

LOVE, SEX, AND LANGUAGE: GENDER DIFFERENCES IN SEXUAL FANTASIZING AND EVOLUTIONARY EVIDENCE FROM STORYTELLING

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Abstract

Charles Darwin first argued that natural selection affects not only biological structures, but also cognitive functions. Evolutionary psychology has now shown how this influence encompasses every facet of the mind, from categorization to language. In particular, the impact of selection pressure is evident in the human ability to form narratives. But, not all narratives are the same; they serve different functions from both an individual and societal perspective. There is also an interesting gender difference in them. It is precisely at the intersection of gender differences, different kinds of narratives, and different ways in which selection pressures affect men's and women's behaviour, that we see a somewhat sexually oriented natural preference for different kinds of stories.

While men have a clear preference for erotic fiction, women seem to prefer the romance novel. The reason for this lies in the different parental investment that evolutionarily characterizes males and females of the human species. While male interest is about increasing the chances of offspring, female interest is about building relationships stable enough for parental care to succeed during the difficult period of human neoteny. This is the reason why males and females prefer to fantasize sexually about different things.

This thesis is tested by strong contemporary cultural drives that seem to free the sexes, at least in part, from such constraints. The social organization of Western countries, women's emancipation movements, and particularly the contemporary tendency to transform every natural drive into a cultural convention, transform the evolutionary constraints just mentioned into socially contested social constructs. It is impossible to determine the outcome of this struggle. But interestingly, this tension shapes the cultural conjuncture in which we live, making our time a pivotal point in the evolutionary and cultural history of our species.

I. Introduction

Within literary theory and literary criticism there is a deep cleavage. It is the same line of demarcation that can be found in any attempt to investigate the processes of human knowledge. The split I refer to is that between “social constructivism” or “constructivism” and “naturalism” or “liberalized naturalism” (De Caro & Macarthur, 2004). In one camp, we find those who argue that the natural sciences and the humanities can never be held together by a network of causal and verifiable explanations. In the other camp, are those who hope

instead for a complete mapping of human nature thanks to the indispensable contribution of science.

The point of view adopted in this essay will be that of liberalized naturalism, which unites the natural and human sciences. Human nature and all its productions have solid biological roots, and it is these roots that firmly bind one to the other. This union seems to be fruitful as the definition of “human nature” is becoming richer in detail, assuming ever greater precision. Cognitive psychologists, evolutionary psychologists, neuroscientists, evolutionary biologists are assaulting the “citadel of the mind” (Darwin, XX Notebook n. 5.). It is thanks to this *bottom up* approach that it will be possible to attempt, over the next decades, to answer one of the fundamental questions for both the natural sciences and the humanities: what is the mind? Consequently, it will be possible to carve out with greater precision the contours of the definition of what human nature is. Of one thing we are certain: so far the *blank slate* model has failed empirical tests. The empirical evidence from biology and neuroscience has shown us that the brain is structured from birth. The varied manifestations of human behavior are determined neither entirely by genes nor entirely by culture, but are the result of their complex and continuous interaction guided by the forces that are present in the environment. The sociobiologist Edward O. Wilson writes in the preface to the book *Animal Literary*:

The mind is a narrative machine – guided unconsciously by the epigenetic rules in creating scenarios and creating options. The narratives and artifacts that prove most innately satisfying spread and become culture. The societies with the most potent Darwinian innovations export them to other societies. In the process of gene-culture evolution, genes affect which scenarios and memes are created, and the cultures thereby generated affect which genes survive (Wilson, 2005, ix).

