

# Applying Evolutionary Psychology in Understanding the Representation of Women in Advertisements

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## ABSTRACT

**One of the most ubiquitous creative copy decisions in advertising is to use young attractive women in decorative roles. Contrary to the mantra chanted by some staunch feminists, advertisers are not involved in a patriarchal white-male-dominated conspiracy to derogate, exploit, subjugate, and dominate women. Advertisers are concerned with providing messages that are maximally effective to their relevant target audience. Accordingly, they are well aware that in certain situations the use of decorative female models will appeal to a particular group of their constituency. Using evolutionary psychology as the explicative framework, it is argued that the greater use of young and attractive women in decorative roles in advertising is steeped in the differential mating strategies of the two sexes. An analysis of several content-analytic studies demonstrates that the more frequent use of women as young and attractive decorative models is longitudinally stable and culturally invariant further attesting to the Darwinian roots of this phenomenon. © 2004 Wiley Periodicals, Inc.**

Marketers wishing to advertise their products face two drastically different types of decisions. First, they must decide on the financial and logistical components of the advertising campaign. This includes determining the budget for the campaign, establishing its reach and frequency

(i.e., gross rating points), deciding which promotional tools to use, and subsequently integrating these into a coherent advertising strategy. Second, they must make a slew of creative decisions with regard to the contents and executional formats of the advertisements. Should the ads employ humor? Should they be one- or two-sided? Should comparative ads be used? Will the audience be receptive to fear appeals? Would it be appropriate to use a celebrity endorser, and if so, which endorser would be most efficacious? The current work seeks to analyze one of these creative decisions, namely the manner in which women are depicted in advertisements. Specifically, it shall be demonstrated that evolutionary psychology (EP), a Darwinian framework that has gained increasing acceptance across the social sciences, is essential for a full and comprehensive understanding of this important issue.

In the ensuing section, a brief description of the EP framework is provided and, subsequently, is contrasted to the standard social science model (SSSM), the leading epistemology in the social sciences. This is followed by a short discussion of the various ideological and epistemological attacks on Darwinian theory and the corresponding rebuttals. In the last section of the article, the viability of using EP in explaining the depiction of women in advertising is demonstrated and the latter approach is contrasted with that taken by gender feminists.

## **EVOLUTIONARY PSYCHOLOGY VERSUS THE STANDARD SOCIAL SCIENCE MODEL**

In 1859, Charles Darwin published the *Origin of Species*, arguably the most powerful scientific treatise ever written. His theory of natural selection proposes that organisms evolve according to three steps, namely, variation, inheritance, and selection. Specifically, random mutations create variations within a species. If a particular mutation is advantageous to the survival of the organism, those individuals possessing the mutation will have a differentially higher rate of survival than those without it. With a sufficient passage of time and given that the mutation is inheritable, it is selected as part of the organism's genetic makeup. Interestingly, while Darwin had proposed that natural selection is operative on both an organism's behavior and physical characteristics, it is only recently that the framework has been explicitly used to explore the human mind. EP, a Darwinian framework founded and refined over the past 20 years, posits that the human mind has evolved through the process of natural selection to solve adaptive problems that *Homo sapiens* faced in their evolutionary past. Hence, in the exact same manner that the eye, the pancreas, and the kidneys evolved as solutions to specific problems of survival, our cognitions, emotions, and behavior were prone to the same selection process. Thus, EP proposes that *Homo sapiens* have evolved mental modules that are domain specific, that is, that solve adap-

tive problems such as finding mates, managing social relations, and maximizing parental care. This view of the human mind is radically different from the epistemological underpinnings of the SSSM, which assumes that we are born *tabula rasa* and are subsequently shaped into unique individuals via culture and other socialization agents. Furthermore, the SSSM assumes that our minds are bestowed with general-purpose and domain-independent capacities, for example, Skinnerian and Pavlovian conditioning. The latter learning mechanisms are both general-purpose and domain-independent in that they can be invoked in numerous contexts and across a myriad of tasks. See Tooby and Cosmides (1992) and Pinker (1997) for a fuller account of these important distinctions.

The SSSM is a hopelessly inadequate framework for explaining human behavior. First, it has failed in providing a unifying framework from which the disparate social sciences can communicate with one another. Wilson (1999) has argued that the achievement of consilience<sup>1</sup> across all human endeavors (i.e., unity of knowledge) requires the adoption of Darwinian theory. He states that the natural sciences have generated a more organized and integrated body of knowledge precisely because they have adopted unifying frameworks both within a field (e.g., Darwinian principles in biology) and between fields (e.g., in physics and chemistry). Tooby and Cosmides (1992) have cogently argued that evolutionary psychology should not only be the unifying framework of all of the social sciences but also of the disparate subfields of psychology. Second, proponents of the SSSM do not provide an explanation of the genesis of the myriad of human cultures nor do they provide a rationale for the universality of specific socialization processes. In their view of the world, culture and its socialization forces simply exist, no questions asked. This is akin to the creationists' strict belief in the Biblical narrative. Where culture originated from and why it has evolved in the particular patterns that it has, the SSSM proponents are alas silent on these issues. Third, the SSSM framework solely provides explanations at the proximate level whereas a full understanding of the panoply of the human experience requires theories at both the proximate and ultimate levels. Proximate explanations address *what* and *how* questions, for example, how the human heart regulates the flow of blood, or what the mechanism is by which plaque builds within the heart's arteries. Within the context of human behavior, proximate explanations address how behaviors, emotions, and/or cognitions function and what they produce as final outcomes. Ultimate explanations address the *why* question, that is, they provide adaptive explanations (in a Darwinian sense) as to why specific behaviors, emotions, and/or cognitions exist in the manner that they do.

