

Beauty in the Eye of the Misinformed Beholder

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Abstract

Sexual selection and society coevolve. There are several factors involved in the selection of a mate. However, modern society has created a number of misleading cues that may confuse the issue. From cosmetics and plastic surgery to recent developments in synthetic pheromones, no longer are we obedient to Darwin's laws of natural selection. Only time will tell whether this is an advantage or a disadvantage for our species.

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Pair Formation and Sexual Selection Out of Necessity

Our species, as any other living organism, continues to evolve through centuries of experience and biological shaping. But to truly understand how and why our species changes physically and socially, scientists must explore sexual selection. Sexual selection is a form of natural selection in which the sexes acquire distinct forms either because the members of one sex choose mates with particular features or because in the competition for mates among the members of one sex only those with particular traits succeed. Sexual selection not only influences society, but changes in society shape, restrict, and enhance sexual selection. One change occurred early on out of necessity: the formation of mating pairs. This change occurred due to evolutionary changes that were also influenced by behavioral changes. Humans began to have to hunt to survive. Then, they had to develop better brains to compensate for their poor hunting bodies. A longer childhood was therefore necessary to develop the bigger brain and to educate it. Hence, the females had to stay put with the children while the males went hunting.

These basic, major changes led to the present sexual complexity. The males needed assurance that their females were going to be faithful when the males left to go hunting. Also, the weaker males had to be given more sexual rights if they were going to be expected to cooperate in the hunt. The females would have to be distributed more democratically and less tyrannically. Deadly weapons—developed for hunting, but utilized in sexual rivalries—along with the aforementioned need for security, led to the need for one male to be satisfied with only one female. Extended childhood introduced relationship formation early on and allowed

the child to form a deep attachment to other human beings. The loss of this bond with maturation and independence left a relationship void that was to be filled by the formation of a pair-bond. With this came the development of sexual imprinting on a single partner and the capacity for falling in “love” (Morris, 1967). According to Morris, in order to firmly reinforce this behavior, the bulk of sexual activity became directed at cementing the pair-bond (not at reproducing) with more exciting courtship and sex for pleasure (Morris, 1967). To prevent sex from being indulged in lightly, the hymen was developed, making the first copulation attempt difficult and painful. This further reinforced the need for a strong relationship bond before mating occurred.

Recently though, a change has occurred with the mating pairs. The increasingly high rate of divorce has proven that children can be raised successfully without solid parenting pairs, a bad sign for the evolution of mating-pairs. There appears to no longer be a need for a monogamous male-female partnership to raise a child, and although still favored for emotional reasons, human relations could be taking a new turn.

Changes Over Centuries

Across the ages, civilization has gone through many drastic societal changes. As Freud suggested, the impetus proved to be sexual desires and aggression in most, if not all, cases. The views civilizations across humanity have taken have fluctuated from one side of the spectrum to the other within one short revolution. From conservatism to sexual freedom, monogamy to polygamy and polyandry, patriarchal to matriarchal societies, male domination to feminism, sex

has ruled our species and the views on how to handle this now taboo topic have oscillated for as long as our species has been able to reproduce.

For most of human history, people have traveled in groups of several families, hunting and gathering. The group elders controlled sexual access and each person's stage of sexual readiness and availability was well known. But about ten thousand years ago, some of these groups settled down to form the first permanent villages. This spawned advanced civilization, but with it came strangers which provided a stark contrast from the previous less gregarious lifestyle where everyone knew their neighbors thoroughly. In order to control the community and prevent unwanted sexual activity, the heads of societies implemented strict codes, laws, customs, and rituals. Often times, the adopted religion of the vicinity would condemn any allusions to sexual relations or promiscuity. Both sexes wore modest and concealing garments and even body postures and movements were desexualized. Women learned to keep their legs tightly together or crossed when sitting and to cover their mouths whenever laughing or grimacing in order to cover the contortions that mimic a sexual response. Men refrained from scratching their "privates" in public and all public displays of affection were strictly prohibited. Societal norms, common courtesy, and religion eradicated all other seemingly indecorous practices not outlawed, often simply by calling such practices "not polite." People rarely consider the true antisexual nature of such customs. The encouragement of sublimation in the form of aggressive sports in order to relieve potential sexual and aggressive urges continues still today, but in vain. Once they began to be surrounded by thousands of stimulating and equally stimulatable strangers, humans needed to find a way to prevent temptation in order to