Charles Darwin first argued that natural selection influences not only biological structures, but also cognitive functions. Evolutionary psychology (Cosmides & Tooby, 1992; Bruni, 2017) has now shown how this influence encompasses every aspect of the mind, from categorization to language. In particular, the impact of selection pressure is evident in the human ability to form narratives (Boyd, 2009; Corballis, 2017; Ferretti, 2022; Gottschall, 2012; McBride, 2014; Perconti, 2021; Thompson, 2010). But not all narratives are the same; they serve different functions from both an individual and societal perspective. There is also an interesting gender difference in them. It is at the intersection of gender differences, different types of narratives, and the different ways in which selection pressures influence the behavior of men and women, that we see a natural gender preference for different types of stories. While men have

a clear preference for erotic fiction, women seem to prefer the romance novel. The reason for this has deep biological roots that I will attempt to investigate in the following pages.

2. A natural history of sex differences in sexual psychologies

The sexual psychologies of human creatures attest to the existence of profound differences between males and females regarding their fantasies (Hesselund, 1976; Knoth, Boyd & Singer 1988). These studies are complemented by the ethnographic record of human sexuality, the proverbial antagonism between romance novels and pornography and their different users, as well as empirical studies that have directly compared the frequency and content of male and female sexual fantasies (Kinsey et al., 1948, 1953; Wilson & Lang, 1981), and the data emerging from the evolutionary perspective on our species. These are data that only confirm this difference. Sexual fantasies, with their being private and unconstrained by the concrete demands of real life, offer an interesting insight into the instincts that underlie human sexual behaviour and, in all likelihood, provide more information about the psychological mechanisms (i.e., the rules or algorithms of information processing) that underlie feelings, emotions, thoughts, and behaviours of a sexual nature, than the observation of the behaviours themselves. Sexual fantasies are less conditioned by social conventions and moral rules than sexual behaviour itself (Salmon & Symons 2003). In fantasy land, each of us feels free to dwell on desires and impulses that are often unacceptable in reality. Moreover, we can entertain ourselves individually and selfishly in fantasies without having them affected by sensitivity or concern for others, even our own partners. This does not happen, for example, when we speak publicly about our opinions or thoughts about sex.

The approach to the study of male and female sexual fantasies that I have chosen to adopt will be the adaptive approach that characterizes evolutionary psychology, i.e., the main naturalistic approach to knowledge in today's cultural landscape or, according to Martin Daly and Margo Wilson's definition of it, "psychological theorizing informed by modern evolutionary theory" (1988, p.7). Over the years, such an approach has proven to be a productive heuristic and a powerful theoretical framework for explaining the workings of our minds and thus much of our psychology: mate choice (Buss, 1989, 1994); social cognition (Cosmides, 1989); human sexuality (Symons, 1979); love (Bruni, 2010a, 2012, 2021; Dunbar 2012); homicide (Daly, Wilson, 1988); parental investment

(Trivers, 1972); mating strategies (Clark & Hatfield, 1989; Kenrick et al., 1990; Simpson & Gangestad, 1992 ; Buss & Schmitt, 1993; Guéguen, 2011; Bruni 2010b); harassing and aggressive behaviors (Buss, 2021).

Specific to the topic we are interested in, the impact of selection pressure is also evident in the human capacity to form narratives. But, as mentioned earlier, not all narratives and not all sexual fantasies are the same; this diversity serves different functions from both an individual and societal perspective.

What kinds of differences emerge from the survey of sexual fantasies? The first thing that is apparent is that men generally engage in sexual fantasies more frequently than women. This frequency is estimated to be twice as large for men (Kinsey et al., 1948, 1953; Knoth, Boyd & Singer, 1988; Jones & Barlow, 1987). It also emerges how women's entertained fantasies include contextual factors, emotional factors, and sentimental factors and have to do with bonding, caring, affection, tenderness, and commitment and not just encounters of a sexual nature. The latter is more explicit, and rich in detail, in male fantasies (Brickman, 1978; Pryzbyla, Byrne, & Kelley, 1983). In addition, men are more likely to see others as the objects of their fantasies, which are often promiscuous, whereas women perceive themselves as the object of sexual desire. Men, moreover, would be more disposed toward group sex scenarios with multiple, unknown partners (Wilson, 1987), whereas women entertain thoughts of sexual encounters with known or well-known men, i.e., socially powerful and famous, in romantic or exotic settings.

