Introduction

While organisms such as starfish, bacteria and many other plant species are capable of producing asexually, humans are not. Therefore, from an evolutionary perspective, it is imperative that individuals of sexually reproducing species like us find a mate.23 Sex has a very important evolutionary function and is an enormously powerful driving force in the lives of humans. It fuels evolutionary change by adding variation to the gene pool (Abrahams, 1994). More importantly, it is the only mechanism that passes genes on to the next generation. For this reason, there has been a growing amount of literature on behaviors and phenomena that seem to promote a sexual encounter between two individuals. Such behaviors may include courtship, dating, and flirting. Among the three, this paper will focus on flirting and the evolutionary function that it may have.

Definitions

Flirting is a form of human interaction, usually defined as expressing a sexual or romantic interest in another person. This paper will use the term “evolutionary function” to mean a particular phenomenon or response to environmental stimuli which may serve as an adaptive advantage and increase genetic fitness. To properly examine whether or not flirting has an evolutionary function to human beings, one should begin by examining whether flirting has a specific role in solving adaptive problems faced by humans.

Adaptations are problem-solving devices24; they are specifically designed to solve a problem and have been naturally selected among other, less successful designs. Over time, individuals with successfully designed adaptations will leave more surviving offspring and their advantageous trait will become species-typical. Adaptive designs, then, have to have specific functions. Function, in the definition of evolutionary psychology, is the specific way in which a certain trait solves problems.

that have been repeatedly faced by a species over time. For flirting behavior to be considered as an adaptation of human beings, therefore, it should be species-typical.

Flirting has been observed cross-culturally. Irenaus Eibl-Eibesfeldt, a scholar of urban ethology, discovered that people in dozens of cultures, from the South Sea Islands to Western Europe, Africa and South America, engage in a similar repertoire of gestures to flirt with each other.25 One may then ask: is flirting, which seems to be a species-typical behavior, an adaptation to environmental problems that thereby leads to the proliferation of a gene with the specific design feature? Or is it just a side effect of other adaptations?

**Puzzles**

Flirting can be thought of as having a signaling function. Flirtatious behaviors are, in most cases, engaged in by two opposite sexes who are mutually interested in one another. Successful flirting often leads to a sexual encounter, courtship, or advances to a stable, committed relationship between the two individuals. Studies confirm the common notion that flirtatious behaviors are used to promote a relationship that involves some degree of sexual contact. However, sexual intent is not a necessary or a sufficient reason to engage in flirting.26 Various experiments, such as the one conducted by England, Spitzberg, Zormeier et al, suggest that individuals in platonic cross-sex relationships do engage in flirting behaviors that are no different from those of individuals in sexual relationships. It was also revealed from similar studies that individuals who are engaged in a committed relationship often flirt with strangers without any intent to get sexually involved with them.27 For this reason, it is extremely difficult to distinguish between flirting behaviors with and without sexual intent. Individuals often misinterpret flirting behaviors without any sexual intent as courtship invitations and escalate their own behaviors so as to pursue unintended, undesired social-sexual behavior.28 For both men and women, the wrong interpretation of flirting leads to embarrassment and a wasteful investment of resources.

which may be time, effort or money. If flirting were to have a signaling function, why would it often involve such costly outcomes?

Another problematic aspect about considering flirting as a signal of sexual interest is that it is free from any cost or risk. According to the theory of honest signaling, the necessary and sufficient features of a believable signal are that it cannot be easily faked and that it is more costly to produce for individuals who do not mean the signal. However, because individuals can terminate the interaction at any point without incurring any significant cost, flirting does not constitute any commitment towards advancing the relationship. Therefore, following the definitions of the honest signaling theory, flirting is mere cheap talk among individuals.

In a case where the main function of flirting is signaling of sexual intent, people would be trying to acquire and explicitly show such information rather than hide the fact and be ambiguous about it. Therefore, to conclude that the only, or at least the main, function of flirting is to signal sexual interest, one seems to fall short in accounting for its ambiguity and meaninglessness. The complicating factors may be due to ulterior motivations other than signaling or barriers in interpersonal interactions during perceptual and cognitive processes.