preserve the pair-bond relationship (Morris, 1967; Hopson, 1979). Essentially, all that these methods have been proven to create is sexual tension and repression.

Recently, a new trend has emerged as a result of the aforementioned sexual tension and repression. One thing humans lost due to the pair-bond formation was sexual freedom. Author and psychologist Dr. Christopher Ryan comments, "If expression of sexuality is thwarted, the human psyche tends to grow twisted into grotesque, enraged perversions of desire" (Ryan, 2010). Not only do extreme psychological repercussions occur as a result, but repression and tension can cause physical maladies too. During the sexual revolution, the "free love" mantra broke through centuries of sexual repression, eliminating many of the numerous negative effects, but the conservative views have condemned the human race once again, causing reaction formation to go as far as Hojatolislam Kazem Sedighi, an Iranian cleric, declaring that, "Many women who do not dress modestly lead young men astray and spread adultery in society which increases earthquakes" (Ryan, 2010). Reaction formation—a psychological defense mechanism in which one form of behavior substitutes for or conceals a diametrically opposed repressed impulse in order to protect against it—plagues society in almost every aspect, but particularly in the case of sexual repression and is the cause for numerous judgments against sexuality. For example, a priest restricted and subdued by the cloth may be attracted to women wearing provocative clothing, but in order to conceal his true intentions, he will attack their clothing as "unholy" and assign them the epithet of "whore." Negative effects can occur as a result of repression of urges, yet everyone is forced to contain their desires, creating more problems than it solves. But not only humans repress their urges. For example, female dogs only come into "heat" only for a few days, twice a year. Female cats

are usually only receptive to breeding for a few days to weeks in the spring. This is a way biology controls “animal desires.” Year-round sexual desire seems to be only a human thing—is this a species advantage, or disadvantage (Law, 2010)?

Biological Basis

While natural selection accounts for major evolutionary changes, particularly in body structure, sexual selection accounts for such fancies as the tail of the peacock. A critical question then comes into play: are these changes the result of good taste or good sense? Darwin argues that females often choose beauty for beauty’s sake and that female interest lies only in what pleases them aesthetically. He suggests that often times in choosing a mate there seems to be “no good reason for the female to choose as she does... [and] there seem to be many good reasons for her not to do so” (Cronin, 1991). Conversely, Wallace proposes that “female choice is not to do with good taste, but with good sense” (Cronin, 1991). Wallace admits that while it frequently appears that the female seems to be opting for taste rather than sense, he says beauty and quality tend to coincide. In humans, this trend may have manifested itself at one point in time and still holds true for animals. The rich colors of the more desirable males usually indicate vivacity and strong nutrition. Likewise, in different cultures and in different time periods, men preferred larger women, particularly wide berthed in the hip and chest area. The biological basis behind this standard of beauty, still reflected in the idealized hour-glass figure today, lies in the simple fact that women with larger hips are more suited for pregnancy and childbirth. Symmetry and sexual dimorphism (how masculine or feminine a face is) largely determine how attractive a person is (Public Library of Science, 2008) and average, as

opposed to large or small, facial features are more widely preferred in both males and females (Public Library of Science, 2008). But this still proves to be in good sense, because, “one study found that men with asymmetric faces tend to suffer more from depression, anxiety, headaches and even stomach problems. Women with facial asymmetry are less healthy and more prone to emotional instability and depression” (Than, 2005). According to Wallace, sexual and natural selection centralize around the common goal: furthering the species. Beauty is simply a pleasurable by-product.

