

The Establishment and Maintenance of Socially Imposed Monogamy in Western Europe

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Abstract

Although stratified societies have typically been characterized by intensive polygyny, socially imposed monogamy has developed in the stratified societies of Western Europe. Following a critical review of other theories of socially imposed monogamy, a multivariate, non-deterministic theory is developed. Within this theory a variety of internal political processes can result in socially imposed monogamy, but socially imposed monogamy, while consistent with evolutionary theory, is underdetermined with respect to 1.) evolutionary theory; 2.) human nature/nurture (i. e., the characteristics of humans); or 3.) external ecological variables. Data on the origins and maintenance of socially imposed monogamy in Western Europe are reviewed indicating that post-antiquity socially imposed monogamy originated in the late Middle Ages and has been maintained by a variety of social controls and ideologies since that period, including political activities of the Christian Church, and, in later periods, women and lower and middle status males. As a result of institutionalized controls on reproduction, non-monogamous Western sexuality has been directed at obtaining psychological rewards deriving from evolved motivational systems (e. g., sexual pleasure, excitement, feelings of dominance, status, or intimacy) but this non-monogamous sexuality has not typically been a major source of increased reproductive success.

The Establishment and Maintenance of Socially Imposed Monogamy in Western Europe

One of the most difficult and interesting problems in the attempt to provide an evolutionary account of human affairs is that of the origins and maintenance of socially imposed monogamy in Western Europe. There is excellent evidence for strong associations between wealth and reproductive success in traditional societies from around the world (e. g., Alexander, 1979; Betzig, 1986; Borgerhoff-Mulder, 1990; Dickemann, 1979; Chagnon, 1979; Daly and Wilson, 1983; Irons, 1983; Symons, 1979; van den Berghe, 1979). In addition, as a result of the highly productive economic base and larger political units, wealthy, powerful males in stratified societies were able to control very large numbers of females compared to polygynous males in intermediate societies or foraging societies. The elite males of the vast majority of the traditional urban societies of the world, including those of China, India, and Muslim and New World civilizations, often had hundreds and even thousands of concubines (Betzig, 1986, 1993; Dickemann, 1979; MacDonald, 1983; Weisfeld, 1990).

Intensive polygyny by wealthy, powerful males would appear to be a theoretically optimal male strategy in a stratified society (i. e., behavior which optimizes individual male reproductive success). Nevertheless, not all stratified societies have been characterized by intensive polygyny. The purpose of this paper is to show that there has been a strong trend toward monogamy in Western Europe since the Medieval period and to attempt to understand the mechanisms involved in both its origin and maintenance.

THEORIES OF SOCIALLY IMPOSED MONOGAMY

Alexander (1979) has introduced the term “socially imposed monogamy” (SIM) to refer to monogamy in economically advanced societies, and his usage will be followed here, although it should be noted that the term, as used here, carries no implications regarding the mechanisms involved in the origin and maintenance of SIM. The term, as used here, does imply that there are prohibitions on reproductive relationships outside of the legitimate, monogamous marriage.

Alexander's Theory of SIM

Alexander (1979; see also Alexander et al, 1979) proposes that monogamy and the sexual egalitarianism it represents are causal antecedents of societies at the nation-state level of political organization and therefore a general feature of such societies. Balance of power relationships are proposed as the necessary and sufficient explanation of all sizes of human groups. And as societies encounter larger and larger social groups, they are forced to impose rules which result in a leveling of reproductive opportunities in order to elicit cooperation and solidarity within the society in opposition to these external groups.

Critique. Masters (1989) shows that while military conquest may be responsible for the emergence of very large states, stratified state societies developed as a result of socioeconomic change prior to military conflict. Moreover, SIM apparently originated not in large empires but in small city-states (Herlihy 1991; MacDonald 1990), so SIM cannot be seen as an outcome of conflict between ever larger groups. Indeed, the vast majority of traditional stratified societies were in fact highly polygynous, and they often covered vast areas with very large populations (Betzig, 1986; 1993; Dickemann, 1979; van den Berghe, 1979).

Nevertheless, while a deterministic theory based on competition between increasingly large groups seems unlikely, it is certainly reasonable that egalitarian political and reproductive institutions may be one type of adaptive response to external pressure. Herlihy (1991) suggests that competition among the small, diffuse city-states of ancient Greece and Italy may have resulted in SIM.

Under conditions of acute competition, it was necessary to maintain the moral commitment and physical energies of the citizens. Such conditions favored the development of democratic and republican, rather than despotic institutions. The citizens whose moral commitment was essential for the welfare of the state had to be granted some participation in it. But another, equally crucial means of maintaining commitment and morale was to offer all citizens access to marriage. Not only would they gain the satisfactions of sexual union, but the rearing of the family and the acquisition of heirs would give them a large stake in the *salus populi*" (pp. 14-15).

This participation would be further facilitated if there were controls such that wealthy males were forced to be monogamous. Thus at Sparta there was a pervasive social, political and sexual egalitarianism among the Spartan citizens as well as high levels of social cohesion and intra-group altruism in the presence of virtually constant military activity (reviewed in MacDonald, 1988, 1990).

However, even if SIM originated in the West as a response to external threat among small city-states, data presented below indicate that external pressure is inadequate to account for the maintenance of SIM through historical time or for other instances of its origin.

Betzig's Division of Labor Theory

Betzig (1986) proposes a variation of Alexander's theory, suggesting that wealthy, powerful males adopt monogamy in order to elicit cooperation from others whose services are both essential and irreplaceable. Coincident with her belief that socially imposed monogamy dates from the industrial revolution, she proposes that monogamy resulted from changes brought on by the industrial revolution rather than external threat. "As industrialization has given rise to specialization, it may also have brought on reproductive concessions" (1986, 105). Individuals in power may have had to make concessions to valuable individuals, such as inventors, in order to enlist their cooperation.

Critique. No historical data are provided which indicate that SIM developed as a result of bargaining processes centering around the need for specialized, irreplaceable labor or that SIM originated with the recent rise of industrialization. In the following, data will be presented indicating that SIM developed far earlier than the industrial revolution and has been maintained by several different processes (see also MacDonald, 1983, 1990).

In addition, there is no reason to suppose that non-elite males could only become irreplaceable and essential as a result of the increased specialization brought on by industrialization. For example, the absolute necessity of enlisting Plebeian support for wars in early Republican Rome resulted in political concessions (e.g., Raaflaub, 1986).¹ (Indeed, such

¹. Raaflaub (1986a; pp. 226-227) notes that "At Rome...the deadly combination of external (enemy) and internal (plebeian) pressure forced the patricians to close their ranks, to limit and formalize their competition and to

bargaining may possibly have been involved in the origin of SIM in Republican Rome, although there is no historical record of this.) Similarly, Hopkins (1978) notes that the Roman aristocracy continued to avoid alienating the lower status citizens during the Late Republic and Early Empire in order to secure their cooperation during wars of expansion.

Conversely, the highly educated civil servants essential to running the Chinese Empire were either eunuchs or were provided sufficient resources to be highly polygynous themselves (Fitzgerald 1938; Van Gulik 1961). Historians of Medieval Spain have often emphasized the indispensability of Jewish courtiers to the king, especially in their role as tax farmers (e. g., Baer, 1961; Lea 1906-07). However, Jews, unlike the Christian nobility, were allowed to practice polygyny (Neuman, 1969).

A Multivariate, Non-Deterministic Perspective on SIM in Western Europe

MacDonald (1983; 1988; 1990) proposes that SIM in stratified societies is the result of a variety of internal political processes whose outcome is underdetermined by evolutionary/ecological theory. The structure of the theory is as follows: From the set of all propositions which do not violate anything we know about evolutionary theory, I have selected the ones which appear to be of empirical importance in the establishment and maintenance of SIM in Western Europe. Some of these propositions imply that individuals will have conflicts of interest regarding the social regulation of mating, and I then provide theoretical reasons for supposing that the outcome of conflicts of interest within human societies is underdetermined with respect to 1.) evolutionary theory; 2.) human nature/nurture (i. e., the characteristics of humans); or 3.) how external ecological variables affect human mating. The theoretical structure is thus explicitly multivariate and non-deterministic.

As a general illustration of this theoretical approach, consider the following: Evolutionary theory is highly compatible with the proposition that males within a society have conflicts of interest regarding the regulation of reproduction. I have noted that in general wealthy males

develop an extraordinary collective ethos and discipline, cohesion, and community-oriented value system. They could not do without the plebeians, but they rarely gave them a chance to exploit internal dissension, and they never made more than the absolute minimum of concessions.”

benefit by being able to maximize their control of females. However, their doing so opposes the interests of non-wealthy males, since these non-wealthy males would benefit from establishing a more egalitarian mating system. SIM qualifies as a relatively egalitarian mating system since wealthy males are prevented from maximizing their reproductive success by having concubines. An interest on the part of non-wealthy males in establishing an egalitarian mating system is therefore highly consistent with the principle of self-interest and the other central tendencies of human behavior predicted by evolutionary theory. Evolutionary theory is compatible with the idea that humans will not only attempt to maximize their own reproductive success but also with attempts to minimize the negative differential between their own success and that of others. One way of accomplishing this latter goal is to cooperate with groups which impose egalitarian social controls on the variance in male reproductive success.

Such a strategy of cooperation in an egalitarian group is expected to be the first choice of a relatively low ranking male, and in fact low ranking males are far more likely than wealthy males to have been supporters of economically egalitarian (socialist) revolutions in this century (e. g., the Soviet Union, China, and Cuba). The point here is that evolutionary theory (in combination with any known ecological variables and/or any set of universal, evolved psychological mechanisms) fails to predict the outcome of this conflict. From an evolutionary perspective, it is not the least surprising that conflicts of interest regarding the regulation of mating or economic activity occur in human societies. Social controls supporting mating or economic systems can vary along a continuum ranging from egalitarian to anti-egalitarian, and these different types of social controls are in the interests of different individual members of human societies. The successful imposition of social controls on others is always a possibility, but there is no reason to suppose that it is a necessity: If the Czar had won the war of the Russian Revolution, no evolutionary/ecological laws would have been broken, and there would be no violation of any of the principles of Darwinian psychology. However, the success of the revolution resulted in a very different type of society, with very different types of social control than would have occurred had the Czar won.