In a 1990 article titled *Sex differences in sexual fantasy: An evolutionary psychological approach*, Bruce J. Ellis and Donald Symons pointed out that men were more likely to fantasize sexually by representing visual images in their minds, including details of their partner's physical characteristics, while women's erotic fantasies were more often about touch and emotional characteristics. Men were more likely to have sexual fantasies with different partners (32% vs. 8% of women), while women were more likely to view their partner as the sole protagonist of their fantasy (75% vs. 38% of men). Added to this is the visual-fetishist tendency of men to be dominated both emotionally and physically by women (Barclay, 1973).

The different mating strategies that characterize the natural history of men and women underlie male and female sexual fantasies. Interestingly, differences in sexual fantasies between men and women decline with age as the influence of sex hormones becomes marginal (Gurvich et al., 2018). Producing the most striking change in male fantasies is the decline, as the years pass, in the influence of testosterone. Female and male sexual psychologies are characterized by profound differences, and these differences produce the variety of human erotic

narratives, ranging from literature to pornography. These differences are due to the evolutionary history that characterizes human creatures and, therefore, the multiple selective pressures that have affected women and men and that are directly responsible for all of our adaptations (Cosmides & Tooby, 1992). Our evolutionary history has a crucial and determining importance for human cognitive processes and, more broadly, for our psychology. The human mind is not a *tabula rasa*, even at birth. It is not an empty container to be filled with information that comes only from the external environment as, instead, most of the social sciences and even psychology have at times and now increasingly argued. The mind is not totally “malleable” by the environment and competitors (Pinker, 2002); on the contrary, it is rich from the beginning and it is thus so by nature.

Language and social cognition, the result of natural and sexual selection, have equipped human beings in such a way that they are able to take advantage of all the opportunities present in both the physical and social environment, enabling them to create, accumulate and subsequently transmit, culture (Tomasello 2008).

3. Darwin in mind: an adaptationist perspective on human psychology

The concluding words of the work that consigned Charles Darwin to history are a prophecy. The *Origin of Species* (1859) concludes, in fact, with an exercise in imagination. In Darwin's own words:

In the distant future, I see open fields for far more important researchers. Psychology will be based on a new foundation, that of the necessary acquirement of each mental power and capacity by gradation. Light will be thrown on the origin of man and his history (Darwin, 1859, p. 488).

A century and a half after the publication of *Origin*, the Darwinian prediction has become reality. Evolutionary theory is not only the foundation of modern biology but also a powerful theoretical framework for explaining how our psychology works. How is the human mind designed? What are causal processes that created the components of our psychological structure? What drives people to act? These are just some of the questions that evolutionary psychology attempts to answer. At the heart of human evolution is, of course, reproduction (Darwin, 1871; Symons 1979). Much of our lives revolve around mating strategies. Differences between males and females in reproductive bi-

ology have given rise to differences in human sexual psychology (Buss, 1989, 2017), and our mating psychology is directly responsible for some important domains such as cooperation, social conflict, or *status* hierarchies, just to name a few (Buss, 2021).

The mind, therefore, and not only the brain, is the result of a long series of adaptations, i.e. innate and specialized mechanisms to perform certain functions, useful for solving all those problems that humans have had to face in their ancestral environment. Humans, like other animals, have faced for thousands and thousands of years a series of problems typical of his species: search for food, identification of a safe territory, competition, diseases, choice of a suitable mating partner, defense from predators, parental care, ability to predict future actions and understand the actions of others, manage family relationships. Those who are able to react more quickly to environmental stimuli and solve more effectively the specific problems that the environment poses, increase their *chances of survival* and therefore also of reproduction. The environment of evolutionary adaptation (EEA) does not correspond to a physical environment (as, for example, the forest, the savannah or the city). It is not an environment defined by spatio-temporal coordinates, but is the set of selective pressures that characterize living beings. It is the environment to which a given species is adapting. The EEA for any species is the set of adaptive problems faced by members of that particular species over time and is a concept of fundamental importance for understanding the functional properties and organization of the brain.