<sup>1</sup> Wilson (1999, p. 6) states "William Whewell, in his 1840 synthesis *The Philosophy of the Inductive Sciences* [italics in the original], was the first to speak of consilience, literally a 'jumping together' of knowledge by the linking of facts and fact-based theory across disciplines to create a common groundwork of explanation."

Men of all cultures and throughout all eras have preferred to mate with young as opposed to post-menopausal women (cf. Buss, 1989). Why does such an undeniable and robust preference exist? A proximate explanation might be that as a result of men's greater testosterone levels, they have greater libidinal drives that are more easily satiated by young women. While perhaps veridical, this is a physiological outcome of an adaptive process, and hence does not provide an ultimate explanation. A second explanation would be that men have historically held greater societal and economic powers and hence they were able to exercise their preferences while subjugating and controlling those of women. This reasoning, which has been ubiquitously used by feminists to explain a wide range of sex differences, in no way addresses the issue, for it does not provide an ultimate reason as to why men possess such preferences. A third and contemporary explanation simply states that men are taught these preferences by the media, the movies, and other popular cultural agents. This is perhaps the silliest of all claims espoused by proponents of the SSSM. It suggests that if exposed to the appropriate socialization forces, men could be taught to prefer older as opposed to younger women. Hence, a fact as obvious as men's sexual preference for youthful women is merely a preference imposed by youth-oriented, misogynistic men. The fact that this preference is a blatant human universal and has been pervasive throughout all of recorded history is merely a manifestation of men's consistent and evil subjugation of women. This type of ideological and dogmatic discourse is void of any scientific rationale. The ultimate explanation for men's preference of youthful women is that it is nonadaptive to be sexually attracted to elderly women. Those men that consistently held such preferences died out in the evolutionary race long ago. The current author is sitting here typing these words precisely because his evolutionary ancestors made choices that allowed them to extend their genes. Being sexually attracted solely to elderly women is tantamount to genetic suicide; it is that simple. See Buss (1994) for an excellent review of the universal preferences sought by men and women in their ideal mates.

One of the most common yet erroneous strategies used to falsify Darwinian-based theories is to identify what appears to be a violation of a human universal. Hence, when evolutionists posit that *ceteris paribus* men prefer to mate with younger women, someone will identify an uncle, brother, or friend that is currently dating an older woman ergo the theory has been supposedly falsified. Similar lines of arguments are used when attempting to attack the tenet that organisms pursue behaviors that typically maximize their inclusive fitness. In this case, antievolutionists might inquire about the adaptive value of homosexuality, suicide, adopting a child, preferring the color red, reading a book, or listening to Mozart. First, many evolutionarily relevant phenomena operate on behavioral predispositions rather than on overt behaviors.

For example, while men might prefer to mate with supermodels and while women might prefer to mate with socially dominant males, there are clearly too few of these to go around. Hence, most people engage in assortative mating (i.e., choose partners that match them along relevant mating characteristics). This is a perfect example of how our innate predispositions (in this case preference for certain traits in prospective mates) interact with the environment (too few gorgeous women and alpha men). If anything, this demonstrates that humans are equipped with extraordinary behavioral plasticity and as such are hardly constrained by preordained biological determinism. Second, an idiosyncratic preference might indeed deviate from the adaptive norm if the distribution of preferences for the given trait is normally distributed. Third, humans do not consciously engage in behaviors that maximize their fitness. If this were the case then all men would be lining up to donate their sperm to sperm banks (Buss, 1995). Fourthly, many phenomena are simply not within the purview of evolutionary theory. Hence, while evolutionary theory can explain the universal gustatory preference for fatty and sweet foods, it cannot address an idiosyncratic preference of a given individual (e.g., if the individual prefers chicken more so than red meat).