Advanced levels of economic production and political organization are thus quite consistent with both egalitarian and anti-egalitarian sexual customs. Conflict of interest over mating behavior depending on control of resources is predicted by evolutionary theory, but

whether intensive polygyny or SIM result from this conflict is underdetermined by evolutionary theory.

The Status of Social Controls and Ideologies in the Origins and Maintenance of SIM.

The theories of Alexander (1979) and Betzig (1986) are phrased in terms which suggest that SIM occurs because each male is pursuing his enlightened, uncoerced self-interest. However, the variables emphasized here posit a role for coercive processes in which wealthy males are prevented by social controls from optimizing their reproductive success. These social controls can range from the subtle effects of group pressure for conformity to laws or social practices prohibiting polygyny or penalizing the offspring of non-monogamous relationships (MacDonald, 1983; 1989; 1990). Stratified societies are characterized by the possibility of very stringent controls on human behavior, and Betzig (1986) presents many examples in which high levels of centralized political control (i. e., despotism) are associated with control over the persons and behavior of others.

Like SIM itself, social controls which regulate behavior are viewed as the outcome of internal political processes whose nature is underdetermined by evolutionary/ecological theory. Corresponding to this indeterminacy, these social controls may be quite insensitive to genotypic or phenotypic characteristics of the individuals to whom they apply and cannot be analyzed reductionistically (i. e., as a genetic characteristic of individuals). Thus whether or not one is altruistically inclined, one may be forced to pay taxes which support the poor. Similarly, whether or not one has the financial ability and desire to engage in intensive polygyny, one may be prevented from doing so by the types of social controls described below.

The indeterminacy of the outcome of the internal political processes resulting in social controls should be emphasized. Social controls can be influenced by historical events such as the outcome of battles, or the religious conversion or death of a leader which are themselves underdetermined with respect to evolutionary/ecological theory (See MacDonald, 1990). This principle is well-illustrated by the work of Donahue (1979) on the development of marital property law in England and France in the 13th century. Both countries had similar agricultural economies and a similar feudal social structure, as well as a similar ethnic composition and ecclesiastical influence. However, because of the success of the Norman invasion in the 11th

century, there were differences in the power of centralized political control between the two areas, with the king being much more powerful in England than in France, and there was a correspondingly greater power of aristocratic families in France as well as a generally greater importance of extended kinship groups in the latter area.

Notice the rich interplay between evolutionarily expected tendencies and historical circumstance here. Kinship is expected to be of great importance in an evolutionary account of human affairs, because of its role in lowering thresholds of cooperation and altruism within the group. This power of the extended family, however, conflicts with the power of centralized authorities, and in this case the outcome of this conflict was influenced by the outcome of a particular battle. The point here is that the relatively stronger central authority in England cannot be meaningfully related to what we think of as ecological variables. However, *given that certain events occurred*, then the disintegration of extended kinship is expectable.

Similarly, the general finding that wealthy males in stratified societies tend to be intensively polygynous is not surprising given the evolutionary theory of sex and the fact that despotism with intensive polygyny may be viewed as an individually optimal male reproductive strategy (Dickemann, 1979). This finding must, however, be viewed as a *probabilistic* rather than a determinate result. Although it is expected that wealthy, powerful males will indeed attempt to engage in intensive polygyny in stratified societies and may often have the power to do so, their ability to do so may conflict with the perceived interests of other members of the society. As a result, while there is no theoretical reason to suppose that reproductive despotism will always prevail, there is excellent reason to suppose that the cards will tend to be stacked in its favor. In light of the preponderance of intensive polygyny among the stratified societies of the world, SIM must be seen as a low probability outcome of social conflict in these societies, but one whose probability may well have been increased by ecological circumstances such as the diffuse, highly fragmented structure of the ancient Mediterranean city-states.

The social controls regulating the imposition and maintenance of monogamy are typically embedded in ideology. While social controls emphasize the idea that behavior is often controlled from outside the individual, personal ideologies emphasize the idea that factors internal to the individual, such as an individual's personal beliefs, norms, and attitudes, often rationalize

behavior and provide a proximate mechanism of motivation. An evolutionary analysis proposes that individuals tend to believe what is in their self-interest (e. g., E. O. Wilson, 1978), and there is certainly a large main effect of this phenomenon in the psychological literature (e. g., Krebs, Denton and Higgins, 1988). However, like social controls, ideologies can be relatively insensitive to individual self-interest and are underdetermined by evolutionary theory (see also Boyd and Richerson, 1985).

The main reasons for supposing that ideology often acts in this manner are that ideologies often characterize an entire society and they are often intimately intertwined with various social controls. Like social controls, their imposition is conceptualized as the result of complex, internal political processes rather than the result of external ecological contingencies. To the extent that an ideology characterizes an entire society it becomes insensitive to individual self-interest and to the extent that it is reinforced by social controls it is possible that individuals who do not benefit from adopting the ideology will be socialized to do so. As in the case of social controls and also because ideologies are so often intricately bound up with social controls, it is not possible to predict which ideology will prevail in a particular society. Ideologies may be egalitarian or anti-egalitarian. They may promote the deregulation of human behavior or they may foster strong social controls on behavior. Like social controls, personal ideologies are strongly influenced by complex, group-level political processes and are thus not analyzable in a reductionistic manner as solely the property of an individual.

The stress placed here on internal political processes in understanding the social controls and ideologies underlying SIM may be seen as examples of group-level processes. There is no theoretical problem with supposing that coalitions can form within human societies and that individuals within these groups can then attempt to impose monogamy on their members or on other groups. While the social imposition of monogamy is emphasized in this essay, it is also worth describing the existence of a significant level of socially imposed altruism in pre-industrial English society. (Since socially imposed altruism is coerced, it is not true altruism.) At a theoretical level the social controls and ideologies maintaining these practices are formally identical to the theory of SIM described here (see also MacDonald, 1988, 289ff). While the evolution of uncoerced altruism is theoretically problematic and continues to receive a great deal

of attention (see D. S. Wilson, 1989; Wilson, Pollock, and Dugatkin, 1992), socially imposed altruism, like SIM, need not have developed as a result of natural selection favoring altruistic groups (Wilson and Sober, 1994).

Hill (1967; see also Gilchrist, 1969) notes a long tradition dating at least from Medieval times in which the Church and the wealthy had a responsibility to help maintain the poor, but which was gradually transformed in the 16th century to a governmental responsibility. Of particular interest are instances where altruism was socially imposed on propertied individuals. Laslett (1983; see also Quaife, 1979) notes that solvent households took in paupers as servants, perhaps as official village welfare policy, and also notes the commonness of transfer payments from the households of the more prosperous to the less prosperous during the 17th and 18th centuries.² During this period parishes were responsible for taxing the wealthiest third of the population to support the indigent (Stone 1992, 14).

Because of increased internal solidarity and cohesiveness, groups characterized by SIM and/or socially imposed altruism may well have increased reproductive success compared to groups in which individuals (and especially wealthy, powerful individuals) are free to pursue individually optimal reproductive strategies. The occurrence of such groups is proposed to be the result of internal political processes rather than group selection, but if such groups occur, their existence could then result in natural selection between groups. Whether or not these groups have increased reproductive success compared to groups without SIM (or socially imposed altruism) is an empirical question, but the evidence provided here indicates minimally that groups which

². However, this socially imposed/customary altruism was far from complete in 17th century England, and in fact the period is generally thought of as far less generous and far more demanding of the poor than was the case in Medieval times (Hill 1967). Quaife (1979) finds that individuals who had been forced to accept apprentices and servants sometimes responded by treating them very badly, and data reviewed below indicate that the authorities strongly discouraged illegitimate offspring because these individuals would have to be supported by the poor rate. Nevertheless, the parish, while acting strenuously to avoid having to support bastards, did in fact accept responsibility to support bastards with no other source of support—clearly an example of rather reluctant altruism toward bastard bearers and their children. “If through illness or infirmity the woman were unable to look after the child, then the parish had to help. In cases where the mother had fled and responsibility could not be sheeted home to master, kin or local officers, the parish had to bring up the child” (Quaife, 1979; p. 234).

maintain a significant degree of reproductive leveling can persist for long periods of historical time, so that the understanding of such groups must therefore be considered an important area of inquiry by evolutionists (MacDonald, 1994a).

While there remain imposing theoretical reasons to suppose that group level evolution is relatively uncommon among animals, human groups are able to regulate themselves (via social controls and ideologies) so that theoretical possibilities regarding invasion by selfish types from surrounding human groups or from within can be eliminated or substantially reduced. Within this perspective, SIM, like socially imposed altruism, is a cultural invention. And unlike the situation with animals, powerful social controls acting within the group can prevent cheating and ensure the viability of group processes. I need not deny, therefore, that genes for altruism are always selected against within groups. *The present treatment does not dispute this fundamental result. It therefore remains theoretically agnostic regarding the importance of natural selection between groups for altruism in human evolution.* The point here is that the typical difficulty which models of group selection face (that the forces of population regulation inevitably lead to the evolution of selfishness (Wilson, Pollock and Dugatkin, 1992)) can be circumvented in human groups: Wealthy individuals can be forced to be monogamous and/or provide some of their resources to others.

Variables important for the establishment and maintenance of SIM. It is a major advantage of the present approach that it is able to accommodate a wide variety of internal political processes leading to SIM (see MacDonald, 1990). Specifically, there appear to be five qualitatively different mechanisms which are theoretically plausible candidates as influences on the development and/or maintenance of SIM: 1.) As Alexander suggests, aristocratic males may accept SIM in order to elicit the support of the lower orders in a situation of external threat; 2.) as Betzig suggests, the aristocracy may accept SIM in order to elicit cooperation with the lower orders for other reasons, such as the indispensability of the lower orders in performing particular functions not necessarily related to external threat.

Both of these mechanisms imply no conflicts of interest within the society: all classes, and in particular wealthy males for whom monogamy is problematic, are proposed to benefit from SIM. However, the difficulty is that there is no empirical evidence for the importance of these

mechanisms in the period under consideration (roughly from the Medieval period to the 19th century). Here evidence will be provided for the importance of the following mechanisms: 1.) political activity by lower or middle status males aimed at reproductive leveling via the social imposition of monogamy; 2.) political activity by females or their relatives; 3.) the emergence of the Christian Church as a powerful, highly collectivist institution which was able to impose monogamy on the secular elite.