Each species has its own EEA and this is the reason why all animals differ from each other. Humans and crocodiles, for example, have faced different problems and consequently have different adaptations. Even animals that live together in the same geographical space and geological era diverge in their EEA because the survival and reproductive challenges posed to them by the environment are different. In the genus *Homo* the environment of evolutionary adaptation dates back to about ten thousand years ago, a period when the last glaciation ended and the Pleistocene ended. In this period, individuals belonging to the species *Homo sapiens* had a social organization composed of small groups of hunter-gatherers. This type of social organization has characterized a good part of our evolutionary history for millions of years until about ten thousand years ago, that is until the birth of agriculture and breeding, which have greatly modified the relationship of man with the environment and the physiognomy of the groups that, becoming more larger, have given life to real urban nuclei.

The processes underlying evolution are slow and gradual. The evolutionary timescales by which genetic mutations occur and by which significant changes

in our cognitive architecture manifest themselves, act slowly over thousands of generations. The immediate consequence of this reasoning is that five thousand years, which is the time frame that separates us from the birth of agriculture and the beginning of modern social organization, is too short a time for any change in our psychological mechanisms to occur compared to the millions of years that humans have lived with a different lifestyle (Cosmides & Tooby, 1992). Evolutionary psychologists, therefore, are convinced that in order to understand why certain psychological adaptations arose, it is necessary to know the selective pressures our ancestors encountered in the Pleistocene evolutionary adaptation environment.

An adaptive approach to the study of behaviour involves understanding the environment in which our brains and minds evolved. However, it must be kept in mind that the modern world differs from the EEA in many ways. The modern world has a long list of innovations ranging from agricultural techniques to industrialization, from the use of weapons on a large scale to medicines, from the introduction of contraceptive methods to virtual reality, from access to large amounts of all kinds of proteins and carbohydrates to mass media. Today's humans face the complexities of the modern world with cognitive functions that have been selected to resolve selective pressures different from those of today. Problems associated with survival and reproduction emerged in an ancestral environment profoundly different from the one in which we now live. There are many methods for identifying the selective pressures that gave rise to our psychological adaptations. One of these is known in evolutionary psychology as *reverse engineering*, that is, focusing on human behavior and attempting to infer the evolutionary history that most likely determined it (Dennett, 1995; Pinker, 1997). Given an “evolutionary object” we try to break it down by going backwards to understand the various steps that led to its creation. Steven Pinker writes in *How the Mind Works*:

Reverse-engineering is possible only when one has a hint of what the device was designed to accomplish. We do not understand the olive-pitter until we catch on that it was designed as a machine for pitting olives rather than as a paperweight or wrist-exerciser. The goals of the designer must be sought for every part of a complex device and for the device as a whole. Automobiles have a component, the carburetor, that is designed to mix air and gasoline, and mixing air and gasoline is the ultimate goal, carting people around. Though the process of natural selection itself has no goal, it evolved entities that like the automobile) are highly organized to bring about certain goals and subgoals. To reverse-engineer the mind, we must sort them out/and identify the ultimate goal in its design. Was the human mind ultimately designed to create beauty? To discover truth? To love and work? To harmonize with other

human beings and with nature? (Pinker, 1997, pp.42–43).