The evolutionary psychology literature is replete with numerous other ultimate explanations dealing with human mating. For example, Daly and Wilson (1988) have shown that men's greater intolerance of cuckoldry is due to the genetic threats of paternity uncertainty. Grammer (1996) has demonstrated that how provocatively a woman dresses in a singles bar is highly correlated to her ovulatory cycle. Hence, women are most likely to advertise themselves in manners that immediately attract the attention of potential suitors when they are maximally fertile. This does not imply that women are cognizant of this reality. Rather, women have evolved physiological mechanisms that are adaptive (e.g., hormonal changes during peaks of fertility). Clearly, such a link between a physiological measure and an overt behavior can never be explained via socialization-based theories. As a matter of fact, the current author has often challenged audience members at academic conferences to provide him with a viable and compelling socialization-based alternate explanation. Not a single proponent of the SSSM has yet been able to meet the challenge. It should be noted that EP extends far beyond the purview of sex differences. It has been used to explain such varied topics as parental care, sibling rivalry, landscape preferences, medical conditions, the prevalence of the incest taboo, reciprocal altruism, the evolution of language, homicide, and warfare. See Barkow, Cosmides, and Tooby (1992), Wright (1995), Buss (1996, 1999), and Barrett, Dunbar, and Lycett (2002) for excellent discussions of the EP framework as applied to these and many other domains.

## ATTACKS AGAINST EVOLUTIONARY PSYCHOLOGY

The SSSM evolved as an intellectual courant, which explicitly sought to remove biological principles from the study of human behavior. For example, much of 20th-century American anthropology as developed by Franz Boas and several of his students (e.g., Margaret Mead) has adhered to the notion of cultural relativism. Namely, it is argued that it is next to impossible to identify universal truths about human behavior given that each culture has evolved in a somewhat different environment. This movement arose as a backlash against the elitist and oftentimes racist approach espoused by earlier anthropologists, wherein cultures were explicitly ranked along continua of progress and development. Hence, in their quest to redress the abuses of earlier scholars, liberal-minded social scientists developed a view of the world that sought to abolish the possibility of future misapplications of Darwinian theories. Within this view of the world, all humans are born equal, with *tabula rasa* brains. Subsequently, individuals' behaviors are fully shaped by their distinct cultures and idiosyncratic life experiences. Note that biological factors cease to exist within this framework.

Other vociferous ideologues that have attacked Darwinian principles include feminists, social-class libertarians, racial libertarians, and creationists. Hence, according to their respective ideological platforms, these ideologues believe that Darwinian theories must be squashed and discredited because they subjugate women, the lower social classes, races, and religion. The fact that numerous miscreants, including eugenicists, social Darwinists, right-wing elitists, and fascists, have misused Darwinian principles states nothing about the scientific validity of Darwinian principles. EP is unequivocally nonracist in that it typically identifies human universals, that is, phenomena that are cross-culturally invariant. Hence, contrary to cultural relativism, which is interested in cataloguing cross-cultural differences, EP seeks to understand cross-cultural similarities. Thus, EP explicitly recognizes that humanity is bound together via common Darwinian forces, making us all grossly more similar than different from one another. Feminists should be staunch supporters of EP, for the framework recognizes that within the human species (as in most other species), female mate choice via the process of sexual selection has guided the evolutionary process. Hence, rather than viewing women as passive Victorian prudes, EP explicitly recognizes the overwhelming evolutionary power that women have held. Social class libertarians and other proponents of the SSSM have fallen victim to false dichotomies such as the now infamous nature-versus-nurture debate, and have been engulfed in trying to defeat the notion of biological determinism. In reality, both issues are moot and nonsensical. No serious evolutionist believes that humans are exclusively shaped by culture or are trapped by their biology. Instead, as Tooby and Cosmides (1992) cogently explain, human individuality arises as an interaction between one's genes

and their environment. Other evolutionists that have espoused this interactionist viewpoint include Dawkins (1976), Lumsden and Wilson (1981), and Durham (1991). Hence, there is no nature–nurture controversy, nor is there such a thing as biological determinism. See Buss (1999, pp. 18–22) for additional clarifications and rebuttals to some of the key misunderstandings linked to EP and Darwinian theory.

The most frequent epistemological attacks fired against EP are that it posits unfalsifiable hypotheses and offers post hoc speculative rationalizations and “just-so” stories. This is an utterly incorrect belief, to which Ketelaar and Ellis (2000) provide definitive rebuttals. One example is discussed here to disprove this gravely erroneous misconception. Trivers’ (1972) parental-investment theory proposes a mechanism by which one can fully and accurately predict sexual behavior across a wide range of species (including *Homo sapiens*). He argued that in species where the sexes provide differential parental investment that sex with the greater cost to bear would be more sexually coy and choosy. The explanation is extremely elegant and yet blatantly simple. Choosing a poor mate carries more deleterious consequences to the sex that will bear the greater parental investment. In many species, the mere fact that females bear the offspring is sufficient to tip the greater parental investment in their favor. However, there are rare species where it is the males that provide greater parental investment. In such species, sexual roles and behaviors are exactly reversed. There is absolutely nothing that is inherently unfalsifiable and/or untestable about the theory. If an ethologist were to find a counterexample at the species level, the theory would be falsified! Incidentally, parental-investment theory is one of the key building blocks in understand the evolution of human sexuality, a topic to be further discussed in a later section.

