

# Communication analysis of human mating behavior based on evolution

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**Abstract.** As the basis of social development, information communication plays an important role in mate selection. In the process of reproduction, the most critical is the problem of mate selection in evolution, how to find the right spouse and maximize their own interests, is the main issue discussed in the academic circle. After understanding the basic concept of evolution, this paper probes into the importance of human mate choice behavior and clarifies the communication strategy in human mate choice behavior, so as to have a deeper understanding of communication theory and human behavior.

**Keywords:** Evolution theory; For humanity; Mate selection behavior; Communication science; tactics.

## Introduction

Mate selection refers to the process of neutral selection in the animal and human worlds. Any animal that reproduces by combining the sexes will encounter these problems. Some scholars have proposed in the study that in the natural world, not only humans are picky about mates, but many monogamous species are very particular about finding a mate, such as birds will pass information through calls, and humans will use verbal or non-verbal ways to convey love. Since mate selection is a typical process of information transmission and communication, a set of communication strategies has gradually evolved during evolution to improve the success rate of animals and humans. From the perspective of evolutionary theory, we can see the importance of communication directly by studying the mating behavior of animals and humans.

## 1. Basic Concepts of evolution

In essence, evolution is a hypothesis based on the origin of species. [1] Charles Darwin, a British biologist, believed that the evolution and variation of species in the biological world took the evolution of heaven and earth as its basic assumption, and at the same time took the genetic thought of sex selection and innate traits as auxiliary basis [2]. In the late 1850s, Darwin published on the Origin of Species, which influenced the entire academic and religious circles, and mainly demonstrated two issues: on the one hand, species are variable and organisms are evolutionary; On the other hand, natural selection is the driving force of biological evolution, as shown in Figure 1 below:

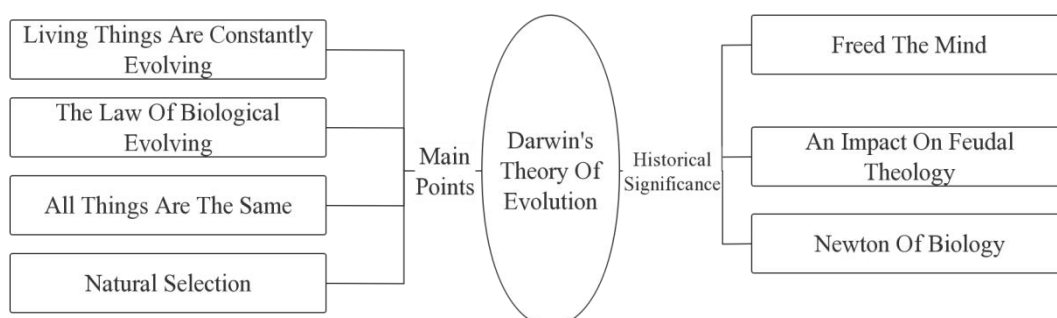


Figure 1 Darwin's theory of evolution

Darwinian evolution holds that there is a slow process of change, and species are not created separately, but are inherited from the original species. Experimental observation can be found that there is a widespread phenomenon of excess reproduction in the biological world, which will lead to a struggle for survival, so biological death events continue to occur. In Darwin's view, an individual or a feature adapted to the brutal environment of struggle will be retained, and otherwise will be eliminated, which is called the survival of the fittest. After a pair of organisms produce many offspring, there are more or less differences in the form, characteristics and functions of the developmental organs. These small, accidental and insignificant variations will be tested in the struggle for survival. Nature will preserve good or useful variations for biological individuals, and reject bad or unfavorable variations for biological individuals, which is natural selection. In other words, when environmental conditions change, organisms can change in habits, functions, and structures, and reproductive excess can provide the possibility and necessity for natural selection, and the preservation of favorable variants and the elimination of harmful variants can enable organisms to achieve survival of the fittest.