Two of these proposed mechanisms require comment. Regarding the proposal that females could be an active force in favor of SIM, the evolutionary theory of sex does not predict that monogamy and sexual egalitarianism among men should be goals of women, and indeed Brundage (1987) and Wemple (1985) note that abolishing polygyny and concubinage in Medieval Europe resulted in many women being unable to negotiate reproductive alliances. The theory underlying female choice and polygyny threshold models (Orians, 1969; Trivers, 1972; Verner and Willson, 1966) suggests females will often benefit by entering a polygynous relationship with a wealthy male rather than a monogamous relationship with a poor one. Nevertheless, this female interest conflicts with the interests of other females (and their relatives) in monopolizing the investment of the wealthy male, and there is evidence that this latter interest was triumphant on some occasions at least. A common practice among Jews beginning in the ancient world and at least until the end of the 15th century in Spain was for the *ketubah* or marriage contract to stipulate that the man could not marry another woman (Epstein, 1942; MacDonald, 1994a; Neuman, 1969). This stipulation guaranteed the interests of the woman's family in not diluting the inheritance of their grandchildren, and was necessary because there were no religious prohibitions on polygyny.³ Moreover, exceptions were sometimes made if there were no children or if the wife had not given birth to both a son and a daughter (see, e. g., Finkelstein, 1924, 305) for examples from 16th century Italy).

Women may support monogamy for other reasons, including the perception that polygyny lowers the social status of women—a view for which there is considerable support (e.g.,

³. Although Askenazi Jews were prohibited from engaging in polygyny beginning around the 11th century, polygyny (and concubinage) continued among Jews in Spain until the expulsion, and among Sephardic and Oriental Jews into contemporary times (Ahroni 1986; Epstein, 1942; Goldberg 1989; Neuman 1969).

Dickemann, 1979). In any case, evidence presented below indicates that women have at times directly supported institutions favorable to monogamy in Western Europe. This influence may also have occurred during antiquity. Wealthy women were prominent contributors to the early Christian Church and may well have been crucial to its success (e. g., Brown, 1987, 1988; Drijvers, 1987). Monogamy, chastity and sexual decorum represented the most prominent features of the public image of the early Christian Church (reviewed in MacDonald, 1990). “Celibate bishops, largely supported by wealthy women, based their prestige on the ability to nourish...the faceless, profoundly anticivic rootless and abandoned poor” (Brown 1987, 280).

The point here is that whether these goals are presently adaptive or whether they result from evolved psychological predispositions which are maladaptive responses to a novel environment, the effort to attain them must be understood as involving internal political processes which effectively support SIM. There is clearly no evolutionary law which implies that women cannot attain their political goals, although there is a clear evolutionary rationale for why these goals may be very difficult to attain. Because the stakes of sexual competition are generally much higher for males, it is expected that in sexually competitive societies males will attempt to control females and that females will have low social status. This is indeed the case (e. g., Low, 1992). However, Low (1992; see also Irons, 1983) provides several examples where females have significant political power and an example in which the low level of polygyny in the society was attributed in part to female opposition to the practice.

Regarding the emergence of the Christian Church as a powerful, highly collectivist institution which was able to impose monogamy on the secular elite, there is agreement among historians that SIM in Western Europe originated as a result of conflict between the ecclesiastical authorities and the lay aristocracy. The Church was “the most influential and important governmental institution [of Europe] during the medieval period” (Ullman, 1970, p. 1), and a major aspect of this power over the secular aristocracy involved the regulation of reproductive behavior. Thus Herlihy (1985) finds that the major influence against polygyny in the Middle Ages was Christian sexual ideology combined with a vigorous campaign against the nobility to control marriage with the result that the same rules of sexual and domestic conduct were imposed on both rich and poor. Duby finds that marriage was “at the heart of the great political question of the age:

the fierce struggle of the spiritual power to dominate the temporal” (Duby, 1978, p. 21; see also Brundage, 1987; Gies and Gies, 1987; Goody, 1983; Wemple, 1985). Duby (1983) notes that the controls “required above all that laymen, especially the most powerful among them, should submit to the authority of the Church and allow it to supervise their morals, especially their sexual morals. It was by this means, through marriage, that the aristocracy could be kept under control. All matrimonial problems had to be submitted to and resolved by the Church alone...” (p. 162). Goody (1983) further emphasizes the point that prohibitions on endogamy, adoption, polygyny, concubinage, divorce and remarriage all diminished the chances of leaving heirs with the result that the Church inherited large amounts of property and attained political power. These mechanisms for the ecclesiastical imposition of monogamy are described below.

The evidence, then, indicates that SIM resulted from conflicts of interest between the aristocracy and the ecclesiastical authorities, with the main goal of the Church being that of becoming a wealthy, powerful institution. Ecclesiastical power over secular rulers originated as an aspect of Christian religious ideology in the fourth century (Ullman, 1970, p. 13), but actual ecclesiastical power over secular rulers was quite variable, peaking from the mid-11th to a high point in the early 14th century (e.g., Lynch, 1992, p. 181; Schimmelpfennig, 1992) at a time which coincides with the culmination of the long attempt by the ecclesiastical authorities to regulate the marriage and reproductive behavior of the elite.⁴

⁴. As further evidence of conflicts of interest between the Church and the medieval aristocracy which support the general proposition that the Church was an independent political actor during the period rather than merely an agent of secular political power, the Church made vigorous and ultimately successful attempts to exclude Jews from the social, political, and economic life of much of Western Europe (e. g., 1989; MacDonald, 1994a). These efforts were often directed at the gentile aristocracy who profited economically from the presence of Jews. For example: “(I)t has been brought to our notice that certain princes do not have their eyes upon the Lord, . . . for, while they themselves are ashamed to exact usury, they receive Jews into their villages and towns and appoint them their agents for the collection of usury; and they are not afraid to afflict the churches of God and oppress the poor of Christ (Letter from Pope Innocent III to the Count of Nevers [1208]; in Grayzel 1933, 127). One aspect of King Louis IX’s campaign to make France into a Christian state was to go even beyond the Church’s directive to enforce moderate interest rates by Jewish moneylenders and attempt to ban Jews from this occupation altogether (Cohen 1994, p. 86).

While an attempt to develop an evolutionary theory for the development and historical course of the Church is beyond the scope of this paper,⁵ the concerns with power and wealth are certainly comprehensible from an evolutionary perspective. Moreover, there is considerable evidence that nepotism played a role of varying importance in ecclesiastical politics throughout the medieval period until the 19th century (Schimmelpfennig, 1992, pp. 81-82). During the early medieval period bishops were known to give Church properties to their relatives who provided them with their office (Tellenbach, 1993, p. 85), and a common saying had it that “the Lord has taken away our sons and has given us so many nephews” (in Lynch, 1972b, p. 199). Religious office was thus at times rather explicitly linked to reproductive interests, and these reproductive interests were also served by the transfer of wealth from transalpine populations to Italian religious personnel (Schimmelpfennig, 1992, p. 184). Moreover, the Church provided an important source of unity for the monarchies of the period and thus often served their political interests in competition with the aristocracy. The Church not only fostered a uniform set of popular beliefs, but, since the high clergy most closely associated with the king derived from the aristocracy of the kingdom as a whole, the Church also fostered a supra-ethnic, supra-regional unity to the society (Lynch, 1992, p. 71; Tellenbach, 1993, p. 58). Eventually church and state became so closely intertwined that secular rulers came to view their own interests as involving the continuation of significant ecclesiastical power because to attack the church would result in an immense social upheaval (Southern, 1970; p. 50).

⁵. An adequate theory must take account of historical variation in the character and circumstances of the Church.

Although the Church represented the interests of women and lower and middle status males in reproductive leveling during the Roman empire (see MacDonald, 1990), these factors do not account for the institutionalization of the Christian Church as the official state religion in the later Roman Empire nor do they account for the power of the Church during the Middle Ages. Along the lines of Balch (1986), one might suggest that the Church be conceptualized as a celibate civil administrative body. However, secular and religious administration were typically separate both during the Roman Empire and into the Medieval period. The civil administrative role of the Church did not originate until the end of the 6th century, and there was much variation in later periods in the extent of this role (e.g., Davis, 1988, p. 76ff). The actual level of celibacy among the lower secular clergy remained quite low and was a target of reformers well into the high Middle Ages (see below), and in the later middle ages the papacy required marriage of the lower clergy in eastern areas (Brooke 1956).

Nevertheless, despite the undoubted importance of nepotism and political and economic factors for developing an evolutionary conceptualization of ecclesiastical power, other factors must also be considered, including the role of popular acceptance of ecclesiastical legitimacy in facilitating ecclesiastical control over secular rulers. Popular attitudes supporting the legitimacy of ecclesiastical power were an important factor which facilitated the effectiveness of excommunication as a mechanism for controlling the behavior of the secular elite (e. g., Davis 1988, 330; Lynch 1992, 144). Popular acceptance of ecclesiastical power was undoubtedly facilitated by ecclesiastical manipulation of evolved systems associated with dominance and subordination and the redirection of kinship behaviors toward loyalty to the organization, as discussed extensively by Johnson (1986) and Salter (1995). For example, during the peak of ecclesiastical control over secular authorities, the papacy adopted symbols associated with secular Roman political power (the tiara, porphyry, imperial purple, burial in imperial sarcophagi) and developed ceremonies emphasizing the subordinate role of secular rulers (Schimmelpfennig, 1992).⁶

Popular acceptance of ecclesiastical influence appears to also have been greatly facilitated by the public appearance of the Church as not pursuing the reproductive interests of its own personnel. Although the celibacy of religious personnel remained a theoretical ideal throughout the Middle Ages, it was more common in the higher clergy and in religious communities than among the lower clergy, especially those living in rural areas (Tellenbach, 1993:90). Indeed, prior to the successful reform movements of the High Middle Ages, it was not uncommon for clerics to have several concubines. Writing of the Frankish Church in 742, Saint Boniface complained to the pope about “so-called deacons who have spent their lives since boyhood in debauchery, adultery, and every kind of filthiness, who entered the diaconate with this reputation, and who now, while they have four or five concubines in their beds, still read the gospel” (in Lynch, 1972a:33). And in the tenth century, Atto of Vercelli castigated his clergy “for flaunting their harlots in public, for stealing from the Church and the poor to adorn them, and for leaving church property to their

⁶. Tellenbach (1993, 93) notes that the priest was likely to be more literate than the congregation and thus command respect. In Scandinavia, the population was very impressed by the candles, incense, chants and bells associated with religious service, and in England, “the ecclesiastical sphere was allegedly the quintessence of all things beautiful: the church buildings themselves; the liturgical utensils; the priests who could read English and sing in Latin.”

illegitimate children” (in Lynch, 1972a:37). Moreover, even during the High Middle Ages, many religious personnel were younger sons, undowered daughters, and other individuals with poor chances of reproductive success. Thus it was common for noble and royal families to have non-inheriting sons enter a religious career, and such individuals would be likely to become members of the highest levels of the clergy (e.g., Tellenbach, 1993:59).