To briefly summarize, evolutionary psychologists do not condone, condemn, justify, or prescribe behaviors. They do not provide unfalsifiable and/or untestable hypotheses. They are not misogynistic, right-wing Nazi zealots bent on maintaining the patriarchal status quo. They do not believe in biological determinism. They do not subscribe to the nature-versus-nurture dichotomy. They simply propose that the forces of natural selection have shaped our behaviors, cognitions, and emotions. These innate Darwinian modules interact with environmental cues and life experiences to yield the uniqueness of each individual. In the ensuing section, a brief description is provided of gender feminism and how it has dealt with the issue at hand. This is subsequently followed by an explanation of how EP can be used in understanding the depiction of women in advertising.

## **GENDER FEMINISM AND ADVERTISING**

No person of conscience should accept a reality whereby any individual and/or group of people are oppressed, subjugated, or dominated. As a

Lebanese Jew who has experienced the most virulent of hatred during the Lebanese civil war, the current author is well qualified to speak of the horrors of oppression. Hence, to the extent that feminism has sought to redress systematic social, political, and economical injustices aimed at women, it has yielded great victories for women's rights. However, where feminism has unequivocally failed is as a framework for understanding human behavior. This is because blind and dogmatic ideology, reminiscent of religious zealotry and intolerance, has shaped the movement. It should be reiterated that the current author is referring here to feminism as an intellectual movement and not as a civil-rights struggle. Furthermore, the focus is on gender feminism, namely, the most venomous and radical form of the variants of feminism (cf. McElroy, 1996). Gender feminism, as is true of Freudianism and postmodernism, abdicates biology as a relevant force in understanding the world around us. In a caustic attack on gender feminism, McElroy (1996) discusses the outlandish irrationality inherent to the movement. Lest the reader think that McElroy belongs to the patriarchal and oppressive regime of white males, she is a staunch feminist. In her book, McElroy provides a remarkable description of the beliefs espoused by some of the premier ideologues of the feminist movement. DNA is no longer viewed as biological reality, rather it is a manifestation of male dominance via its master molecule implications. All men become rapists, irrespective of whether they have actually committed rape or not. The systematic oppression of women becomes one of the central goals of capitalism. Being male ceases to be a biological reality, instead it is a political and social construct. Heterosexual dating and sex are rejected, for they ultimately serve as the most direct manner by which the patriarchy can oppress women.

Needless to say, a movement that espouses the latter beliefs is unlikely to adhere to ideologically free scientific standards when addressing a topic such as the depiction of women in advertising. Feminists argue that because advertisers have historically been sexist white males who are members of the patriarchy and participants in the capitalist system, they have used advertising as yet another instrument to oppress women. Hence, according to this viewpoint, it is indeed not surprising that women have traditionally been depicted in sexist roles and as sexual objects. Furthermore, the feminist agenda champions the idea that a woman's self-worth is negatively affected by advertising images that reaffirm standards of beauty that are unattainable. For example, Stephens, Hill, and Hanson (1994) state that advertising creates a female "beauty myth" resulting in problems for women including poor self-esteem, excessive dieting, and eating disorders. Martin and Gentry (1997) argue that young girls are trapped by these standards of beauty. Hence, given the deleterious effects that such images have on women viewers, feminists are quick to condemn advertisers as sexist and misogynistic capitalists. It is perhaps true that women's self-perceptions are negatively affected by sexy images of decorative models. Why do capitalists, intent on maximizing profits



as their sole *raison d'être*, consistently make use of such images? It is inaccurate and misleading for feminists to repetitively chant the "oppression of women by white males" rhetoric. It is proposed here that certain advertising universals, namely, specific sexual imagery such as the depictions of women in advertising as decorative models, is best explained via evolutionary psychology, a topic addressed in the ensuing section.

## EVOLUTIONARY PSYCHOLOGY AND SEXUAL ADVERTISING

Advertisers are in the business of reaching an audience. Hence, they will use whichever means necessary to convey their messages, including the use of sexual imagery. That being said, the findings on the efficacy of such an executional strategy have been equivocal. In determining whether an advertising campaign is efficacious, numerous dependent measures can be gauged. These include paper-and-pencil measures such as one's attitude toward the ad and brand, purchase intention, brand recall, and message-related thought listings (cf. Severn & Belch, 1990) and physiological ones (cf. Belch, Holgerson, Belch, & Koppman, 1982). Perhaps the most robust finding has been that while sexual stimuli may draw one's attention to an ad, it does not translate into improved comprehension or memorability. Furthermore, the opposite-sex effect has been a very ubiquitous finding. Providing sexual images of women is more effective when targeting men (Jones, Stanaland, & Gelb, 1998; LaTour & Henthorne, 1993; LaTour, Pitts, & Snook-Luther, 1990; Smith, Haugtvedt, Jadrich, & Anton, 1995). On the other hand, the display of sexual images of men is more effective when targeting women (Reidenbach & McCleary, 1983; Simpson, Horton, & Brown, 1996). Are men and women taught via socialization forces to have their attention drawn to sexy and attractive people of the opposite sex? Of course this is not the case. One need not be a staunch Darwinist to appreciate the fact that sexual stimuli are attention grabbing.

