If the brain evolved by natural selection," argues E.O. Wilson in his Pulitzer prize-winning book, \textit{On Human Nature}, "even the capacities to select particular esthetic judgments and religious beliefs must have arisen by the same mechanistic process." Sociobiology is a field which examines the connections between such social beliefs and institutions and the evolutionary process. According to sociobiologists, individuals are engaged in competition to reproducitively promote genes from their own biological heritage. The ultimate mark of an individual's success within his or her lifetime is the extent to which his or her genes are reposed in the next generation. Religion is particularly interesting for sociobiological study because religious doctrine often influences the sexual practices of a culture. Evolutionary theory would predict that such doctrines are molded by reproductive competition and genetic self-interest.

Larry Foster in his recent book, \textit{Religion and Sexuality}, describes the relationship between religious doctrine and sexual customs in three nineteenth-century groups—the Shakers who practiced celibacy, the members of the Oneida community who practiced complex or group marriage, and the Mormons who practiced polygyny. In the case of the Mormons, sociobiology is specifically concerned with how polygynous doctrine might have functioned to select certain elite males to become the culture's highest reproducers.
It is reasonable to examine Mormon doctrine from such a sociobiological perspective because polygyny did in fact produce a reproductively distinct hierarchy. The reproductive strategy of early Mormonism promoted a hierarchy dominated by relatives, maintained that domination by patrilineal succession, and magnified those relatives’ reproduction through polygyny, which was embraced more widely by the hierarchy than the general Church population.

Thirteen of the original twenty-eight hierarchical appointees during the tenure of Joseph Smith were Smith’s biological relatives, averaging about four generations removed to a common ancestor. Selections for the practice of polygyny in Nauvoo also had a genealogical component: eight of the ten hierarchical members chosen by Joseph Smith to practice polygyny were his biological relatives. Since there was a high degree of patrilineal success to leadership, sons of the Smith-related group were represented in the hierarchy during the whole course of the practice of polygyny within the Church.

The high involvement of the Smith-related hierarchy in polygyny appears to have enhanced their genetic reproductive fitness or, in sociobiological parlance, their inclusive fitness. It is possible for one's fitness to be much extended beyond that which would otherwise be apparent solely through the sum of one's children. Thus fitness should be properly considered “inclusive” of one’s kin. Thus even though an individual had no direct descendants, he or she could still gain genetic representation in the following generation by means of children born to his or her siblings or other biological relatives. For example, a fourth of the genes held by an individual are held in common with his or her niece or nephew. Parents have half their genes in common with their offspring, siblings half their genes with each other, grandparents a fourth of their genes with grandchildren, cousins an eighth of their genes in common, and so on.

The genetic success of the Smith-related hierarchy is placed in rather bold relief when an analysis is made of their degree of fertility. If the unit of measurement is taken to be a child sired directly—an individual sharing half of one’s genes—then any one person within the Smith-related hierarchy sired the equivalent of 24.2 children. By contrast, an average member of the Smith-unrelated hierarchy sired 11.4 children. This two-to-one difference is a substantial advantage indeed. It is attributable to the compounding which occurs when polygyny is practiced by a group of men who are initially biological relatives. What this difference in inclusive fitness suggests is that Mormon polygyny may have functioned to specifically promote the genetic heritage of its founder, Joseph Smith, and his relatives.

In addition to the fact that the Smith-related hierarchy reproductively distinguished itself from the Smith-unrelated hierarchy, the hierarchy as a whole remained reproductively distinct from the general Mormon population—even while polygyny was preached for public practice after 1852. Hierarchical polygynists (from 1830 to 1897) had an average of 5.12 wives and 25.00 children, while Utah polygynist males in general averaged about 2.41 wives and 15.00 children. Mormon monogamist males from 1820 to 1910 had an average of only 6.63 children.

Darwin's theory of sexual selection argues that females choose mates based upon their potential for reproductive success. Darwin also maintains that males often embellish their appearance and behavior with colorful ornamentation and rigorous courtship displays in order to effectively advertise their reproductive status to potential mates. Though polygyny was preached as a general commandment to the Church after 1852, there were certain doctrinal ideas, some implicit and some explicit, which tended to promote the marital prospects of the hierarchy, in the way Darwin's theories suggest.

