy and the Medieval Church, through the Puritan repression of sex both inside and outside marriage. In our own country, anti-bigamy laws have been in existence since colonial times, often with the death penalty attached, and the polygamous practices of the Mormon Church were severely repressed by Congressional legislation, Supreme Court opinion, and eventual police interference. As a further example, adoption of an egalitarian Western ideology by China has resulted in the establishment of monogamy and severe state controls on reproduction, in sharp contrast to the previous dynastic periods of Chinese history. Finally, the feminist movement is attempting to develop social controls which influence the role of women in society in a manner that would be virtually inconceivable in an intensely reproductively competitive society.

Freud's search for an evolutionary theory that would explain monogamy and restrictions on sex as a leveling phenomenon is thus rewarded, but the specific mechanisms he proposed are rejected. From a contemporary point of view, social controls are the result of attempts by a larger group to control behavior, and such controls can either increase or decrease the variance in reproductive success in the society. Leveling controls, such as monogamy, lower the variance in reproductive success, but human history is replete with social controls which increase this variance, as, for example, in classical China. Since such controls may apply to large groups, they can be quite insensitive to genetic variation and are consistent with the view that in general individuals attempt to maximize their fitness. They constitute an irreducible element of sociobiological analysis (MacDonald, 1983). Lamarckian inheritance and group selection are not required, although the latter cannot be ruled out completely by contemporary theoretical arguments.

Although the role of social controls is clear enough, Freud would also emphasize the importance of psychical reaction formations which reinforce the controls on sex. The family and society attempt to socialize the individual in such a manner that the instincts will be sublimated or frustrated. There is very good evidence to believe that socialization of this nature occurred and that the social controls on sex that have occurred in the West have been accompanied by an ideology that has emphasized the sinfulness of sexual functions. For example, Stone (1977), discussing Puritan attitudes toward sex in the seventeenth century, points out that in addition to very strong social controls on sex there was socialization which encouraged guilt and anxiety over sexual functions. The religious ideology surrounding these practices, including the fear of God, was a very effective means of motivation. From a sociobiological point of view, these data indicate a very powerful role of ideology in the service of social controls on sex and suggest the importance of socialization during development for developing effective social controls (MacDonald, 1983). Thus, the Freudian concern with the manner in which sexual functions are controlled within the family points to a very real and theoretically important phenomenon. Whether the results of such socialization practices are as Freud thought is a matter of empirical research.

The struggle of *Eros* and *Thanatos*

Freud concludes chapter IV of *Civilization and Its Discontents* by equating the desire for sexual contact with love. This love makes the male unwilling to be deprived of the female and is the motive for the Oedipal scene. The female's love is for her children, and together this love is the basis of civilization. Love for others outside the family is viewed as 'aim-inhibited love' because it is directed toward objects different from those for which it was originally intended. Civilization depends on this love, but it also depends on the increasing suppression of love, since the sublimated psychic energy required for the social bonds occurring in large human groups comes from this source, and in chapter V he notes that aim-inhibited libido is used to develop the ties of friendship required as the social cement of civilization. But what should force civilization along such a path?

The answer is that humans are not basically angels after all. There is an inclination towards aggression which shows itself in the fact that humans exploit others' labor, engage in war and rape, seize others' possessions and so on: '*Homo homini lupus*' (p. 111). The origin of this destructive instinct was thought by Freud to be an internal principle of self-destruction which could be turned outward:

> (T)he instinct is diverted toward the external world and comes to light as an instinct of aggressiveness and destructiveness. In this way the instinct itself could be pressed into the service of Eros, in that the organism was destroying some other thing, whether animate or inanimate, instead of destroying its own self (p. 119).

When directed outside the individual, there is a conflict between these destructive forces, which tend to tear human relationships apart, and the forces of aim-inhibited love which keep the social fabric intact. Freud maintains that

> the satisfaction of the (death) instinct is accompanied by an extraordinarily high degree of narcissistic enjoyment, owing to its presenting the ego with a fulfilment of the latter's old wishes for omnipotence. The instinct of destruction, moderated and tamed, and, as it were, inhibited in its aim, must, when it is directed toward objects, provide the ego with the satisfaction of its vital needs and with control over nature (p. 121).

As in the case of the sexual instinct, civilization must attempt to exert social controls on these aggressive instincts and must also attempt to keep them in check by psychical

reaction formations. This is the function of the superego which is derived from this repressed instinct.

By deriving aggression from an internally directed self-destructive instinct, Freud is prevented from taking a truly ecological view of aggression. Modern theorists have given considerable thought to senescence and life history biology, and this body of theory views the senescence of individuals, including death, as the result of natural selection for maximum reproductive success. [See, e.g. Emlen (1979).] This body of theory is quite separate from theories of aggression, and there is no modern reason to link them in the manner suggested by Freud.