The manner in which men and women are depicted in sexual ads has been mainly explored via the use of content analyses. In some instances, the content analysis is limited to a single culture and a single time period. For example, Lin (1998) found that women were more often depicted as sex objects, and that men were depicted as heavier and not quite as attractive. In other instances, the content analysis is longitudinal; for example, Reichert, Lambiase, Morgan, Carstarphen, and Zavoina (1999) found that women were three times more likely than men to be portrayed in a sexually explicit manner, and this ratio remained consistent for 1983 and 1993. Ferguson, Kreshel, and Tinkham (1990), in a content analysis of *Ms.* magazine over a 15-year period, demonstrated an increase in the portrayal of women as sexual objects. A third type of content analysis introduces a cross-cultural component, wherein the depiction of men and/or women is contrasted cross culturally. Recent studies have included

content analyses from such varied countries as Malaysia, Singapore, Japan, the United States, and the Hispanic American culture (cf. Ford, Voli, Honeycutt, & Casey, 1998; Fullerton & Kendrick, 2000; Maynard & Taylor, 1999; Wee, Choong, & Tambyah, 1995). Several consistent patterns have emerged from these studies. Sex-role stereotypes are found in all cultures, albeit to varying degrees. For example, in the Fullerton and Kendrick (2000) study of Hispanic ads, only 3 of 92 advertisements contained a sex reversal of stereotypical roles. Not surprisingly, cultures with more egalitarian attitudes toward the sexes have typically yielded fewer incidences of such stereotypes. Furthermore, women's reactions to the manner in which they are portrayed is a function of their cultures; for example, Ford, LaTour, Honeycutt, and Joseph (1994) found that women from New Zealand were more critical of their portrayals as compared to their Thai counterparts.

To the extent that advertising should provide accurate depictions of societal values, stereotypical depictions of women that are incongruent with such realities are reprehensible. Hence, remedying stereotypical depictions of women (e.g., in the roles that they portray) is certainly within the purview of the feminist agenda. Alas, feminists will find that the second set of robust findings to emerge from the aforementioned literature on cross-cultural content analyses will be more difficult to address. To the extent that a sex difference was found, women were always depicted as younger, more attractive, and were more frequently shown in decorative roles. In not a single culture was there a reversal of any of the latter findings. The feminist rhetoric rings empty here, for the depiction of women as young, attractive, and sexually desirable is certainly not restricted to those cultures where the patriarchal white males run free. What can explain this universal preference for youth and beauty? In an investigation spanning 37 cultures, Buss (1989, 1994) has shown that there are universal preferences held by men and women in terms of the characteristics they seek in their ideal mates. The cultures studied were exceptionally heterogeneous along economic, political, racial, ethnic, and religious lines. Two consistent patterns emerged: Men value beauty and youth more so than women, while women value social status more so than men. It becomes rather difficult for proponents of socialization theory and feminists alike to explain how a sample so exhaustively varied along all possible dimensions can yield such universal preferences. The Darwinian explanation is rather simple: Men and women have evolved mate preferences that make adaptive sense. Mating with unattractive elderly women or with moronic, submissive, and lazy men are behaviors that, evolutionarily speaking, constitute genetic suicide. Thus, the greater incidence, in which women are depicted as young and attractive, is merely a reflection of the fact that advertisers are aware of this blatant reality.

Why are women more likely to be depicted decoratively than are men? Is it nothing more than a new forum to derogate and humiliate women? Feminists certainly seem to think so. Trivers' (1972) parental-invest-

ment theory debunks this assertion in very certain terms. Recall that the theory states that within a given species the sex that bears the greater parental investment will be more sexually choosy and coy. This is because a wrong mating choice has greater deleterious effects to the latter parent. Not surprisingly, men and women have evolved sexual strategies and sexual responses that are consistent with their adaptive goals and realities. The theory predicts that the sex that provides the lesser investment is more likely to be interested in short-term mating opportunities. An innumerable number of studies have shown that men are indeed more interested in short-term mating opportunities (cf. Buss & Schmitt, 1993). Clearly, a short-term mating strategy yields greater benefits to men than it does to women. Thus, men have evolved physiological responses that are congruent with their optimal mating strategies. That men are quickly aroused by visual stimulation would ensure that they would take advantage of short-term dalliances should such opportunities arise. However, if women were to have the same sexual response when exposed to overt visual stimuli, this would severely affect their judicious choice for an optimal mate. One need only contrast the sexual practices of gay men and women to realize that the sexual responses of men and women are grossly different irrespective of sexual orientation. Countless studies have shown that men are more likely to fantasize about having sex with a greater number of partners, they are more likely to fantasize about having sex with strangers, and they are more aroused by the viewing of pornography and by attending strip bars. The world is replete with so many examples and studies highlighting men's greater arousal when exposed to visual stimuli that only a movement as irrationally politicized as gender feminism could attribute it to socialization and oppression. See Symons (1979) and Buss (1994) for excellent discussions of the evolution of human mating.