Some of these promotions might be called “informal” or “inadvertent.” Discourse about polygyny often emphasized the need to control and discriminate the types of men who would become polygynists. Heber C. Kimball's comment, while manifesting hyperbole, reveals the general attitude of the period:

If I am not a good man, I have no right in this church to a wife or wives, or to the power to propagate my species. What then should be done with me? Make me a eunuch and stop my propagation.

This emphasis on the fact that all were not worthy to practice polygyny went together with the belief of some that the purpose of polygyny was to endow the earth with improved offspring. General Authority and polygynist, B.H. Roberts, hints at a general eugenic attitude regarding polygynous reproduction in his own overview of the accomplishments of Mormon polygyny:

It was in the name of a divinely ordered species of eugenics that Latter-day Saints accepted the revelation which included a plurality of wives. [Polygyny] would have afforded the opportunity of producing from that consecrated fatherhood and motherhood the improved type of man the world needs to reveal the highest possibilities of the race, that the day of the super-man might come, and with him come also the redemption and betterment of the race.

Brigham Young appears to sustain this view, explaining polygyny as a means of raising a royal priesthood:

The time is coming when the Lord is going to raise a holy nation.... He will bring up a royal priesthood upon the earth, and he has introduced a plurality of wives for that express purpose.

The fact that polygynous reproduction was always taught as having a unique godly sanction and giving rise to special offspring may have reinforced many females'
attraction to polygynous males.

At the same time that the practice of polygyny was at its peak in Nauvoo, there arose a concept of a reproducing and polygynous God whose glory consisted “in the number of his posterity.” Similarly, a man’s ability to become a God was sometimes associated with “the increase of his own progeny.” According to Benjamin F. Johnson, one of the first polygynists:

The first command was to “Multiply” and the Prophet Joseph taught us that Dominion & power in the great Future would be Commensurate with the no. of “Wives children and Friends” that we inherit here and that our great mission to earth was to organize a Nuculi of Heaven to take with us. To the increase of which would be no end.

“Reproductive wishes” were expressed flamboyantly in this pulpit fanfare of Heber C. Kimball:

How long do you suppose it will be before my posterity increases to over a million! A hundred years will not pass away before I will become millions myself. You may go to work and reckon it up, and twenty-five years will not pass away before brother Brigham [Young] and I will number more than this whole Territory.

Furthermore it was taught that “the only men who become Gods . . . are those who enter polygamy.” This imagery which associates high rank and power with glorified notions of polygyny and reproduction may have also functioned to focus unmarried females’ attention on the divine aura of polygynous males.

In addition there was specific encouragement for members of the hierarchy to practice polygyny. George S. Tanner, for example, describes the pressure on his father, a prominent leader: “The idea was that a man who was in a prominent position should have another wife . . . [leaders weren’t] setting a very good example if they didn’t enter polygamy.”

Women were similarly encouraged to accept proposals to enter polygyny. “We were told that if a worthy man asked us to marry into polygamy, we were supposed to accept it,” recalled one woman. Women were also encouraged to consider the rank of the men proposing marriage. “If a woman can find a man holding the keys of the priesthood with higher power and authority than her husband, and he is disposed to take her,” said Brigham Young on one occasion, “he can do so.”

Such informal beliefs and directives may have indirectly promoted the members of the hierarchy as marital prospects. In addition, members of the hierarchy held specific views about their own biological heritage which they felt singled them out to be not only the culture’s leaders but also it’s highest reproducers. Heber C. Kimball is perhaps the most outspoken of the “elite pedigree” of the Church’s hierarchy.

You take a man that is not very good, and that has a wife that is not very good, and they cannot produce a very good fruit, because the root (their ancestry) is not very good. They are as plain as cattle? You understand how to originate good stock, and so do I . . . It is upon this same principle that this people should become regenerated. . . .

The aristocracy—that is, those that are called the aristocracy, came out of the old country; they came as far as Lehi came from Jerusalem, and so on, till they came into this country; and those men were chosen characters, and God spake to them, and they came over here.

I am one of the sons of those old veterans [prophets], and so is brother Brigham [Young].

Now, I will refer to brother Brigham, brother Heber [C. Kimball], brother Joseph Smith, Oliver Cowdery, Bishop N[ewell] K. Whitney, and lots of other men. Brother Joseph [Smith] actually saw those men in vision; he saw us in a day when we were all together. We have been separated by marriage and thrown apart; but he saw the day when we all came out of one stock, and that was out of the aristocracy. Yes, we came directly down through the Prophets, and not only us, but lots of others—the whole Smith race.