Take the case of emotions. The current universality of some emotions may offer some insight into the adaptive problems our ancestors faced. Anger, for example, is a ubiquitous emotion. Adaptive pressures from our ancestral past selected anger by shaping its behavioural responses in the environment. Triggering the anger response in a father or a mother, for example, may be the perception of threat to the offspring. This emotional-behavioural response is also appropriate in the modern environment but was selected in the Pleistocene, i.e. our EEA. The first 5 million years of hominid history were characterized by small hunter-gatherer groups (groups consisting of no more than 30–50 individuals). From this it follows that the majority of our psychological adaptations are calibrated to small human settlements (Dunbar, 1998, 2010). This kind of cognitive architecture poses quite a few problems when it comes to dealing with modern challenges of a global nature such as, for example, geopolitical conflicts or mass migrations. Modern agricultural practices and the emergence of cities are recent inventions in the history of *Homo sapiens*. The tools that make up our cognitive toolbox are the psychological mechanisms shaped during our ancestral past. How can they guide and orient us in the complexity of our society and in a physical environment that has profoundly different characteristics compared to our distant EEA?

4. Pornography and romance novels

Although erotic/pornography and romance at first glance seem almost opposite literary genres, both are the product of our natural history. The evolutionary magnifying glass illuminates many aspects of their production and enjoyment by highlighting how the important differences that exist between the two genres accurately reflect the different male and female erotic fantasies. The differences in erotic fantasies between male and female are due to the different selective pressures faced throughout our natural history. Pornography is a topic that often generates embarrassment. It is argued that it is addictive, that it is immoral, that it is offensive to women because it reduces them to sex objects, etc. Few scholars, however, ask why (from an evolutionary point of view) pornography attracts men so much and is less interesting to women. Even fewer ask what elements make it appealing and why women prefer romance novel (e.g. Bella Books, Dreamspinner Press, Crimson Romance, Harlequin Enterprises).

The porn industry is widespread and generates approximately \$5 billion annually. Some sources report that it may actually have a greater influence on the

American economy than Netflix (Crooks et al., 2020). Here are some statistics on porn and porn addiction (2021): approximately 200,000 Americans are addicted to porn; 37 new porn videos are made every day in the United States; 28,000 people watch porn at any given time; approximately \$3,000 is spent on pornography every second; 35% of all internet downloads are porn-related. Analyzing some of the most popular porn sites can also give you an idea of how widespread pornography is. Pornhub, one of the most popular porn sites in the world, sees a steady increase in new users each year. According to their website, between 2017 and 2018, their annual visits increased from 28.5 billion to 33.5 billion. The erotic counterpart to pornography for women is romance novels. The latter account for 13.2% of the print book market in the United States, more than twice as much as science fiction, *fantasy* literature or *Crime Novels*. According to statistics, there are 29 million regular readers of novels in the United States (http://www.rwa.org/cs/readership_stats). The world's largest publisher of romance novels, Toronto-based Harlequin Enterprises, publishes more than 100 titles a month translated into 32 languages (Harlequin, 2010). This success is a testament to the appeal of this literary genre across the globe and across cultures.

To explain the strong impact of pornography in society, Catherine Salmon (2012) refers to two ways within what she calls non-evolutionary approaches to pornography: on the one hand, the traditional feminist perspective (Dworkin, 1989; MacKinnon, 1989) and on the other hand, the neo-feminist perspective (McElroy, 1995; Paglia, 1994). It is easy to see how the goal pursued by traditional feminism is not to investigate why men like pornography. Rather, their intent is to use pornography as an element that would prove the oppression of women by men. In doing so, classical feminism inserts a moral judgment into the analysis of the pornographic phenomenon. These approaches do not really illuminate the phenomenon of pornography, but argue that it should be banned because it generates violence and sex crimes. These claims are not supported by the facts since there is statistical evidence that highlights that in cases where the availability of pornography increases, the number of sex crimes has remained the same or, in some cases, even decreased (Diamond, 2009). Neo-feminists also contend that pornography is degrading to women, morally wrong, and violent but they also argue that pornography has allowed for the expansion of the world of erotic fantasies, allowing both men and women to explore their sexuality without moralism or social restrictions (Abrams, 1995; Shrage, 2004). The studies just mentioned, however, do not address either why men find pornography attractive or what adaptations modern pornography may elicit. Even studies that examine romance novels are predominantly

sociocultural or feminist in nature (Radway, 2009).