From a positive perspective, Darwinian evolution has for the first time explained the occurrence and development of the entire biological world in a regular way, linked all branches of biology together, and provided an effective basis for future biological scientific research and exploration. At the same time, it has mastered the mutual relationship between organisms and the environment, and explained the common law of the emergence and development of the biological world. It laid a solid foundation for the establishment of dialectical materialism view of nature. On the negative side, Darwinian evolution has certain limitations. On the one hand, Darwin recognized only gradual extinction, not sudden extinction. Some scholars have studied and counted the more obvious biological extinction events in history, such as the Permian great extinction and the Devonian great extinction. On the other hand, there is no recognition of the diversity of biological evolution, such as community purification, population evolution, etc. Therefore, in the future theoretical research and application, we should continue to explore life and observe the world based on a broad vision and scientific theory, so as to form a new evolution.

## **2. The importance of human mating behavior**

Whether animal or human, the ultimate goal of walking behavior is to select suitable objects to achieve species inheritance [3]. Most animals use auditory signals to transmit this information, such as bird calls, and humans, like animals, also have unique communication systems and rich information transmitters. Some scholars pointed out in their studies that human beings use hair, face, cheeks, pointed head, skin, breast, buttocks and other parts to transmit sexual information, which is more diverse than animals [4]. At the same time, human beings have also created language and culture to communicate and transmit information, so the communication in human mate selection behavior is more complicated [5]. According to practical research, humans and animals share many patterns of information transmission in plant behaviors, such as physical display, singing and dancing. Some biologists have found that most mating signals are slowly transformed into constant secondary sex characteristics during evolution, gradually becoming a "signal transmitter" that can be inherited [6]. Take men as an example, in the ape period, the beard was regarded as a kind of decoration, mainly used to stimulate the love of the opposite sex, to convey a competitive message; Taking women as an example, the tied waist, slender neck, smooth skin, etc., are powerful carriers of sexual signals, and have important biological significance in human mating behavior [7].

## **3. Analysis of communication strategies in human mating behavior**

From an evolutionary point of view, the biological and psychological differences in human sex are caused by gametes, and the male and female cells are also very different anatomically [8]. Human eggs are 8,500 times larger than sperm, a difference that requires a greater investment per

sexual cell in a woman, while a man can release hundreds of millions of delicate cells at a time, and his genes and her genes will reap the same benefits after fulfilling purely biological obligations. This biological difference leads to different benign mating strategies.

On the one hand, mate selection behaviors under different genders [9]. From the male point of view, if they can fertilize more females, they can expand their range and spread, which is advantageous for males according to the evolutionary standard of heredity. From the perspective of females, breeding offspring requires a lot of time and energy, and this behavior is difficult to complete independently, so they will carefully select a mate and are more inclined to choose a male who will invest all resources into their offspring [10]. In response to this phenomenon, evolutionary psychology has proposed the parental investment theory, which holds that if members of one sex invest too much in children, individuals of this sex will be very selective in choosing mates; On the other hand, individuals of the opposite sex who invest less will be less selective in choosing a mate, but the competitive conflict with the same sex will be very intense. At present, some scholars have raised a number of questions in the survey, among which the most popular one is "What is the most important condition of a partner?" The actual survey results are shown in Figure 2 below. This result proves that the concerns of men and women are not exactly the same when choosing a mate [11].

