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An evolutionary theory of love

Abstract

Initially, we will explore the concept of love in a general sense. Then, using a neo-Darwinian approach, we will examine the three main types of love in more depth: **Parental Love, Heterosexual Romantic Love,** and **Homosexual Romantic Love.**

Keywords: love, instinct, psychology, darwinism, gene, evolution

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Introduction

An instinct, broadly speaking, is a predisposition, genetically encoded in the brain, that, depending on the circumstances, leads an organism to exhibit certain behaviors, feelings, or desires that generally help preserve its genes. This could involve increasing its survival ability or providing greater adaptability to the environment. In this broad definition, instincts can manifest as desires, feelings, and even highly complex behavioral traits. Instincts are inherited and, therefore, do not need to be taught: the organism is born with them. We should not underestimate the power of instincts. Practically all living beings—such as insects, reptiles, mammals, etc.—survive in aggressive and competitive environments (without being taught), thanks to instincts. Instincts evolve through natural selection: Genes that create instincts that help the organism carrying them to perpetuate them (by passing them on to future generations) tend to remain in the genetic pool. For example, this explains why it is rare for mothers to devour their offspring immediately after birth: genes causing such behavior would die along with the offspring. Therefore, genes that encourage carriers to help their offspring—and themselves—survive are the ones that persist through generations, whether through instinctive maternal care or the survival instincts of the offspring themselves.[1]

All forms of love are feelings and, therefore, also instincts. Since love is an instinct, we cannot control it directly through reason. This is why a mother loves her child even if she has not been taught to love or does not consciously want to love them. Similarly, a person can love or fall in love with someone even if they do not consciously want to love that person—or vice versa: no one can love someone simply because they consciously choose to. For the purpose of study, we can divide love into two groups: Parental Love and Romantic Love**.** The latter can also be divided into two subgroups: Heterosexual Romantic Love and Homosexual Romantic Love**.**

Parental love

Parental Love can be generalized beyond the love of parents for their children to include love for close relatives such as siblings, parents, nephews, uncles, etc. This generalization implies that when we "know" these individuals share much of our genetic makeup, this instinct drives us to protect and/or help them much more effectively than if they were unrelated. Love is an instinct, meaning it does not need to be learned to be felt; it arises naturally. A mother does not need to be taught to love her child to do so and to give her best to help ensure the survival and well-being of her child.

Since love is an instinct that, like all instincts, aims at genetic preservation, it is expected that the stronger the genetic sharing, the greater the degree of love felt. This is why a mother is likely to love her children more than her nephews and to love her nephews more than her neighbor's children, and so forth. It is important to emphasize that, being an instinct, love does not "consciously" or rationally know anything about genes or genetic preservation. Everything happens automatically, without any need for rationalization about genes or genetic sharing. For example, if a mother adopts a newborn baby, over time, her instincts will come to perceive this child as her biological offspring. Even though there is no genetic sharing, the woman's brain will perceive the child in this way because there must be a rule encoded in the brain, such as: "If you have been caring for a baby for a long time, this baby must be your child or a close relative. Therefore, you should love and protect them."

Heterosexual romantic love

From now on, we will simply refer to heterosexual romantic love as love. In summary, we can say:

"Heterosexual love is an instinct, programmed into us by genes, to perform Quality Control on the person who could be the father/mother of our children."

From this, we can conclude:

Romantic love is an instinct: Instinct, as referred to here, means desires, impulses, or reflexes—in short, mental algorithms—shaped in our brains by prescriptions encoded in our genes. An instinct can sometimes also be modulated by the environment; that is, its action depends on the circumstances in which the organism finds itself. Instincts are beyond our conscious control. While we can consciously mold our actions to prevent them from manifesting, we cannot choose what we will feel, when we will feel it, or for whom we will feel love.[2]

Since love is an instinct, it implies that it is also hereditary. However, this does not mean that the object of love is determined exclusively by genetics. As mentioned earlier, mental algorithms can be influenced by the environment—that is, local culture can establish certain values that will influence mental algorithms in determining the object of affection. However, I believe most of the traits influencing love are genetically fixed. Certain traits are always valued, regardless of culture or era. For example, beauty, intelligence, character, health, and personality will always strongly influence the degree of love felt. However, the proportion of each trait necessary to trigger the instinct—and make a person fall in love—varies from person to person and must be genetically determined.

The 'goal' is quality control: Many still mistakenly believe that the "goal" of living beings is to perpetuate the species. It is not. The "goal" of every living being is to perpetuate its genes—its own genes. To perpetuate means to survive over time, across generations. This means that the quality of the gene carrier is essential. Our genes will combine with those of the opposite sex to form another being. If the genes that combine with ours in our offspring are not of sufficient "quality," our genes might not survive over time. This could mean failing to survive the environment and competition with other individuals, failing to attract sexual partners to have children, or failing to secure high-quality partners. Thus, quality control is necessary for genes to maintain their "intention of immortality."