Gender feminists have sought to systematically remove and deny all sex differences, for they have incorrectly equated the recognition of sex differences with the maintaining of social and economic inequalities. The current author recently engaged in an intellectual debate with a graduate student of anthropology who happened to be both a feminist and postmodernist. At one point in the conversation, the author asked the graduate student to explain to him the postmodernist tenet that not a single truth exists. Surely, the author argued, only women can bear children and the sun always rises in the East and sets in the West. In the nonsensical and intellectually dishonest tradition of some postmodernists, the postmodernist/feminist flippantly replied that both so-called "facts" were far from being true. In the first case, she referred to an obscure Japanese society that had a rich spiritual parallel life. Within the spiritual realm, the student stated, it is the men that bear the children! She indirectly chastised the author as being obtuse and patriarchal, given that he was restricting his definition of childbirth to the physical realm. As far as the second "fact" was concerned, she questioned his use of arbi-

trary semantic labels such as “sun.” She proceeded to “deconstruct” his use of the term “sun”; for, after all, that which he calls the “sun,” another might call “dancing hyena.” All is relative, she concluded. Hence, gender feminists turn one’s biological sex into a political and social construct; they reject heterosexual sex as oppressive; and in some instances, they reject the tenet that only women can bear children! One can fully understand why it might be difficult to convince them that men and women have indeed evolved different sexual strategies.

Recognizing that men and women have different sexual strategies does not translate into the tenet that women are sexually passive, submissive, and demure. To the contrary, evolutionists have demonstrated that in most species, females have completely shaped the evolution of their species via the process of sexual selection. Feminists will also be pleased to know that evolutionists have amassed an impressive body of data from numerous fields, including ethology, physiology, and human sexuality, demonstrating that women have not evolved to be monogamous. Ethologists have found that within the primates, there is a very high correlation between the size of the testes of the males within a species and the promiscuity of females within the species. For example, female chimpanzees are extremely promiscuous, yielding male chimpanzees with gigantic testicles. On the other hand, in gorilla society, a single dominant male will monopolize sexual access to numerous females, resulting in male gorillas having small testicles. The evolutionary story is quite simple, yet manifestly elegant: The intensity of the sperm wars within a species (as guided by female sexual behavior) will guide the evolution of males’ testes. Human males fall somewhere between the chimpanzees and the gorillas on this continuum, hence suggesting that evolutionarily speaking, human females have not been disposed to life-long monogamy. Robin Baker (cf. R. Baker, 1996; R. Baker & Bellis, 1995) has developed an evolutionary-based albeit controversial research stream linking women’s sexual behaviors with the adaptive advantages of promoting sperm wars (within the female reproductive tract). For example, his research has shown that a man’s sperm is actually comprised of three different types of spermatozoa. The “fertilizers” are exactly those that most people are aware of, namely, the long-tailed spermatozoa seeking to fertilize the ovum. Surprisingly, there are two other types of spermatozoa within a man’s ejaculate that are quite uninterested in the ovum. The “blockers” establish a line of formidable chemical defenses against any potentially incoming sperm (from another man). On the other hand, the “killers” seek and, if found, destroy other men’s spermatozoa (for a challenge of these findings, see Birkhead, 2000, pp. 23–29; Moore, Martin, & Birkhead, 1999). Given the limited longevity of sperm within a woman’s body, this suggests that evolutionarily speaking women were very likely to mate with more than one man within a short time period. Hence, men have evolved physiological, anatomical, and molecular adaptations for sperm warfare. Baker and his colleagues further review behavioral research in support of the tenet that women have not evolved to be

monogamous. Women are much more likely to cheat when ovulating while at the same time not insisting that their lover use any contraception. This result held true only for those women that were not taking contraceptive pills. Furthermore, women are more likely to achieve an orgasm during an extramarital dalliance. It has been shown that the contractions that occur during a woman's orgasm increases the likelihood of the collected sperm being drawn closer to the ovum. Finally, women are more likely to cheat with men that are more physically attractive than their long-term mates. See Baker and Bellis (1995) for additional details regarding this line of research. Feminists could not have dreamt of data that are as "liberating" and as empowering to their cause as those presented above. If anything, feminists should extol the evolutionists for providing them with ubiquitous, parsimonious, and robust data that demonstrate the evolutionary power that women hold. The latter statement is made somewhat facetiously, for scientific pursuits should be undertaken without any ideological prejudice. Evolutionists do not condone or condemn the latter results. That women have not evolved to be monogamous is neither framed as a political victory nor as a condemnation. Gender feminists would be better served in adhering to the same standards of scientific integrity and intellectual discourse.