Nevertheless, reform among the secular clergy was real. No English prelate of the thirteenth century is known to have had a wife or family (Moorman, 1955:64). Brooke (1956:53) found that married clergy even at lower levels were exceptional by the second half of the thirteenth century in England, and low levels of clerical incontinence continued into the Reformation period (Lynch 1972b:204).

Moreover, the image of reproductive altruism was central to the public image of the Church. During the tenth and eleventh centuries thousands of monasteries were founded. Monks were often recruited from aristocratic families who placed non-inheriting sons in monasteries at an early age (e.g., Miccoli, 1990). Whatever the motivations involved, these societies of celibate and ascetic males “set the tone in the spirituality of the whole church, in education and in art, [and] in the transmission of culture . . .” (Tellenbach, 1993:101). Miccoli (1990: 53) notes that five of the six popes during the critical reform period from the late eleventh to the early twelfth century had a monastic background and that their influence

reflected a powerful cultural movement to gain command of all life in society and organize it according to monastic views. The legacy of the church Fathers and the early Middle Ages was reinterpreted and reformulated in terms of monastic hegemony: theology, cosmology, anthropology, morality, and the law were recast to provide a foundation and a justification for the preeminence of monks within the rigid social categories that subdivided and disciplined society.”

Critical to this monastic perspective was “a tendentious negative judgment of any human category that did not have chastity—or at least an unmarried state—as its first requirement” (Miccoli 1990:54). The image of monastic altruism was also fostered by an ideology in which the prayers of monks were believed to aid all Christians (Lynch, 1992:131-132). These orders provided a very popular public image of the Church at least during the early Medieval period (Davis, 1988:261ff; Lynch, 1992:131).

In addition, during the thirteenth century, mendicant friars (Dominicans, Franciscans) were instrumental in reforming the Church to extend the power of the Pope over the Church, to enforce rules on clerical celibacy, to prevent nepotism and simony (the buying and selling of Church offices), and to make the Church supreme over secular powers and not subject to their influence (see Lawrence, 1994).

The fact that ecclesiastical reform movements over a period of several centuries always focused with varying degrees of success on the issues of clerical celibacy and simony (including nepotism) is good evidence that an important source of ecclesiastical legitimacy underlying the Church's influence and control over the reproductive interests of the secular elite resulted from the appearance, if not always the reality, of reproductive altruism in its own ranks. For example, Lawrence (1994:126) notes that "(t)he voluntary poverty and self-imposed destitution that identified the early Mendicants with the humblest and most deprived sections of the population, in loud contrast to the careerism and ostentation of the secular clergy and the corporate wealth and exclusiveness of the monasteries, moved the conscience and touched the generosity of commercial communities."

It is one of the most remarkable phenomena in the whole of history that in the high middle ages . . . many members of the highest and wealthiest or at least prosperous strata of society, who had the best chances of enjoying earthly pleasures to the full, renounced them. . . . The flow of new candidates was particularly impressive in those places where the rules of monastic life had been restored to their ancient strictness, imposed more rigorously or even redefined more severely. . . . We must assume that the main motive for the choice of a monastic life was always the eschatological ideal of monasticism, even if this may have lost something of its driving force in the course of a long life or was mixed with other motives from the start. (Tellenbach, 1993:103)

During the thirteenth century, the mendicant friars, who were typically recruited from the aristocracy, the landed gentry, and mercantile and professional families, often had parents who disapproved of their decision—an indication that they often did not view the celibacy of their children in positive terms: "It was a nightmare for well-to-do families that their children might become friars" (Southern, 1970:292). These families began to avoid sending their children to universities because of well-founded fears that they would be recruited into a religious life (Lawrence, 1994:127). Monastic standards of appropriate behavior then set the standard for other Christians, including especially the clergy and the members of lay confraternities of the mendicant

orders (many of whom were wealthy and high-born) who adopted the ascetic lifestyle of the mendicant orders with the exception that they were married (Lawrence, 1994:112ff). Eventually, for the clergy, “not to follow these models was increasingly a matter for silent or even noisy reproach” (Tellenbach, 1993:105).

St Francis and St Dominic . . . gave to the Church a new form of religious life, which had an immense and permanent appeal, and one which both attracted a new type of recruit and in its turn inspired an apostolate to the laity, to the heretic and to the heathen. Not only did the appearance of the friars rescue the western church from its drift toward heresy and schism, but the new warmth of devotional life, the preaching, the confessing and the daily counsel of the friars gave a new strength to the lower level of Christian society and indirectly acted as a powerful agent of spiritual growth and social union, thus inevitably compensating for the growing power of legalism and political motives at the higher levels of church life. (Knowles and Obolensky, 1968:345; see also Moorman, 1955:373, 389).

There is no reason to suppose that the monks and friars were pursuing individually adaptive reproductive strategies by advancing a movement which resulted in powerful controls on the reproductive behavior of the secular and ecclesiastical elite. Betzig (1992b:376) argues otherwise, stating that clerical control of secular reproductive behavior was the result of conflict within families in which celibate religious personnel benefited by restricting the reproductive opportunities of their non-clerical siblings because there would be a greater possibility that they would inherit in the absence of an heir either indirectly, because of bequests to the Church, or directly as a back-up heir.

However, such a strategy would be extremely maladaptive. The most obvious way for a celibate cleric to increase his RS would be to help his non-celibate brother maximize his RS by engaging in divorce and unlimited concubinage. Even if the cleric were to succeed in inheriting the estate from his heirless brother, his reproductive chances would be severely restricted by the same ecclesiastical rules which limited his brother. Thus the cleric may be viewed as choosing between the following alternatives: allowing his brother to have a series of wives and a large number of concubines and their many children, while he remains celibate; or allowing the brother

to have only one wife and (hopefully) no children so that he might have one wife and (hopefully) several children. The latter strategy would be wildly maladaptive.⁷

Medieval Christianity is best conceptualized as a collectivist society in the sense of Triandis (1990, 1991). Collectivist cultures (and Triandis (1990:57) explicitly includes Medieval Christianity in this category) place a high emphasis on the goals and needs of the group rather than on individual rights and interests. Ingroup norms and the duty to cooperate and submerge individual goals to the needs of the group are paramount. Collectivist cultures develop an “unquestioned attachment” to the group and view themselves primarily in terms of group membership. As Lynch (1992:131) notes, Medieval Christians viewed themselves as members of a unified group “which was conceived as the people of God or the church.” The reformation movements of the eleventh to the fourteenth century resulted in a highly collectivist Christendom—“a single social organism” (Lawrence, 1994:157)—unified under the pope, substantially independent of secular power, and with a strong influence over the reproductive behavior of the secular elite. During the thirteenth century, the mendicant friars were central agents in the development of this collectivist world view, and Cohen (1982:264) points out that they had well developed anti-individualist views in which people were to strive for the benefit of the entire society. The friars were very popular among all sectors of society and their work imparted a cohesiveness and sense of community to the society as a whole (Knowles and Obolensky, 1968:345; Moorman, 1955:373, 389). While the evolutionary basis of group processes remains a fairly unexplored area, several investigators have suggested that there are evolved facultative psychological mechanisms which predispose individuals to join or form cohesive, collectivist groups, especially under conditions of perceived external threat (MacDonald (1994a, 1994b; van der Dennen, 1987, 1991; Wilson and Sober, 1994).^{8,9}

⁷. In addition, there is no evidence that clerics, and especially those in the monastic orders (who tended to derive from the more prosperous strata of society) typically acted as back-up heirs who were then able to marry. (On the other hand, I have noted that there is evidence that wealthy families sometimes attempted to prevent their children from joining these orders.) Moreover, simply inheriting property indirectly via bequests to the Church would not increase the cleric’s RS since the monks and friars remained celibate and did not personally own church property.

⁸.

The data suggest, therefore, several links between evolved psychological mechanisms and ecclesiastical control over secular reproductive interests during the medieval period. Individuals in the high secular clergy were often motivated by desire for wealth and power, and they engaged in limited, fairly submerged nepotism. Many of the secular clergy, and especially the lower secular clergy, continued to engage in reproductive relationships, at least during the early Middle Ages. The Church successfully manipulated ecclesiastical symbols of dominance. Moreover, the Church provided the appearance as well as significant reality of reproductive altruism in its own ranks which were critical in obtaining popular and aristocratic support of ecclesiastical authority. The aristocracy also benefited from ecclesiastical authority because of its utility in cementing and unifying secular political power. And finally, evolved psychological mechanisms related to group cohesion and the creation of collectivist groups were successfully triggered. Other mechanisms, of course, may be involved. Nevertheless, given the widely accepted principle that evolved motivational systems need not be linked with reproductive success in environments that postdate the environment of evolutionary adaptedness (EEA), the foregoing suggests that an evolutionary analysis of the medieval Christian Church presents no insurmountable difficulties.