Furthermore, the quality of offspring is not determined solely by the partner's genes. It is of little use to have many descendants if they cannot survive even a single generation due to a lack of physical or cultural preparation. Therefore, particularly in humans, there is a trade-off between quality (nutrition, culture, etc.) and quantity. Generally, the greater the quantity, the lower the quality tends to be. Conversely, the fewer the children, the greater the care and investment "per capita," and, consequently, the higher the quality of each child, increasing the chances of the genes surviving across generations. In summary: Love acts as a quality control filter to help us make a good choice of partner with whom we can combine our genes to produce offspring.[3]

The 'goal' of heterosexual love is to produce 'quality' offspring: A small note: Love does not have an actual conscious goal, but everything happens as if this goal existed. What happens is that natural selection shaped this aptitude because this instinct—love—conferred a much greater genetic survival advantage to the genes of its carriers. The primary 'goal' of heterosexual love is to produce offspring, as it is through children that genes leap from one generation to another in their "quest" for immortality. This explains the direct connection between love, sexuality, libido, and the desire to always have the loved one close. It also explains jealousy.

Jealousy is a mechanism to ensure and, above all, to keep the loved partner as a future provider of gametes (eggs/sperm) with which our genes will unite. It is also the reason why aging is so feared by women: Most men instinctively prefer younger women who appear fertile, in their reproductive age (even if they do not consciously want children!). Women are aware of this and desperately fight "against" aging. This is also why aging is not as psychologically tragic for men as it is for women: Men have almost double the fertile period that women do, and thus they do not face the same selective pressure from the opposite sex as women do. For this reason, we do not fall in love with people of, at least apparently, exceptional quality, such as muses of great beauty or famous artists. Although they may seem to have excellent genes, they are often far beyond our realistic possibilities. As a result, instincts are not fooled by illusions that cannot lead to children.

Homosexual romantic love

Evidence: There is evidence suggesting that genes influence homosexual attraction, and its manifestation may depend on environmental, cultural, and/or physical influences—such as hormones in the intrauterine environment.

The purely cultural influence on human sexuality must be dismissed, as it alone cannot explain the large number of individuals who, despite immense efforts to change their "sexual orientation" due to familial, religious, or social pressure, have flagrantly failed. Therefore, homosexuality must also have a genetic component independent of conscious choice. Like most instincts, homosexuality is likely caused by multiple genes, which would allow for varying degrees of homosexual tendencies. Moreover, research shows that approximately 10% of the population identifies as homosexual. This is statistically significant, especially considering that this trait might ostensibly represent the end of the genetic line for its carriers and, therefore, an apparently detrimental characteristic for genetic perpetuation.

Our genes in other bodies: If we study evolutionary theory more closely, we will find that what is at stake is not the survival of the carriers of the genes but rather the survival of the genes themselves. If the paradigm of life were individual survival, a mother would not risk her life to save her children, and a praying mantis would not sacrifice its life for successful copulation, and so forth. In nature, what is truly "at stake" is genetic perpetuation. Genes are the true essence of life, and this is the key to solving this dilemma. One might argue that social/religious pressure against this behavior, in the form of anti-homosexual prejudice, could undermine any supposed genetic benefit. This argument would indeed be valid if prejudice had existed for many thousands of years—enough time to shape human genes. However, prejudice against homosexuals only became significant with the advent of "modern" religions, such as Christianity and Islam. Before these, as in Ancient Greece, for example, homosexuality was not only tolerated but even encouraged. Currently, the influence of religion, especially in modern Western societies, has declined significantly, allowing the homosexual stigma to no longer be viewed as sinful or associated with immoral behavior. This shift permits, as we shall see, the genetic advantages of the trait to outweigh prejudice.

Trait = genes + environment: In some cases, depending on the context or environment, it is advantageous for the gene to harm its carrier—the individual—in favor of the genes present in their close relatives (as a mother often does for her children). This makes sense when we consider that homosexuals, by not marrying and starting traditional families, could, for example, help their families by caring for future siblings and nephews. For the theory to be consistent, "homosexuality genes" would need to provide better survival conditions for their identical counterparts in the bodies of close relatives. Additionally, the environment would need to act on the genes to promote homosexuality under certain conditions, such as: when there are many siblings; when the family is large or poor; or when society is overcrowded, causing stress on parents. Furthermore, homosexual only-children should be rarer than average. Of course, childhood events could also trigger homosexuality if there is a genetic predisposition, but as this varies greatly, not all cases could be analyzed. If statistics do not corroborate these hypotheses, we would need to revise our theory of environmental influence on the homosexual trait.

Resolving the paradox: Thus, we can easily resolve the apparent homosexual paradox: Homosexuality is indirectly linked to the genetic perpetuation of its carriers. This behavior would favor, in the form of an authentic Darwinian mechanism, their close relatives: Homosexuals, by not having traditional families with wives and children, have much greater potential, in terms of time and resources, for self-development, professional and/or cultural advancement. Additionally, they would have much more time to establish alliances or friendships. All this could facilitate their socio-economic, political, or power ascension, which would inevitably bring direct or indirect benefits to their relatives, who share a high percentage of genetic material, such as nephews, siblings, and uncles. So, the possible "evolutionary role" of homosexuals, from an darwinianist perspective, would be to act as a kind of "social warrior," paving the way in the competitive human society so that their blood relatives have a better

chance of perpetuating their own genes. Therefore, the modulation of "homosexual genes" by the environment, whether uterine or not, would favor these genes indirectly, a mechanism known in evolutionary biology as parental altruism.

Conclusion

The evolutionary perspective provides framework for understanding love and sexuality. While genetics and instincts play crucial roles, it is essential to recognize that human emotions and behaviors are also shaped by culture, society, and individual experiences. Balancing biological explanations with sensitivity to these factors creates a more comprehensive view of human relationships.

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Conflicts of interest

The author declare that there are no conflicts of interest.

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