**Different Motivations**

Flirting behaviors are often very similar in appearance, but may be driven by two or more different motivations. This indicates that flirting interactions can be quite complex, often involving a variety of disparate goals. Different motivations can be broadly classified into two categories. Sexually motivated flirting behaviors are courtship initiating; behaviors with no sexual intent are quasi-courtship. For this reason, the distinction between courtship initiation and quasi-courtship appears to lie not in the behaviors, but rather in the motivations that generate those behaviors. To correctly make a distinction between courtship initiation and quasi-courtship flirting, one must first separate the motivations of the adaptations from its effects. Therefore, to understand flirting interactions, this paper will first have to recognize the different motivations that promote these interactions and study whether or not each differently motivated function of flirting solves a specific adaptive problem.

29. Robert Kurzban, Honest Signaling Lecture.
Flirting with Sexual Intent

As mentioned above, not all flirting behaviors are driven by sexual intent. However, sexual motivations are still the most likely to produce flirting interactions in most of the cases. The strongest evidence may stem from the fact that the decision not to flirt with a person is significantly predicted by a lack of sexual attraction to the person (Messman, Canary, & Hause, 2000).

Besides sexual motivation, a second type of motivation is relational – increasing intimacy in an existing relationship to develop it into a more stable, committed one. The finding of Messman et al. (2000) indicates that people are cognitively aware of this motivation and view flirting as a way of promoting relational development.

There is an interesting gender difference inferred from the comparison of the two motivations. In one experiment (Abbey, 1982), participants were given various scripts of a typical cross-sex flirting interaction and then were asked what flirting motivation the person in the interaction would have while engaging in the flirting behavior. In this experiment, men believed significantly more flirting behaviors were sexually motivated than women did, whereas women believed significantly more flirting behaviors were relationally motivated than men did. These findings are consistent with the evolutionary theory view of flirting interactions. From an evolutionary perspective, men are likely to pursue more sexual encounters than women do, whereas women are more likely to value relational commitment than men are (Trost & Alberts, 1998). Research conducted by Yarab et al. (1999) found that while both men and women view flirting with others as a threat to existing relationships, women reported greater jealousy and viewed the behavior as more unfaithful than did men. This implies that women see flirting as more connected to developing relationships as well as a greater threat to an existing relationship. These experimental results further support the evolutionary perspective of gender differences.

32. Ibid.
33. Ibid.
34. Ibid.
36. Ibid.
Gender differences in flirting behavior were also noted in a different experiment conducted by Mishra and two colleagues from McMaster University. Participants were asked to rate their partners or acquaintances before and after watching a video of members of the opposite sex being interviewed. When the female interviewees of the videotape acted more socially and flirtatiously, both attached and unattached men lowered the ratings of their current partners and other women, whereas the relative openness of male interviewees had no effect on women subjects. This finding also indirectly supports the evolutionary theory. Women are less likely to respond to signals of intent because, historically, females benefit most from finding one high quality partner. Therefore, their opinion of their partner is less likely to be swayed by exposure to an attractive male. Reproductive success for men, on the other hand, has historically been contingent on finding and mating with a large number of females.

Flirting Without Sexual Intent

The two motivations mentioned above involve sexual intent – either initiating the first courtship, sexual encounter or stable relationship, or refueling an existing relationship. Many other motivations of flirting lack a sexual intent, often referred to as quasi-courtship behaviors. These quasi-courtship motivations of flirting may explain why flirting is often too ambiguous and unreliable to be interpreted solely as a signal of sexual intent.

David B. Givens noted that individuals engage in flirtatious behaviors with an exploring motivation to assess and check various types of information about the prospective partner. This can be understood as the step before the signaling of sexual intent. Before increasing intimacy in a certain interaction, individuals try to examine the personal predisposition and physical or psychological state of the partner. Then the individual may decide whether the interaction is worth increasing intimacy or if the person is worth the investment of more resources.

In this exploring motivation of flirting behaviors, sexual selection plays an important role. Sexual selection refers to mating strategies that favor certain traits. Those individuals with certain more

desirable traits will have an advantage in obtaining mates over others without those desirable traits. Individuals engaging in exploring-motivation flirting will try to detect traits that indicate relevant properties and assess the potential partner accordingly.