But while these hypotheses may hold true in the animal world, but they rarely fit in the modern human world anymore. Before, the selection of mates involved the genetic structure of the potential mate and the resources he/she could bring to the mating pair. Therefore, the traits that increased chances of survival would result in the chosen mate. But currently, the trend leans less towards Wallace’s theory of good sense and natural selection and more towards Darwin’s theory of good taste. Before, the strong hunter might have been chosen as a mate for protection, provision, and genetics. But in the modern era, such skills and traits lose their necessity in the fast paced corporate world and with the advancements in science and medicine. In today’s society, if equipped with enough resources to survive independently, a mate may be chosen by any criteria, if chosen at all, skewing hundreds of years of natural and sexual selection. Now that our society has mastered the death rate, we finally meet our match in battling the birth rate.

Pheromones and False Connections

Humans have developed an innate behavior over thousands of years of advancement to seek mates that express genetically opposite traits, extending to every portion of the genotype.

While humans typically seek those who are similar or compatible in some way to them in respect to personality, the ideal mate contains genetically converse traits, with the exception of immunocompatibility (Smith, 2002). One example appears in pheromones, as discussed by David Wolfgang-Kimball:

“Sensitivity to musk in women is critically [dependant] on the levels of estrogen in the blood: during ovulation, serum estrogen is at a peak, whereas serum levels of estrogen are low during menstruation, pregnancy, in post-menopausal women, women who have had ovariectomies, and birth-control pill users. Further, it is the action of progesterone which causes nasal congestion during menstruation and pregnancy, and might be responsible for the reduced sensitivity at these times” (Wolfgang-Kimball, 1992).

An ovulating woman (not menstruating, on contraceptives, or pregnant) is attracted to mates with genetically opposite pheromones in order to prevent inbreeding. But a pregnant woman’s (or a woman on contraceptives which mimic pregnancy) pheromone receptors become skewed by hormone imbalances and an increase of mucous in the nasal cavity, and she becomes “attracted” to those with similar genetic structures, such as family members and father figures, people she would choose to surround herself with during the pregnancy. Therefore mating decisions made during pregnancy or contraceptive use should be considered with a grain of salt (Hopson, 1979).

Humans can now control the one sense that previously could not deceive—smell. Pheromones were the secret signal that would betray the true emotions and intentions of a human, whether they be feelings of sexuality or aggression. With humans stripping away the most honest parts of their bodies, the entire concept of selection of mates becomes a complete

mirage. A study on pheromones and their relationship with sexual attraction was done in 2005 with two sets of “attractive” identical twins, one set male and one set female. The twins participated in speed dating and one twin from each set was given a pheromone and the other a placebo. The female wearing the pheromone received nine out of ten numbers while the one without only received five out of ten numbers. The male wearing the pheromone received all ten numbers while the one without only received six out of ten numbers. Companies have begun engineering perfumes that mimic the chemical structures of human and natural pheromones, employing glandular extracts from animals such as the musk deer, civet cat, and castoreum found in beavers (Hopson, 1979).

Besides the factors that distort our perceptions of others naturally and without our knowledge, such as birth control, often times the deceit comes from our own doing, whether we consider it or not. Within one day the average American uses hundreds of products laced with chemicals designed to strip away natural odors and replace them with new, specially engineered pheromones, to cleanse and cover up blemishes and any signs of aging or fatigue, and to generally deceive potential mates. Without beauty products, steroids, dermatology, plastic surgery, odor enhancement, etc., natural and sexual selection would have continued to eradicate imperfections in our race. The debate still remains as to why humans insist on wearing a façade. One hypothesis is that humans are above the laws of Mother Nature, and that while pheromones apply to and control “lesser” species such as insects and other beasts, we refuse to be tamed and controlled by such reflexive responses. In conclusion, the biological and social evolution of mankind has created changes in the way mates are selected. Whether this proves to be an advantage or disadvantage for the species remains to be decided.

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