“Elite heritage” extended into explanations by the hierarchy of their own appointments to leadership.

Our fathers were heirs to that Priesthood, which was handed down from father to son, and we [the hierarchy] came through that lineage. We are and were heirs when we were called and ordained to the Apostleship. Wilford Woodruff wrote, “I am entitled to the Keys of the Priesthood according to lineage and Blood, so is [Heber]. C. Kimball & many others.” Joseph Smith taught that he was a literal descendant of the biblical prophet Joseph of Egypt, and Brigham Young taught that it was this “pure” descent through the “blood relation” that gave Joseph Smith “the sole right and lawful power” to leadership. In addition, Young taught his family that the “same blood of Ephraim” ran in their veins.

A much more difficult doctrine to document, but perhaps a natural outgrowth of a view of “superior heritage,” was that of “divine descent” and the literal fatherhood of Christ. Sporadic allusions in the literature are ambiguous but are consistent with the reproductive motif. Orson Hyde, the most publicly vocal on this matter, taught, “We say it was Jesus Christ who was married, to be brought into the relation whereby he could see his seed, before he was crucified.” He then alluded to the hierarchy: “That seed has had its influence upon the chosen of God in the last days. That same spirit inspires them that inspires their father, who bled and died upon the cross after the manner of the flesh.” Many years later in a “solemn assembly” George Q. Cannon, as recorded by Rudger Clawson, taught:

“There are those in this audience who are descendants of the Lord’s Twelve Apostles—and, shall I say it, yes, descendants of the Savior himself. His seed is represented in the body of these men.”

As recorded elsewhere, George Q. Cannon during a private meeting of the hierarchy identified himself as a direct descendant of Christ.

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The doctrine of "elite heritage" suggests an association with three elements of reproductive strategy. First, it may have increased the reproductive attractiveness of the hierarchy as potential mates by distinguishing them from all other Mormon social strata. Second, the notion not only may have justified the original inclusion of relatives into the hierarchy, but may have justified patrilineal succession as a consequence of priesthood heritance. Finally, "elite heritage" may have allowed the differential practice of polygyny by the hierarchy, justifying it as a means of proliferating a divine heritage.

Many hierarchical teachings reveal an idealized socio-biological course of behavior. Polygynous doctrines do not appear to have been generated in the absence of genetic self-interest. Such a view places the development of religious doctrine into the general context of behavioral evolution and suggests further exploration of the question originally posited by E.O. Wilson: Is religion just one aspect of a broader evolutionary scheme resulting from reproductive competition?

Notes
4. Derived from Quinn. See also Daniel Bachman, "A Study of the Mormon Practice of Plural Marriage before the Death of Joseph Smith" (M.A. thesis, Purdue University, 1975). The selection of this many of the Joseph Smith-related hierarchy does not appear to be random with respect to the total hierarchy (P is less than 0.07, binomial probability of choosing 8 polygynists from the possible 14 members of the Smith-related hierarchy, with the probability of being hierarchically polygynous 0.345 per individual).
5. There appear to be a nonrandom bias toward the choice of Smith-related sons (P is less than 0.04, binomial probability of the proportion of Smith-related hierarchy to the total hierarchy, 0.41, giving rise to the 9 Smith-related sons taken from the 13 appointed hierarchical sons). Of twenty-nine appointments made between 1844 (the end of Joseph Smith's tenure) and 1906 (the tail end of polygynous practice), thirteen were sons of previous members of the hierarchy. Nine of these sons were Smith-related (Quinn, 1973).
7. Derived from frequency data in Stanley irvins, "Notes on Mormon Polygamy," *Western Humanities Review* 10 (1956): 229-239. The differences in both numbers of wives and children are significant P is less than 0.05
15. *JD* 9:2e.
19. George S. Tanner, Interview by Jessee Embry, 22 April 1976, Oral History Project on Polygamy, Charles Redd Center for Western Studies, Brigham Young University, p. 16.
25. 2 Nephi 3:7-15: Doctrine and Covenants 36, 8-10.
29. Abraham H. Cannon Journal, 19 vols. (1870-1893), Special Collections, BYU. Entry of 5 April 1894 for the proceedings of a Quorum meeting of the same day.

Other References

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