Several sociobiologists have emphasized the role of aggression in human evolution, and Alexander (1979) has argued that the necessary and sufficient condition for the increasing size and complexity of human societies is predatory pressure from other human groups. According to this view, then, aggression is the main force resulting in larger groups, and does not necessarily tear groups apart as Freud theorized. Moreover, a modern view would propose that the impulse toward aggression does not conflict with the sexual impulse, but is indeed a principal means that human groups have used to increase their reproductive success. The invasions of the Mongols mentioned by Freud as an example of the destructive instinct resulted in a massive expansion of the territory under their control and huge harems for many of the males, and Chagnon (1979) pointed to the role of male violence in obtaining females among South American Indian groups. From a modern perspective, the control over nature and satisfaction of the needs of the ego have often gone hand in hand with reproductive success.

If there is no modern reason to connect life history biology with the theory of aggression as Freud did, there is similarly no reason to derive the basis of human social ties from the suppression of a sexual instinct. From a modern viewpoint, the social cement of human groups is thought to revolve around kinship and, in larger societies, social controls such as laws (Alexander, 1979). The proximate mechanisms involving kin selection in humans may indeed involve genetic systems involving affective relationships within the family, but there is no need to derive these from the suppression of a sexual instinct. As indicated above, the suppression of reproductive self interest is not a prominent feature of most human groups and can probably only be achieved by social controls on sexual behavior. The manipulation of the affective systems is quite another matter, and there is some evidence for complex interactions involving the affective systems, aggression, and reproductive self interest among human groups.

Before discussing these interactions, a modern theory of familial affective interactions will be sketched. From a modern viewpoint, the evolution of cohesive family units underlies the development of the affective systems. Several sociobiological theorists have posited that some of the affective responses to environmental stimulation are preprogrammed. Thus, Wilson (1975) speaks of the rewarding properties of stimuli as being due to natural selection operating on the limbic system of the brain, and Pulliam & Dunford (1980) and Barash (1977) argue that there has been selection for epigenetic rules which program for the subjective, affective response to environmental stimulation. The ethological theory of attachment (Bowlby, 1969, 1973) includes such rules, and MacDonald (1984) argues that such rules are of use in a general analysis of familial affective relationships.

The behaviors associated with parental warmth, the behaviors leading to secure attachment, and presumably love and sexual pleasure are thus analyzed as providing environments or eliciting environments which lead to subjectively pleasurable affective states in oneself or others. In ultimate evolutionary terms, such behaviors are adaptive

because they ensure the functioning of a cohesive family unit, paternal investment, etc., just as the epigenetic rules underlying taste are adaptive in acquiring nutritious food. Examples such as this suggest the general principle that there are epigenetic rules which result in subjective, affectively pleasurable experiences due to biologically adaptive interactions with the environment. This theoretical framework would suggest that during the evolution of the epigenetic rules underlying human behavior, there was a harmony between the affective consequences of environmental events within the family and their adaptiveness. Only if developing emotional dependencies on other people were maladaptive, would one expect them to be associated with negative affective states.

This theoretical viewpoint contrasts sharply with that presented in *Civilization and Its Discontents*. Here, the family is one of the main agents in the suppression of instincts. For example, the suppression of instincts by family rearing practices could result in the production of a character trait such as the anal personality which is highly valued in a civilized society. According to Freud, it is the sublimation or frustration of instincts, often within the context of family rearing practices, that is so characteristic of civilization, and it has already been suggested that anti-sexual socialization procedures may well be an important aspect of social controls on sex.

Sociobiological theory is quite compatible with the point of view that there will be conflicts of interest within families, since even though the members of families are closely related, they are not genetically identical (Trivers, 1974). Nevertheless, the fact that the epigenetic rules underlying human social behavior evolved within the context of the family makes it unlikely that there is something in the nature of familial interactions which necessitates the negative affective states typical of the frustration of instincts. Epigenetic rules involved in the production of affective states crucial to the cohesiveness of the family unit, the bonding of children to parents, paternal and maternal investment, etc., would be expected to involve selection for positive affective interactions within the family unit promoting these behaviors.

The problem pointed to by Freud is a real one, however. In many cultures, cool and hostile familial relationships prevail. Such a situation is surprising from the modern perspective described above. One possibility is that changing social conditions occurring at different points in human evolution have had a powerful effect on the affective interactions of families. These changing social situations result in a conflict between the evolutionarily derived epigenetic rules and behavior that is adaptive in a contemporary setting. As an example of such a potential conflict, Alexander (1979) has argued that in modern societies children growing up with non-related children could show more altruism toward them than would be predicted on the basis of theory. The epigenetic rules that evolved in small family groupings could be overriden in a society composed of many unrelated individuals.