SOCIAL CONTROLS AND IDEOLOGY MAINTAINING SIM IN WESTERN EUROPE

The purpose of the following is to briefly summarize historical data on the origins and maintenance of SIM in Western Europe in the post-Roman period (See also MacDonald, 1990). I will also attempt to provide a few glimpses of some of the motivations of the various interest groups involved in these political processes. While a detailed account of these interest groups and the extent of their influence on political processes is beyond the scope of this essay, the examples provided are sufficient to establish the general theoretical approach described above.

Western European monogamy appears to derive ultimately from classical Roman civilization (Herlihy, 1991; MacDonald, 1990). The social controls and ideologies underlying Western SIM underwent a major development in the Middle Ages, especially with the development of the canon law of marriage, and these social controls and ideologies survived the

Reformation and indeed “medieval sexual morality became the paradigm for modern Western assumptions about human sexuality that remain by and large intact” (Brundage 1987, 579).

Like many other traditional stratified societies as well as the intermediate-level clan societies, the emerging European aristocracy in the early Middle Ages practiced resource polygyny (Brundage, 1987; Geary, 1988; Goody, 1983; Herlihy, 1985) and this practice continued in areas, such as Scandinavia, where Christian influences were late in coming (Frank 1973; Jacobsen 1982). However, in Western Europe the Church adopted an ecclesiastical model of marriage which was diametrically opposed to the reproductive interests of the aristocracy. As a direct result of these efforts, there was a transformation of family structure and the social imposition of monogamy by the Christian Church by the end of the twelfth century (Brundage, 1987; Duby, 1978; 1983; Gies and Gies, 1987; Herlihy 1985; Wemple 1985). The following factors appear to have been most important in the imposition and maintenance of SIM:

Prohibitions on Divorce

Serial monogamy can result in a very large variance in male reproductive success (Flinn and Low, 1986), and, because of their value on the marriage market, wealthy males benefit most by being able to divorce easily. While divorce was common in other Eurasian societies and was legal among the pre-Christian tribes of Europe (Goody, 1983), the Church’s point of view was that marriage was monogamous and indissoluble. Divorce became ever more restricted under the Christian Roman emperors (Phillips, 1988), and between the 9th and the 12th century the Church engaged in a successful conflict with the aristocracy centering around a series of divorce cases involving the nobility (Brundage, 1987; Duby, 1978; 1983; Gies and Gies, 1987; Wemple, 1985; reviewed in MacDonald, 1983; 1990).

Although aristocratic marriages could be ended by various subterfuges, such as consanguinity or precontract, the Church’s policy on divorce clearly had an effect on the marriage practices of the aristocracy. The extensive prohibitions on incest provided a convenient grounds for divorce, but Goody (1983) comments that this method of dissolution was not in fact common, and Helmholz (1974) notes the difficulty of showing consanguinity as well as the reluctance of the Church to grant divorce on this basis after the Fourth Lateran Council of 1215 (see also Gies and

Gies, 1986; Hanawalt, 1986; Houlbrooke, 1979; Phillips, 1988; Sheehan, 1971). Moreover, the goal of successful divorce was typically to obtain a male heir in cases where the first marriage had failed to produce one (e. g., Louis VII and Eleanor of Aquitaine in Medieval France, as well as the turmoil of Henry VIII's marriages in Renaissance England). Prior to 1749 in England fully 85% of Parliamentary divorces were on behalf of childless, wealthy males who wanted heirs to their estates—their sole purpose being “to protect patrilinear legitimate descent of honours, titles, and great estates” (Stone, 1990, 328). Divorce “was virtually impossible except for a handful of the very rich” (Stone 1990; p. 4) in England until the reform of 1857, and, as noted below, even kings such as Charles II and George IV did not divorce even though they lacked heirs.

There is evidence that after the decline of ecclesiastical control in England, elite and middle class women were important interest groups favoring no basic change from the traditional anti-divorce customs. These women feared that divorce would result in desertion and economic loss (Stone, 1990, pp. 16, 373, 384)—a fear which has been amply confirmed in recent times (e.g., Stone, 1990; p. 420). (Working class wives remained suspicious of divorce throughout this period, but had no influence on the political process.) Other women's interest groups focussed on recognition of women's economic interests during separation or divorce (Stone, 1990, p. 373).¹⁰

There is also some indication of a role for male interests in controlling the reproductive behavior of females and other males. Phillips (1988) describes a variety of motivations in the anti-divorce legislation of the Bourbon restoration in France, including male fears that allowing divorce would lessen male authority in the family. In England, the fear that legalizing divorce would result in large scale serial monogamy by promiscuous males continued to be apparent in arguments over divorce in England up to the 19th century (Stone, 1990; p. 351, 384). When English and French divorce laws were finally liberalized in the 19th century, a main purpose was to reduce adultery and shore up the nuclear family (Stone, 1990; Phillips, 1988).

¹⁰. Phillips (1988; p. 495ff) describes a lack of consensus among 19th-century European and American feminists regarding divorce. In some instances (e. g., Portugal) women successfully influenced the enactment of liberalized divorce laws, but many feminists advocated either no change or only a minimal number of changes which would benefit women's ability to escape an unsatisfactory marriage.

The fear of large scale serial monogamy was apparently groundless, at least until very recent times—a finding which attests to the inertia of anti-divorce customs in Western Europe: In Scotland, where divorce was inexpensive and legal, there were only 19 divorces per year from 1836-1841, mostly from the non-nobility, and Phillips (1988; p. 316) similarly notes low rates of divorce, difficulty in obtaining divorce, and a general reluctance of Protestant theologians to modify the Catholic doctrine of indissolubility: “In those parts of Europe that had legalized divorce in the sixteenth century, it was three hundred years and more before any line of divorce could be distinguished from the horizontal axis of a graphic depiction of divorce rates.” In England the divorce rate remained at less than 0.1/1000 marriages until 1914 and less than 1/1000 until 1943 (Stone 1990); in 1910 no European country had a divorce rate higher than .5/1000 population (Phillips 1988).

Prohibitions on Endogamy

Thornhill (1991) has emphasized the theoretical importance of consanguinity as a marriage strategy for the elite. Ecclesiastical prohibitions on consanguinity in the Middle Ages were extreme: by the 11th-century they extended to the seventh degree (6th cousins; i. e., individuals with a common great-great-great-great-great grandfather) as well as affinal and spiritual kinship (see Goody, 1983). Because these prohibitions often provided grounds for divorce, they were reduced to relatives in the fourth degree by the Lateran Council (1215), and this (still extreme) prohibition remained in force until 1917.

Goody (1983) emphasizes that these rules on incest represented a radical alteration of the custom of first cousin marriages of the Germanic tribes, and successfully opposed the interests of the nobility and the royalty in consolidating power and economic resources such as land by promoting extended kinship ties. Moreover, the rules were generally observed and were not typically used in a cynical manner to obtain a *de facto* divorce (Bourchard, 1981; Brundage, 1987; Goody, 1983; Helmholz, 1974; Phillips, 1988). Contrary to Thornhill (1991), this pattern of Western European exogamy appears to be a continuation and extension of generally exogamic marriage practices originating in Roman culture and adopted by the Christian Church during the

Late Empire by expanding the Levitical rules on incest (MacDonald, in press; Mitterauer, 1990; Saller, 1990).

Penalties for Illegitimacy

From an evolutionary perspective, the most crucial aspect of social controls related to reproduction is the control of concubinage. Controls on illegitimacy oppose the reproductive interests of wealthy males by making concubinage difficult or impossible and by affecting the prospects of illegitimate children by, e. g., preventing them from inheriting property. If illegitimate children can inherit property, then an important barrier to concubinage is removed. Wealthy males would be able to have a monogamous legitimate marriage but also sire other children who would be able to inherit property and even be the principal heir if there were no legitimate heirs. The result would be a mating system that would, potentially at least, be indistinguishable from the other stratified societies of Eurasia.

The Church was actively opposed to concubinage, especially concubinage in the presence of a legitimate wife. Boswell (1988; p. 72n) finds a steady deterioration in the status of bastards under the Christian Roman emperors, and Brundage (1987) finds a similar result of Christian influence during the early Middle Ages. It would appear that social controls on the abilities of illegitimate children to inherit were often effective (see Brundage, 1975, 1987; Duggan, 1981; Goody, 1983; Ozment, 1983; Hanawalt, 1986; Stone, 1979; Wemple, 1985). Goody (1983) notes that the Church held the attitude that legitimate marriage produced legitimate children and that others had no legal standing, although in certain periods bastards had more standing than others (see below). Goody notes that the estates of bastards were subject to confiscation by the Church or the state, so that even if a man wanted to leave property to a bastard his wishes could be thwarted by the authorities. Stone (1979) finds that bastards disappeared from wills altogether during the Puritan era in England.

Besides direct ecclesiastical influence, there were a variety of other penalties attached to illegitimate birth arising from the secular authorities and public opinion. For example, Wrightson (1980) and Amussen (1988) note the very harsh treatment of bastard bearers in mid-17th century England, with repeat offenders committed to a year in prison (see also Mitchison and Leneman

[1989] for Scotland from 1660-1780). Being the father and especially the mother of an illegitimate child were causes for ostracism (Amussen, 1988; MacFarlane, 1980), and it was common for the woman to take every effort to conceal the pregnancy, including leaving the area.¹¹

These social controls had effects on mortality of illegitimate children. Infant mortality was higher for illegitimate children in both early modern England (Oosterveen and Smith, 1980) and France (Flandrin, 1979a). Women often abandoned illegitimate children (Stone, 1979; Flandrin, 1979a). Illegitimate children were often reported as stillborn, indicating infanticide, and women sometimes sought to avoid bearing illegitimate children via abortion (Amussen, 1988; MacFarlane 1980; see Duby (1983) for similar data from Medieval France). Quaife (1979, p. 118) also provides cases where the abortion was sought by fathers who were in positions of social superiority to the women (as in master/servant relationships).

During the 17th century, even a claim of stillbirth did not exempt the woman from sanctions: Stillbirth in the absence of witnesses ceased being a defence (Amussen, 1988). Trexler (1974a,b) and Flandrin (1979a) found that illegitimacy and its associated scandal resulted in some parents giving their children to foundling homes where they were subject to very high rates of mortality. Phillips (1988; p. 421ff) concludes that the foundling institutions originating in the late Middle Ages continued to have very high rates of mortality at least to the end of the 18th century. The minority who were spared were consigned to social oblivion.