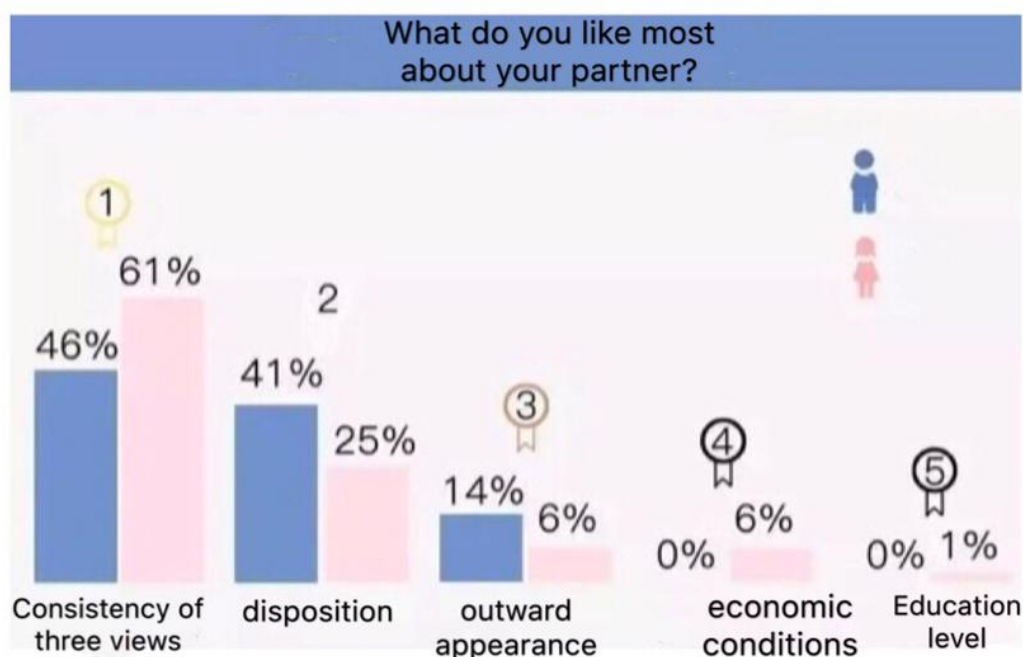


Figure 2 Questionnaire survey

On the other hand, information dissemination is closely related to mate selection behavior [12]. After clarifying the mate preference of the other party, both parties will convey the mate selection signal that can meet the needs of the other party. If the information conveyed by the other party cannot meet their own needs, it is difficult to continue the walk behavior [13]. Therefore, when studying human mate selection behavior, some scholars put forward that information transmission is related to the acquisition of valuable resources. Interpersonal communication refers to the symbol transmission process in which party A and Party B borrow and provide resources to each other or negotiate and exchange resources in a certain relationship. In other words, the process of mate selection is a process of resource exchange and symbol transmission [14]. But from a practical point of view, communication in human walking behavior is more complex, does not directly exchange information like animals, and does not rely on original signals to transmit information, and contains a lot of false information during Friday, such as excessive showing off, packaging and propaganda. Some scholars have found in their research that typical denigrating propaganda includes ridiculing

competitors' achievements, spreading rumors about competitors, making fun of competitors' faces, etc. Men can reduce their attractiveness by denigrating competitors' resources, while women can achieve significant results in the short term prospects by denigrating competitors' appearance. Judging from the development of the current marriage market, denigration is the most effective solution [15].

#### 4. Conclusion

To sum up, combining evolutionary theory to study human mate selection behavior and judge some phenomena and correlations in human mate selection behavior can not only scientifically solve the mate selection problem in human evolution, but also have a deeper understanding of human consciousness and information transmission. Nowadays, evolution provides a new paradigm for the study of human mating behavior and its communication, effectively integrating the two disciplines of psychology and biology, and continuously expanding the research horizon of scholars from all over the world. Both anthropologists and sociologists have put forward a number of theoretical phenomena through the study of human mate choice view and mate choice behavior. Although there are few research topics and conclusions at present, with the continuous development of society and economy, more facts and clues are bound to be unearthed in the future to prove the views put forward by evolution and psychology. It should be noted that the theory of evolution is based on the biological research and analysis of human beings, and there are obvious differences in human's mating views and behaviors. Under the influence of various factors, human's mating views and behaviors will change, so it is necessary to build a more open system for subject research, and constantly revise and improve reasonable professional theories and practical cases. Only in this way can we better study and analyze the communication in human mating behavior.

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