As a further example, MacDonald (1984) has contended that this type of conflict is very important in human evolutionary history. On the basis of a large anthropological literature, it is argued that the affective systems underlying family functioning, which were adaptive in small, economically autonomous family groupings, became increasingly maladaptive as societies became more productive and social organization shifted toward extended kinship groups. In the latter type of societies, there is socialization for cool and hostile familial and personal relationships as individual males must integrate themselves into a wider network of kinship, a trend that is associated with a decreasing average degree of genetic relatedness among the individuals in the society. This decreasing genetic relatedness among the individuals within a social grouping gives rise to increasing conflicts of interest within the group and makes altruism within the group increasingly

maladaptive. For example, Paige & Paige (1981) pointed out that violence and feuding are common within and between large kinship groups. The economic and reproductive success of the individual depends on establishing himself in these large groups, often in competition with the father, rather than as a semi-autonomous family. The conflicts of interest inherent in such a situation and their affective consequences extend even to familial relationships, and socialization for violence, lack of altruism, and a general emphasis on cool and hostile emotional relationships within the family predominate:

> Every man is a potential head and, therefore, also a potential traitor to his lineage. In the words of an Arab proverb 'I against my brother; I and my brother against my cousin; I, my brother and my cousin against the next village; all of us against the foreigner' (p. 128).

The passage shows the affective consequences of such a social system, but it also shows quite clearly that sociobiologists did not invent the principle of inclusive fitness.

Again, however, as in the case of the suppression of sex by society and the family, there is a formal similarity between the Freudian idea of a conflict between the biological constitution of the individual and the family environment. Although the mechanisms for this conflict are completely altered in the modern view, the same question must be addressed.

A particularly interesting example of this tendency toward cool and hostile interpersonal relationships from the Freudian point of view is the finding that fathers tend to be closer to their children in cultures where polygyny and the extended family are absent (Katz & Konner, 1981). The data suggest that although the importance of sexual identity and triadic familial relationships are a constant part of the human condition, the Oedipus complex of Freudian theory, which emphasizes conflicts between fathers and sons, may be a cultural artifact deriving from the adaptiveness of cool or hostile relationships in economically productive societies where sexual competition and relatively distant intra-group genetic relationships prevail. As the passage from Paige & Paige (1981) suggests, there is competition between fathers and sons and among brothers in such societies. In our own society, where warm affective relationships within the family appear to be related to upward mobility (Kagan, 1979; MacDonald, 1986), we can expect a decreasing frequency of hostile father–son affective relationships. The Oedipal complex may be as historically transient as the hysterical female of Victorian times.

Conclusion

This exercise has been of interest because it shows how many of the interests of Freud coincide with those of modern human sociobiologists. This treatment says nothing about Freud's ideas on many of the mechanisms proposed by Freud or more recent psychoanalysts. It does rule out some of his mechanisms—for example, the idea that the social cement bonding people and societies together is an aim-inhibited sexual energy, the mechanisms involved in father–son conflict and the mechanism for development of aggression and the superego. Moreover, modern behavioral scientists have rejected many of his notions, especially the psychohydraulic model of energy flow so essential to *Civilization and Its Discontents*.

If one might be allowed a general criticism of Freud in *Civilization and Its Discontents*, it is his tendency to desire a philosophical sense of simplicity. This sense of simplicity resulted in attempting to derive all of the biological predispositions of humans from two basic instincts. When phenotypically diverse behaviors were in need of explanation, he was able to derive them from the more basic instincts by presuming a general psychohydraulic model: the suppression of instinct X results in behavior Y. As Sulloway (1979)

notes, such ideas were part of Freud's intellectual milieu and were even common in ethology until quite recently. In ethology, as in psychology, there has been a general disenchantment with such ideas as general explanatory principles of behavior.

As Sulloway (1979) points out, Freud was indeed a biologist of the mind. Unlike behavioristically oriented psychologists, he made the necessary attempt to link his theories of the proximal mechanisms involved in behavior with the ultimate explanations necessary for an integration with evolutionary theory, and in many cases the proximal mechanisms proposed appear to have been tailored to fit into the general evolutionary framework. If his ideas on how these links should be framed seem outdated by modern theory, they were in any case reasonable and certainly imaginative attempts given the theory available at the time. Moreover, we have seen that many of the modern arguments parallel his arguments in important ways. Freud asked many of the right questions, and these questions must be answered by any theory which attempts to explain historical and cross-cultural variations in behavior and to link these with evolutionary theory.

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