There is also evidence that illegitimate children suffered a variety of social handicaps and often did not reproduce. Boswell (1988; p. 399, 403) finds that during the Middle Ages abandoned

¹¹. However, returning home was not always easy: In 1609 the Somerset justices ruled that the woman would have to have the child in the parish where the seduction occurred, rather than allowed to move back to where her parents lived—clearly a problem in an era when a large percentage of young people were in service away from home. “The attitude of local parishioners, the apathy and often malice of the seducer, and the distress of the girl herself led many girls into a tragic lonely trek across the county which usually culminated in being delivered in the street, or if a little luckier, in the church porch, or under a hedge” (Quaife, 1979; p. 102; see also Flandrin [1979a; p. 184] for similar data on France). Murder of the pregnant woman was “not unheard of” (Quaife, 1979; p. 100), and there are examples where the woman died in her futile journey to find a parish that would allow her to give birth.

children, some of whom were illegitimate, were commonly reared as oblates in monasteries where they were required to adopt a life of celibacy as adults.

Finally, Amussen (1988) notes that bastardy was a term commonly occurring in defamation suits, while Flandrin (1979a) comments on the benefit a “child of sin” received when the parents were forced to marry. Both of these findings indicate the social disability of being a bastard in Early Modern England and France respectively.

There is no indication that the fathers of illegitimate children in England were disproportionately from the elite classes. Mitchison and Leneman (1989) and Quaipe (1979) find that gentlemen were better able to avoid the sanctions of the Church courts (including child support) than lower class males, but the full sanctions of the courts fell on female bastard bearers no matter who the father was. Laslett (1984) writes of “the consistently low levels of aristocratic illegitimacy” (p. 158), with perhaps a “trivial rise” associated with the Restoration. Hollingsworth (1965) estimates that illegitimacy amounts to only 10% of the total fertility of the nobility in pre-industrial England. Levine and Wrightson (1980) found only one father of gentle status among 50 known fathers of illegitimate children in Terling from 1590-1640. Moreover, there was a trend such that an increasing percentage of fathers of bastards were poor and obscure (66% in the period 1590-1609; 86% in the period 1590-1640), indicating that for the most part illegitimacy involved a low investment reproductive strategy pursued by the poor. Illegitimacy itself (and even bridal pregnancy) declined during this period, “while such bastardy as occurred was the result of the offences of a harassed and steadily diminishing core of delinquent individuals and families, supplemented by occasional cases involving obscure and transient inhabitants” (p. 174). Similarly, Depauw (1976) finds that the nobility was disproportionately underrepresented as fathers of illegitimate children in 18th century Nantes (France).

Controls on Concubinage among the Elite

There is considerable evidence that controls on concubinage practiced by elite males became increasingly effective during the Middle Ages. Brundage (1987) notes that polygyny among the German tribes decreased following the mass conversions to Christianity in the late 6th century. Nevertheless, the ecclesiastical revolution in family structure was not really completed until the

mid- (Duby 1983) to late-12th century (Brundage 1987) in the West. Indeed, Brundage (1987) notes that “the principle of monogamy is one vestige of medieval Christendom that remains intact” (pp. 587-588), and was more permanent than the Church victories in the struggle for marital indissolubility and against consanguinity.

The 12th century thus appears to be pivotal. There are good examples from this period of elite males who were able to avoid social and ideological controls favoring monogamy as well as examples where such individuals were entirely monogamous (Duby, 1978; 1983).¹² The general patterns may be perceived by considering the illegitimate fertility of English rulers. Given-Wilson and Curteis (1984) note that 10 of the 18 kings who ruled England from 1066 to 1485 are known to have taken mistresses, and are known to have fathered 41 illegitimate offspring who can be identified “with a fair degree of certainty” (p. 178). Henry I, who ruled from 1100 to 1135 sired 20 of these, and 5 more are listed as probable. No other Medieval king sired more than 3, and no certain illegitimate children are recorded for 8 of the kings. Henry I is unique in his apparent interest in obtaining large numbers of offspring to further his territorial ambitions both in the British Isles and on the Continent (Given-Wilson and Curteis, 1984). Nevertheless, Newman (1986) provides evidence that Henry treated his illegitimate brood far less well than his legitimate children, the latter being pampered, tutored at court, and prepared for life as great nobles.

¹². Duby (1978; 1983) recounts the story of the French Count Baldwin II in the 12th century who managed to have 23 illegitimate children besides his 10 legitimate children. The mothers apparently came from the family’s bastard daughters, rather than from the daughter’s of the Count’s vassals (“a kind of pleasure reserve within the house” (p. 94)). These highly endogamous unions were quite open, the sons receiving training as knights (but did not become heirs) and the daughters marrying well. Duby (1983) also mentions two early 12th century cases: Thomas, the son of Enguerrand of Coucy, who kept a handful of “prostitutes” in his house, and the duke of Aquitaine, who is said to have had a number of concubines. On the other hand, the 9th-century Louis the Pious and the 11th-century King Henry of France were passionate soldiers in the Church’s attempt to institute monogamous, indissoluble marriage (Duby 1983; see also Wemple 1985). King Philip II of France, who engaged in a prolonged divorce battle with the Church, is said to have had an illegitimate son in addition to 3 legitimate children, hardly indicative of intensive polygyny by the most powerful man in Europe at the time (late 12th century).

Bastards, on the other hand, were excluded from inheriting the throne, and they were often not offered marriages.

Reflecting the general change in attitudes and practices related to marriage occurring in the 12th century, there is a decline in both the numbers and importance of illegitimate children in the following centuries. King John (r. 1189-1216) was a notorious womanizer and is known to have sired 7 illegitimate children, with 2 more being possible. However, following King John in the early 13th century, a total of 10 adult kings reigned between 1216 and 1485. Only four of these kings produced any illegitimate children, and they sired a total of 9 certain illegitimate children with 2 more listed as possible. Even granting these two possible illegitimate children, the average is only 1 illegitimate child per king. These results, even if they are conservative estimates, do not suggest that English kings in the late middle ages were maximizing their reproductive success via having large numbers of illegitimate offspring by concubines. Given the reproductive career of Henry I, there is no reason to suppose that economic factors inhibited the reproductive careers of these rulers.

Moreover, “the offices, privileges and status accorded to royal bastards declined” (Given-Wilson Curteis, 1984; p. 135), and it was not until the 16th century that an illegitimate son attained the peerage after William Longsword, son of Henry II, did so in the 12th century. Besides Longsword, two other 12th century bastards, Robert of Gloucester and Geoffrey Plantagenet, attained high status as illegitimate children of Henry I and Henry II respectively. However, the careers of the later bastards, including those of King John, were “relatively insignificant” (Given-Wilson and Curteis 1984; p. 130), “a reflection of a long-term and deep-rooted change in attitudes towards bastardy, a change which affected royal bastards just as much as it did humbler ones” (Given-Wilson and Curteis, 1984; p. 131). Another indication that indeed attitudes toward bastards had changed was that bastardy came increasingly to be used as a political smear in the 14th and 15th centuries. Moreover, although public attitudes may not have been all that negative earlier, Newman (1988) suggests that the experience of being a bastard may not have been a pleasant one, even in the Middle Ages: Only 2 acknowledged bastards themselves sired bastards, despite the fact that many of them could have afforded additional children. “Perhaps natural children were not as accepted and life as pleasant as the impersonal records of designation and patronage indicate.

Perhaps an acknowledged bastard would not put another child through the experience” (Newman 1988; p. 200).

It is not likely that illegitimate children of the Medieval royalty are undercounted by a great deal. As Given-Wilson and Curteis (1984) note, since the Medieval kings had no qualms about acknowledging their bastards (even after their numbers and prospects declined), there is no reason to suppose that their existence would be intentionally kept from public view. Thus in the 15th century Richard III acknowledged two bastards (both probably born before his marriage), and both of whom were well provided for. Indeed, one measure of the success of social controls on concubinage would be if kings were prevented from publicly giving them high offices and good marriages. The fact that we do not know about any more bastards is thus an indication that the social controls were for the most part effective.

Place Table 1 about here

Table 1 shows the extent of illegitimate fertility among English rulers in the post-Medieval period. These findings indicate a general pattern of low illegitimate fertility, with some exceptions. The post-Medieval apogee of illegitimacy in the Royal family occurred during the Restoration era, with Charles II and James II (1660-1688). Charles acknowledged 14 illegitimate children, including 5 with one woman (Gibbs 1926), making him the second ranking English monarch after Henry I. He made no attempt to conceal his mistresses, and he provided them and their children with estates, titles, and money (Hutton, 1989).

Given the long term trends in bastardy within the royal family and the fact that much of this activity was publicly known in the era immediately following Puritan political power (during which adultery was declared a capital crime), the reproductive career of Charles II is truly remarkable. Nevertheless, there were limits on his power to control his own reproductive interests: Charles did not have any legitimate children, and made an unsuccessful attempt to legitimize his oldest son, James, whom he nevertheless made the Duke of Monmouth and married off to a wealthy heiress.

Moreover, while Charles enjoyed a great deal of popularity early in his reign, his sexual behavior was considered scandalous and lowered public confidence in his regime. For example, Hutton (1989) notes that “The regime had not regained the popularity which it had lost in 1661–2. His morals and those of this court remained the subjects of gossip and censure...” (p. 213). His last principle mistress, Louise (whom he made a duchess), was told by the Earl of Pembroke that “she was the realm’s greatest grievance” (p. 336). In 1675 a parody of the king’s speech to Commons included a complaint that the money requested for the fleet would instead be used on “cradles and swaddling clothes” (p. 338). Further, “The king’s habits continued to create a mixture of disgust and ribaldry, and to sap confidence in the government in general” (p. 338), and indeed, the court “had become a byword for loose living” (Spurr 1990; p. 39). This indicates the existence of considerable social pressure on the king (albeit relatively ineffective) not to engage in concubinage.

Charles’ brother and successor, James II, had several mistresses, two of whom bore him a total of 6 children (Ashley 1977; Trevor 1988). At his ascent to the throne in 1685 James attempted to set a better moral example than his brother and banished his mistress from court. However, the Restoration court continued to have a reputation for immorality, and the 1690’s are often characterized as a period of “moral revolution” under William III (see Bahlman 1957; Spurr 1990).