Numerous studies have demonstrated the efficacy of using physically attractive models in advertisements. For example, M. J. Baker and Churchill (1977) found that physically attractive endorsers positively affect an ad's evaluation. Within the social psychology literature, the advantageous effects of being attractive are so pervasive that the effect has been coined the "what-is-beautiful-is-good" effect (see Eagly, Ashmore, Makhijani, & Longo, 1991, for a meta-analysis of the latter effect). Hence, attractive people reap numerous benefits, including being perceived as more intelligent and commanding higher salaries for equal work. Why does such a pervasive bias exist? Are the same standards of beauty common to all cultures and similar across eras? Proponents of the SSSM provide us with the standard socialization rhetoric. For example, they argue that men are taught/socialized to appreciate certain standards of beauty via their exposure to media images. Furthermore, given that these standards are supposedly socially constructed, they vary across cultures and eras. Englis, Solomon, and Ashmore (1994) conducted a content analysis of the portrayal of standards of beauty in magazine and TV music videos. They explored six archetypes of female beauty (trendy, classic beauty/feminine, exotic sensual, girl-next-door, sex kitten, and cute) and found that the prevalence of a particular archetype varied across type of medium. Furthermore, they argued that the most desired archetype varied across eras, a finding consistent with Fay and Price's (1994) study wherein they showed that the ideal female body shape of models had drastically changed. It is further proposed that one need only look at the differences in cross-cultural preferences of body types, for example, the fact that certain African cultures prefer women that are significantly more rotund than our Western ideals to see the influence of

culture in shaping our standards of beauty. Finally, such proponents argue that a content analysis of Renaissance paintings would unequivocally demonstrate how the standards of beauty of that era are grossly incongruent with our current ideals.

Several evolutionists have recently shown that all of the latter differing ideals of beauty have one evolved commonality, which none of the proponents of the “beauty-is-a-social construct” tenet has ever considered. Men consistently display a near-universal preference for women that have a waist-to-hip ratio (WHR) close to 0.70 (cf. Singh, 1993; Singh & Luis, 1995; Streeter & McBurney, 2003). Hence, the rotund woman in the Renaissance painting, the voluptuous sexy vixen of the 1950s, and the thin supermodel of the 1990s all share one common metric: They all have WHR of roughly 0.70 (see Freese & Meland, 2002, for a challenge to this finding in the context of a longitudinal analysis of models posing as *Playboy* centerfolds and of winners of the Miss America pageant). Numerous studies have shown that a WHR close to or equal to 0.70 is an excellent indicator of fertility and health (cf. Singh, 2002). Hence, evolutionarily speaking, it is indeed adaptive that men have evolved these universal standards of aesthetic body ideals. That said, this male preference for a WHR of 0.70 is dependent on the particular ecological niche. For example, in environments that have been recurrently defined by caloric scarcity, men’s preferences typically adjust accordingly via a preference for a higher WHR (cf. Sugiyama, 2004; Westman & Marlowe, 1999). This further demonstrates the importance of the environment within the context of an evolutionarily relevant phenomenon.

Are there any universal standards of facial beauty? Once again, the results are unequivocal in terms of pointing to universal and innate preferences. Thornhill and Gangestad (1993) have shown that averaged symmetrical faces are perceived as most attractive. Both facial and body symmetry are highly desired traits, for they serve as reliable cues of health (e.g., parasite resistance) and youth (Gangestad, Thornhill, & Yeo, 1994). This metric of symmetry is universally preferred, irrespective of the race of the person being judged, the person doing the judging, and the extent of exposure to Western media (see Buss, 1999, pp. 141–142, for a summary of the relevant studies). Interestingly, Gangestad and Buss (1993) have demonstrated that the importance of symmetry varies as a function of the prevalence of pathogens within a particular culture. This is yet again proof that our Darwinian modules are malleable. In other words, far from espousing biological determinism, our innate modules interact with environmental cues in shaping our behaviors, cognitions, and emotions. Finally, this universal preference for attractive faces is neither learnt nor socially constructed. Infants as young as 6 months old display this preference, as measured by their longer gaze at photos of attractive people (Langlois, Roggman, & Reiser-Danner, 1990).

To summarize, the greater incidence with which women are depicted as young, attractive, and decorative models has absolutely nothing to do with a concerted effort to humiliate, derogate, or oppress women. Buss

(1994, p. 214) states that “Feminist theory sometimes portrays men as being united with all other men in their common purpose of oppressing women. But the evolution of human mating suggests that this scenario cannot be true, because men and women compete primarily against members of their own sex.” Advertisers are ultimately interested in profits, and not in the systematic oppression of any particular group. Advertisers merely recognize that images of attractive and young women appeal to one of their audience segments. For additional discussions on the applications of EP to the study of media images, advertising, and marketing, see Malamuth (1996), Grammer (1998), Cary (2000), Bagozzi and Nataraajan (2000, pp. 3–4), Saad and Gill (2000), and Colarelli and Dettman (2003).