The first type of information revealed during flirting is the degree of interest that one may have in approaching the other. Wasted investment of resources in an uninterested individual is very costly to both men and women. Moreover, various psychological theories suggest that most humans have a strong inclination towards reciprocity. For example, social exchange theory posits that all human relationships are formed by the use of a subjective cost-benefit analysis and the comparison of alternatives.\textsuperscript{41} When a person perceives that the costs of a relationship outweigh the benefits, then the theory predicts that the person will leave the relationship. Thus, the initial step in flirting interactions is recognition of another's behaviors. It is crucial, before increasing intimacy in a relationship, to examine how willing a person is to establish initial contact and to mutually commit to a relationship. Therefore, individuals may engage in flirting behaviors to assess whether another person might be interested in them with no immediate interest of sexual contact. In other words, people may flirt to assess another’s potential interest before making a judgment about what type of interaction they would like with them.\textsuperscript{42}

The second type of information that may be revealed is intelligence. Humans are complex creatures whose higher faculties presumably contribute to their success. Intelligence, therefore, can largely contribute to genetic success in the human population. In his theory of mating minds, Miller suggests that many different, highly complex traits which demonstrate cognitive abilities can clearly signal one’s intelligence.\textsuperscript{43} One of the best indicators of such excellent cognitive fitness is language. To be a reliable indicator of a certain trait, following from the logic of honest signaling, a cue should not be easily faked and should be costlier to produce for the less fit. Miller suggests that language can be considered one such reliable indicator. Learning language beyond the basic grammar and vocabulary is a difficult task; less than 7% of vocabularies can account for 98% of conversation. Language is critical in most interpersonal interactions, especially courtship, dating, and flirting. Compared to when they

\textsuperscript{41} Homans, George C. Social Behavior as Exchange. America Journal of Sociology, 597-606.
\textsuperscript{42} David Dryden Henningsen, Flirting with meaning: an examination of miscommunication in flirting interactions, April 2004.
\textsuperscript{43} Miller, Mating Mind, 2000.
are engaging in normal conversations, people try to use much more creative, humorous and witty types of language when flirting. Flirtatious language is indirect and complex; it involves a process of thinking and interpretation. Although flirting may not definitely signal sexual intent, its language makes it an intelligently challenging behavior for individuals. Thus, flirting does carry a significant function as a signal of mental fitness.

On the other hand, people often flirt simply because it represents an enjoyable form of interaction. For instance, Koeppel et al. (1933) found that individuals reported flirting as a fun and harmless behavior. Another case of gender difference was revealed by the same experiment conducted by Abbey et al. in 1982. In this experiment, women, on average, reported more fun-motivated flirting behaviors per script than did men. Thus, the results indicate that women are more likely to see flirting as playful or fun-motivated than are men. This result also partially supports the claim that women will engage in flirting without sexual intent much more often than men.

From an evolutionary perspective, this finding is very relevant to the exploring motivations for flirting behavior. The sexual selection theory indicates that because females often make bigger parental investments, males are relatively less selective in mating than are females. A wrong choice of a mate is much costlier to women than it is to men. Consequently, women need to be especially conscious of the traits that they desire in a male. For this reason, women need to develop a large repertoire of flirting behaviors so that they can not only attract men who are good relational targets, but also judge the language skills that are revealed during flirting. To develop such an assortment, women may compare effective and ineffective flirting strategies in a harmless fashion by practicing flirting.

Flirting can certainly be used to signal one’s sexual intent; but this is only one of its numerous functions. Flirting is also a behavior adopted by individuals who want to assess the degree of interest and mental fitness of the partner. Also, many people flirt just because they find it fun. Sexual selection, however, plays an important role even in these quasi-courtship behaviors. Thus, even in flirting with less sexual intent, a close examination of gender differences in flirting seems to affirm the evolutionary function that flirting may have.

44. Guerrero, L.K., Close encounters: Communicating in relationships.
45. Trost & Alberts. An evolutionary view on understanding sex effects in communicating attraction. 233.
Conclusion

Studies of gender differences in flirting appear to indicate that flirting has an evolutionary function. These studies provide insight into how gender differences in motivations for and perceptions of flirting might have emerged. Flirting often results in miscommunication because its singular appearance can be driven by many different motivations. Nonetheless, we can learn from what these studies suggest about motivations for and perceptions of flirting by members of the opposite sex so that we can be better prepared for future cross-gender interaction.