There is some evidence that in fact adultery among the aristocracy in general increased toward the end of the 17th century (Phillips 1988). Interestingly, Stone (1990; p. 232) notes the moralistic campaigns beginning in 1690, and suggests that “all this activity is testimony to the anxiety felt during the 1690’s about the apparent deterioration of morality since 1660” (i. e., since the Restoration of the monarchy under Charles II). Stone (1990; p. 278) also shows that there was a great deal of anxiety about the sexual behavior of the aristocracy in the period following 1790, with a concomitant increase in the size of damage awards for adultery and a generally chilling effect on sexual promiscuity. There is thus some evidence for active campaigning by the middle and lower orders of society against the concubinage of the elite (see also below).¹³

¹³. Two monarchs, George IV and Edward VII, had numerous short term relationships but very few illegitimate children and were censured by the press. Although George IV detested his wife, he was unable to divorce her,

These data do not support the general assertion that the English kings were able to maximize their reproductive success by engaging in intensive concubinage, and suggest that for the most part social controls on concubinage in the royal family were successful. There does not appear to be a linear trend in the reproductive behavior of English kings, but rather a set of peaks and valleys. There has, however, been a powerful decrease in illegitimate children since the time of George IV and William IV in the early 19th century, presumably reflecting at least in part the relative lack of royal power and consequent need to abide by a monogamous middle class morality.

Even during its peaks, however, the reproductive behavior of the English kings cannot be considered as maximizing reproductive success. The reproductive career of Charles II was truly polygynous, but certainly not maximally so given the enormous wealth available to a late-17th century monarch. Moreover, he was not able to pass the crown to his illegitimate offspring. Nor did he divorce his wife and sire legitimate children. In a society, such as traditional China where intensive polygyny and divorce were entirely legitimate, the emperor would have had much more control over the inheritance rights of his offspring, so that if a principal wife was barren, the offspring of a concubine could inherit (Ebrey 1986).

In addition, it is noteworthy that even though Charles II had a high degree of reproductive success, he fathered the same number of children as did the puritanical George III, all of whose children were legitimate. Thus Charles' polygyny did not really enable him to achieve higher reproductive success than would a monogamous relationship, or serial monogamy. (Recall Charles had no legitimate children and did not divorce his wife.) Moreover, since Charles' children were not legitimate, their marriage chances were far less than those of George III's legitimate brood. George III's children were all in the line of succession, and when George IV and the Duke of York

even when there was considerable evidence that she had committed adultery. St. Aubyns (1979; pp. 155ff) describes the birth of one illegitimate child to Edward VII after an attempted abortion ordered by the future king. William IV had several mistresses, and a 20-year long domestic relationship with a commoner, Mrs. Jordan, with whom he fathered 10 children prior to his marriage (Ziegler 1971). Although the relationship was scandalous at first, it came to be accepted by the public. He also fathered an illegitimate child by a German woman. William managed to marry his bastard daughters into the nobility, but his sons chafed at their second-class status. Clearly the prospects of royal bastards had declined considerably from the time of Charles II.

died, William, the third son, inherited the crown. When William died with no legitimate heir, the crown passed to George III's granddaughter, Victoria, by yet another son, the Duke of Kent. Several of George III's other children were able to marry into the royal families of Protestant Europe. For Charles' brood, as well as for the children of William IV, the bar sinister would always be a liability in life. Even though public opinion was not able to prevent some English kings from behaving polygynously, there is no doubt that such behavior was viewed very negatively by the public and that this had effects on the prospects of the offspring.

Other Mechanisms of the Social Control of Sexual Behavior

Duby (1983) states that one of the prime goals of the Medieval Church was to repress the pleasure of sexual intercourse even within marriage. Married couples "were always being exhorted to continence. If they disregarded the admonition, they were threatened with begetting monsters or at best children who were sickly" (Duby, 1983; p. 29; see also Brundage, 1987; De la Ronciere, 1988). Married couples were to have sex in the minimum number of times necessary for procreation, in a restricted number of positions, with the minimum amount of pleasure, and could only be engaged in on certain days and times. Stone (1979) describes similar ecclesiastical efforts in post-Medieval England.

Policing sexual violations was an important function of the ecclesiastical courts beginning in the Middle Ages and extending at least to the end of the 17th century. Wrightson (1980; see also Houlbrooke 1979; Laslett 1984; Levine and Wrightson 1980; Stone 1979, 1990; p. 67, 232) shows that these courts were very active in 17th century England prosecuting cases of fornication, adultery, incest, and illicit cohabitation. Although the effectiveness of these ecclesiastical sanctions varied by region and period, Quaife (1979; p. 195) indicates that there were examples of devastating consequences in which "the victim was hounded by his fellows, deprived of his living by a community boycott, and treated as an outcast". Indeed, Hill (1967; p. 349) notes that in the 17th century the ability of the High Commission of the Ecclesiastical Court system to impose sanctions, including sanctions for adultery, on the propertied who could expect to be immune from other judicial processes: "This enforcement of equality before the law did not endear the court to those who mattered in seventeenth-century England".

Moreover, the secular authorities, such as justices of the peace, also stood ready to prosecute such offences (Marchant, 1969; Quaife, 1979), so that “no one was at liberty to live a life of sexual freedom” (Laslett, 1984; p. 156). For example, pursuant to Elizabethan statutes, Justices of the Peace in the 16th and 17th centuries commonly sentenced sexual offenders of both sexes to a public whipping while stripped to waist (the woman “until her back be bloody”) and placed in the stocks (Marchant, 1969; p. 224). Powerful social controls on fornication, illegitimacy, “promiscuous dancing”, and extreme sanctions against adultery (including banishment) continued in Scotland throughout the 18th century (Mitchison and Leneman, 1989; Smith, 1982). Indeed, capital punishment for adultery was only repealed in 1783 in Scotland, and the last recorded executions occurred in the 1690’s.

The Puritan period is particularly interesting from an evolutionary perspective because of the evidence for middle and lower class support for social controls on sexual behavior. The main support of the Puritan religious movement which came to power during the 17th century in England was from the “industrious sort of people” (Hill, 1967; p. 133) who were economically independent, including the yeomanry, artisans, and small and middling merchants and some few of the gentry. However, Spufford (1979) shows that in Cambridgeshire this radical movement for conformity to monogamous sexual restraint represented a grass roots phenomenon not only among these classes, but also among many of the very humble, including women.

The Puritans instituted very elaborate social controls on sexual behavior based mainly on their ability to exert economic pressure on the lower orders via their control of the poor relief and by exerting social pressure on all classes (Hill, 1967). Marchant (1969) notes that Puritans criticized the Church courts because their sanctions on sexual crimes were insufficiently harsh, and Quaife (1979) details the extraordinary level of social control of individual’s sex lives in 17th-century Somerset (England), including not only very aggressive magistrates made up mostly of the respectable yeomanry, but also a pervasive network of community informants who eagerly reported every aspect of sexual non-conformity to the authorities.

In the 17th and 18th centuries, after the decline of ecclesiastical courts in England, the common law developed provisions which in effect continued the controls on behavior previously vested in the ecclesiastical institutions. Rather than being based on religious authority, the new

practices were based on recognizing a variety of individual interests, including those of women, in the reproductive process. Thus the common law of tort developed provisions such that women could sue if they had lost their virginity or given birth to a bastard after being promised marriage—the idea being that financial compensation could raise the woman's damaged position on the marriage market (Stone, 1990; p. 82). The courts also consistently supported the ability of creditors to sue husbands for debts accumulated by abandoned wives (Stone, 1992;, p. 14). Moreover, the law of seduction in which the plaintiff was the father of the woman also developed during this period. In 1763, a court decision which allowed the prosecution of a master who attempted to sell his female apprentice to be the mistress of a wealthy man was based not on the sinful character of the behavior, but rather because the corruption of the woman was *contra bonos mores*.

Stone (1990; p. 297-8) also shows that an important source of social controls on sexual behavior in the period of the decline of ecclesiastical courts was the interest of lawyers in expanding the law of torts and thereby providing more business for themselves. Another set of interests reinforcing sexual conformity derived from the public interest in preventing bastardy because of its effect on the poor rates—an increasing concern in the 18th and 19th centuries—with the result that the standard of proof required in such cases was relaxed considerably (Stone 1990; p. 89). In addition, Quaipe (1979; p. 71) notes that one mechanism for restraining the adulterous aims of masters with their female servants was for the servant to threaten to tell the master's wife, a comment indicating that women's power within marriage was at least sometimes considerable. (The servant who succumbed to the master's aims also sometimes used such a threat as a bargaining tool in efforts to get the master to provide more resources for her.) Finally, the institution of *charivari* in which young men opposed the remarriage of wealthy widowers during the Medieval and early modern periods, sometimes with violence (see Gillis 1981), is another example in which the reproductive interests of relatively wealthy individuals were constrained by the behavior of others.

In addition, private Societies for the Reformation of Manners, supported mainly by dissenters and low churchmen deriving from the non-elite classes organized to enforce sexual conformity. Moralistic campaigns enjoining monogamous sex have had sporadic success

throughout modern English history: Stone (1979) and Wrightson (1980) note the successful moralistic campaigns of the Puritans in the 17th century, and Stone (1979) and Porter (1982) note their persistence in the 18th century and their success in 19th century. In at least some of these cases the campaigns were explicitly directed at the behavior of the elite, as in the campaigns for anti-adultery legislation between 1771-1809. “The proponents of all four bills talked a great deal about the rising tide of immorality among the rich...” (Stone, 1990; p. 336). Although he wanted much stronger penalties, Lord Auckland, “the indefatigable scourge of seducers” (Phillips 1988; p. 414), finally got a law passed which prohibited remarriage of an adulterous wife with her accomplice in a period when only the elite were able to get divorces at all (via an act of Parliament).

Ideologies Promoting Monogamy

Although ultimately relying on social controls, the Medieval Church developed elaborate ideological structures to promote monogamy and sexual restraint. These writings were extensions of the writings of the Church Fathers during the Roman period which were themselves strongly influenced by the Stoic writers of antiquity (see Brown, 1987; Brundage, 1987; Veyne, 1987). In general these writings emphasized the moral superiority of celibacy, the sinfulness of extra-marital sex of any kind, and typically viewed sexual pleasure itself, even within marriage, as sinful.