## CONCLUSION

Recently, the current author watched a debate between two feminists on a popular prime-time television news show. One feminist was representing an organization for the empowerment of women while the second one was a representative of PETA (People for the Ethical Treatment of Animals). The debate topic centered on whether it was appropriate for PETA to have used sexual images of women in advertising its cause. The former thought it demeaning that women would be depicted as sexual objects, whereas the latter felt that women should use their sexual power to draw attention to worthy causes. What irony! The empowerment feminist wanted to assuage women’s sexual powers, whereas the PETA feminist wished to celebrate it. In the tradition of feminists such as Camille Paglia and Wendy McElroy, the PETA guest was highlighting the silliness and irrationality of ignoring basic biological realities. This anecdote cogently demonstrates the need to discuss the depiction of women in advertising at two distinct levels. At the policy level, one can certainly debate whether or not it is appropriate to legislate the images that members of a free society can be exposed to. However, at the scientific level, if we wish to truly understand why such images exist in the manner that they do, we must refrain from introducing ideological dogma into the discussion. The prevalent depiction of women as young, sexy, and attractive models has absolutely nothing to do with oppression. It is merely recognition by advertisers of the most blatant and universal truths regarding men’s evolved sexuality.

Women do prefer to be depicted with realistic and egalitarian images (cf. Jaffe & Berger, 1994), and failure to do so might indeed reduce the efficacy of the advertisement (cf. Bower, 2001). Furthermore, both sexes have ethical concerns with regards to the manifest use of sexual stimuli in advertising (LaTour & Henthorne, 1994). Hence, it is important that advertisers be sensitive in the manner in which they depict women, lest they run the risk of offending their audience. That being said, this does not imply that advertisers should ignore the fact that we are sex-

ual beings. When it comes to sexuality, *Homo sapiens* react to certain stimuli in clear and predictable manners that have little to do with cultural agents. A personally relevant example should solidify this important point. Numerous studies have shown that women prefer taller men (cf. Buss, 1994). Taller men are financially more successful, are more likely to win U.S. presidential elections, and are more likely to have a greater number of sexual partners. The current author happens to be shorter than the average male. He could easily propose that this preference is socially constructed by media images of tall men in Hollywood films. He could also add that this is a feminist plot to demean short men. Better yet, perhaps this is a strategy that tall and racist white males of the patriarchy have chosen to derogate short Jewish men. He should insist that advertisers stop using tall men as the ideal representation of the powerful and sexy man. He should vigorously pursue Randy Newman (the Californian songwriter) who in the 1970s wrote a hit song derogating short people. He could do all of the latter things but it would be silly for him to do so. Evolutionarily speaking, the preference for taller men has had clear adaptive benefits, thus explaining why women have evolved this exact preference. This does not mean that short men are doomed to a life of romantic and employment rejections, for one can certainly compensate for his lacking height via other qualities. Gulas and McKeage (2000) have shown that the depiction of financially successful men and women in advertisements had an adverse effect on men viewers. On the other hand, viewing physically attractive men and women in the ads did not have any negative effects on men's sense of self-worth. This is exactly what EP would predict, for in terms of male intrasexual rivalry, financial resources are much more important than physical attractiveness. Should we now insist that advertisements no longer promote such images for it harms men's self-worth? That advertisements depict ideal standards of aesthetic beauty is neither surprising nor deplorable. Advertisers are in the business of reaching an audience. To the extent that they should use images and messages that appeal to their target audience, it would make perfect sense that they utilize our innate aesthetic preferences.

That advertisements should accurately depict women in their panoply of occupational roles is indeed a requirement. Feminists have certainly been successful in ensuring that the depiction of women be congruent with current social and economic realities. Along those lines, Wolin (2003) analyzed published findings covering the period 1970–2002 and found an apparent decrease of gender stereotyping in advertising. However, where gender feminists are doomed for failure is in chanting the mantras that heterosexuality is oppressive and demeaning to women, that beauty is a socially constructed myth, and that preferences for youthful and attractive women are a further instrument of humiliation. To politicize sexuality and to irrationally ignore the most basic and blatant sex differences is foolish. Recognizing that men and women have evolved different mating strategies, which translate into ubiquitous differences in behav-



iors, does not imply the superiority of one sex over the other. A true understanding of the human condition requires the recognition that we are biological entities that have been shaped by millions of years of evolution. It is neither sexist nor misogynistic for men to be attracted to young and beautiful women. Feminists will never succeed in eradicating these preferences. Advertisers simply take advantage of this reality. If all humans were to abide by the tenets of gender feminism and reject heterosexual sex, it would surely put a damper on our species' ability to survive. Gender feminists are indeed poorly versed in Darwinian thinking.

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