Although Brundage (1987; see also Stone 1979; Flandrin 1979a; Phillips 1988) indicates that there was some variation in these writings on attitudes toward sexual pleasure, especially during and after the Reformation, all sexual relationships apart from monogamous marriage were universally condemned by religious authority throughout the early modern period into contemporary times. Marital sex was viewed as a regrettable and sinful necessity, and excess passion towards one’s wife was considered adultery. While there was a relative relaxation of attitudes during the 18th century, a powerful anti-hedonist religious sexual ideology rose to prominence in the 19th century (See also Corbin, 1990; Porter, 1982; Stone, 1979). Porter (1982) notes that the intellectual movement for relative sexual freedom of the Enlightenment was confined to the elite, and there were significant (non-elite) sections of the society which remained ideologically opposed to non-monogamous sex, including anti-hedonist religious movements

whose successors had considerable effect in the 19th century (Corbin, 1990; Porter, 1982). Stone (1979) notes that strongly anti-hedonist religious attitudes in the 19th century were characteristic of all classes except the aristocracy and the poor.

CONCLUSIONS AND QUALIFICATIONS

These data indicate that beginning in the Middle Ages an elaborate system of social controls and ideologies resulted in the substantial imposition of monogamy in large areas of Western Europe. As Herlihy (1985) notes, “The great social achievement of the early Middle Ages was the imposition of the same rules of sexual and domestic conduct on both rich and poor. The King in his palace, the peasant in his hovel: neither was exempt” (p. 157).

Nevertheless, the system was by no means completely egalitarian. There is evidence that for a positive association between wealth and reproductive success throughout pre-industrial Europe (Herlihy 1991; see also Hanawalt, 1986; Herlihy and Klapische-Zuber, 1985; Phillips, 1988; p. 409n). Hollingsworth (1965) shows that fertility rates of British ducal families remained above the average at least until the end of the 19th century and there was no general decline in fertility from the 14th to the 19th century, but rather an increase in fertility in the 18th century followed by a decline in the 19th century which paralleled trends occurring in the general population. Hollingsworth (1965) also notes that British peers tended to have large families compared to commoners and that the fertility of dukes’ daughters remained higher than commoners well into the 19th century. On the basis of these data Coleman (1990) concludes that the fertility of the British aristocracy was higher than that of the general population into the early modern era, but that “from the seventeenth century onwards they adopted the late marriage already typical of the rest of the population, with correspondingly reduced fertility. In the eighteenth century they were noted for the lateness of their marriages and for evading it altogether” (p. 62).

There are indications that the fertility of the upper classes was subject to important constraints, even within legitimate marriage. One would suppose that the ruling families of Europe would be the least likely to feel the need to restrict fertility in order to increase investment in children. However, Peller (1965) finds that the age of marriage increased among the ruling families of Europe from the 16th century to the latter half of the 19th century (for bridegrooms

from 25.9 years to 29.95 years; for brides from 20.2 years to 22.5 years). Moreover, Peller finds that the decline in (legitimate) fertility among these families began in the latter half of the 17th century (two centuries earlier than in the general population), and that even from the earliest period “efforts were made to keep family size within certain limits” (p. 89). Along with lowered fertility were much lower rates of perinatal and child mortality among this group than in the general population and the survivorship gap between these families and the general population was not closed until the mid-20th century. However, based on Peller’s data, there is a gradual decline in average number of children surviving to age 15 among this group, from 5.7 in the period 1500-1599, to 4.4 in the period 1700-1749, to 3.45 in the period 1900 to 1920.¹⁴

Finally, the hypothesis that SIM occurred during this period does not entail the proposition that no male was ever able to engage in non-monogamous sexual relationships which increased his reproductive success. For example, despite the generally low levels of aristocratic illegitimacy (Laslett, 1984; p. 118), Quaipe (1979) finds that some wealthy males successfully escaped the attention of the authorities by providing maintenance for the child or were able to marry their pregnant mistresses to lower status males by providing compensation to the husband, and in some cases by continuing to maintain the new family. However, these examples hardly constitute evidence for intensive polygyny. Given the evolutionarily expected central tendencies of human behavior, it is not surprising that under most circumstances wealthy males will indeed attempt to mate polygynously, and there may well be variation in the extent to which social controls constraining this strategy are effective in different historical periods.¹⁵

¹⁴. Van de Walle (1980) also notes the very low fertility among the French aristocracy in the 18th century: “In a social class that should have valued the birth of at least one heir, 35% of the married women had no recorded live birth by the second half of the century” (p. 165); and “(t)he low fertility of the upper aristocracy was leading to the disappearance of many families which would have expected to lay much stress on the survival and perpetuation of the family name” (p. 167). This gradual decline began well before the demographic transition, and it is difficult to see how this extremely elite group would have a need to curtail reproduction in order to invest in children (see also Flandrin 1979a).

¹⁵. There is also important variation within the Western European family system, e. g., within France (Ladurie 1986), and between France and England (Ladurie 1986; Wrigley and Schofield 1981). Thus there is some evidence that polygyny persisted longer in France than in England (Flandrin 1979a) and, as indicated below, France was

I suggest that as a result of institutionalized controls on reproduction, non-monogamous Western sexuality has been directed at obtaining psychological rewards deriving from evolved motivational systems (e. g., sexual pleasure, excitement, feelings of dominance, status, or intimacy) but that this non-monogamous sexuality has not typically been a major source of increased reproductive success (See also Fox, 1986). The main exception to this is the early- to mid-Medieval period when the West was confronted with tribal cultures characterized by resource polygyny, and there have been a few religious heresies which have practiced genuine polygyny (e. g., 19th-century Mormonism [see MacDonald, 1983] and several radical Protestant sects, such as the 16th-century German anabaptists who were ruthlessly suppressed by the authorities [Cairncross, 1974]). As a result, sexual behavior and attitudes have ranged between the extremes of Puritanism and libertinism, but have never approached the systems of legitimate intensive polygyny characteristic of other traditional stratified societies.

Thus during the Puritan era in England there was a pervasive suppression of sexual nonconformity (e. g., Gregg, 1988; Smith, 1982; Spufford, 1979; Stone, 1979; Wrightson, 1980), while in the 18th century sexual promiscuity was more common (Porter, 1982), although Stone (1990; p. 259) shows that there is no evidence that a “tide of marital infidelity was engulfing the British aristocracy”. However, even this rather modest 18th-century libertinism appears rarely to have resulted in high reproductive success, and quite probably was often maladaptive. Despite the notorious sexual escapades of the French aristocracy in the 18th-century, Flandrin (1979a) and Van de Walle (1980) conclude that many did not leave heirs or had very few legitimate children, and Coleman (1990) comes to the same conclusion regarding the British aristocracy in this period. Bernier (1984) notes that Louis XV of France (r. 1715-1774) had several *maîtresses déclarés*, as well as numerous short-lived affairs. Out of all of this illicit sexual activity, only one illegitimate

characterized by a relatively “high pressure” demographic profile compared to England. Moreover, laws regulating the status of bastards were more inflexible in England than France (Brundage 1987). Nevertheless, both France and England conformed to the Western pattern of reproduction and family relationships, and it is this qualitative difference between Western family and demographic patterns and those of other stratified traditional societies which must be explained by any competing theory. This qualitative difference is clearly compatible with low levels of *de facto* polygyny by a few wealthy males, and is certainly compatible with the fact that reproductive success was correlated with wealth.

child is mentioned. (One *maîtresse déclaré* died in childbirth.) In this regard, his behavior was a far cry from that of his 13th-century predecessor, Louis IX (St. Louis), who ruled France while living like a monk and carrying out the Church's program of developing an organic, collectivist Christian society. But the reproductive results were little different.

The point is that there is no reason to suppose that Louis XV (or George IV or Edward VII of England) attempted or succeeded in having large numbers of illegitimate children from these relationships. Similarly Porter (1982) finds a more tolerant attitude toward bastards in Enlightenment England, but the emphasis seems to have been far more on legitimizing the pursuit of pleasure than on maximizing reproduction. As in our era, there were active attempts to separate sexual pleasure from fertility by advocating contraception. Flandrin (1979b) provides evidence of birth control in illicit relationships of inequality in 18th-century France. Indeed, Flandrin (1979b) notes that the percentage of girls impregnated by upper class males actually declined in 18th-century France.

I suggest that the basic reason for this recurring gap between sexuality and reproduction even during periods of sexual tolerance in the West is that, with the recent exception of serial monogamy made possible by divorce, Western institutional structures surrounding reproduction have always discouraged non-monogamous reproduction. Unlike the institutionalized polygyny typical of the other stratified societies of Eurasia (Dickemann 1979), Western non-monogamous sexuality has nearly always been limited, reproductively vacuous, and usually somewhat unrespectable. The data also suggest that evolved male psychological predispositions are much more directed at sexual variety than at having large numbers of children (Fox 1986). Under conditions in which intensive polygyny is legitimate, these predispositions may be adequate to ensure large numbers of children and a similarly polygynous heir, but within Western institutional structures, the result tends to be a sterile libertinism.

Indeed, it is the persistence of these institutional structures favoring monogamy in Western Europe which must be explained by any adequate theory of SIM. Thus even if the present proposal that the Church succeeded in imposing monogamy by the end of the Middle Ages is incorrect so that the aristocracy continued to engage in intensive polygyny until some very recent date and only stopped for some unexplained reason, one must still take theoretical cognizance of this

powerful institution which was ideologically committed to imposing its view of marriage on the aristocracy and energetically pursued this goal politically.

Viewed from an evolutionary perspective there has been a remarkable continuity within a varied set of institutions which have uniformly penalized polygyny and channeled non-monogamous sexuality into non-reproductive outlets or suppressed it altogether. Despite changes in these institutions and despite vast changes in political and economic structures, Western family institutions deriving ultimately from Roman civilization have clearly aimed at the social imposition of monogamy. The thesis of this paper is that there has also been a significant degree of success in this endeavor.

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