These authors (e.g. Coward, 1980) have suggested that “novels do not help women change their lives” and that “novels are subversive of women’s lives, [they] encourage readers to succumb to stereotypical models that pacify and obscure women’s legitimate frustrations in performing traditional roles and encourage dependence on men and reinforce female passivity” (Mussell, 1984, p. 107). There are few exceptions in these types of studies, including Helen Hazen’s book, *Endless Rapture. Rape, Romance, and the Female Imagination* (1983). Hazen, in her vigorous attack on feminist literature and feminist sexual politics, rejects the revisionist and “prescriptive” critique that distorts women’s writing, arguing instead that all women’s fiction explores the same basic themes, namely the problems inherent in finding, acquiring, and keeping a suitable mate. According to Hazen, while male pornography deals with bodies, the female counterpart – that is, literature that provides women with sexual arousal – focuses on love.

5. Language, sexuality, and the display of resources

Eros, one of the most mysterious and powerful forces of nature, seems to be one of the main sources of taboos within societies. Perhaps for this very reason it is able to capture everyone’s attention. Writes Steven Pinker in *The Stuff of Thought*:

Sex has high stakes, including exploitation, disease, illegitimacy, incest, jealousy, spousal abuse, cuckoldry, desertion, feuding, child abuse, and rape. These hazards have been around for a long time and have left their mark on our customs and our emotions. Thoughts about sex are likely to be fraught, and not entertained lightly. Words for sex can be even touchier, because they not only evoke the charged thoughts but implicate a sharing of those thoughts between two people. The thoughts, moreover, are shared “on the record,” each party knowing that the other knows that he or she has been thinking about the sex under discussion. As we shall see in the next chapter, this embroils the dialogue in an extra layer of intrigue. (Pinker, 2007, p. 217).

The asymmetry and conflicts present between males and females in all activities that have reproduction as their goal, also seem to be reflected in the way men and women use language. In particular, this asymmetry manifests itself in the choice of words that have to do with the sexual sphere. The asymmetry to which we refer is common to the entire class of mammals and, therefore, we humans are no exception. Every time, in fact, that we perform a reproductive act, this

lack of balance is triggered. First, as we have already seen, asymmetry consists in the way reproductive success is measured between the two sexes. Second, the female is subject to a long period of pregnancy and will certainly be busy for the three years following conception, unlike the male, whose “effort” lasts a few minutes, just the time of an intercourse. In many cultures, it is men who are most eager for sex, who are most brazen in the face of a casual fling. It is men who talk more, and very casually, about sex, and it is again men who exercise violence on women precisely to obtain sex. One would expect, then, that the language that characterizes so much of the nature of human creatures would show evidence of this asymmetry in the ease men have in talking about sex.

Things are just as expected. Evolutionary psychology underlines how the multiplicity of conflicts that the typical sexuality of human beings brings into play is resolved precisely in language. It is mostly men who are foul-mouthed and it is mostly women who feel an uncomfortable sensation when they hear words that (feel) are not appropriate to the circumstances in which they find themselves. In order to obtain information about the type of male and female sexual psychology, it may be useful not only to carefully analyse the use of words that fall within the semantic space of sexuality, but also to look at erotic and pornographic material. Bernard Arcand (1993) argues that one of the fruitful ways to demonstrate that there are important differences between the two psychologies (and especially if there are indeed two gendered psychologies) is to trace one genre of pornography for exclusively female use and consumption and another intended for a purely male audience. After all, it takes very little to answer positively to this kind of questions. We can, for example, observe the erotic material in circulation. If we look at romantic literature, we notice some recurring textual characteristics. In everyday life, interactions between people are mediated by a number of factors, including respecting social conventions and trying not to transgress the ethical codes of a given culture. For this reason, each individual feels the need to frequent neutral places, which are protected from prying eyes and in which any social compromise is banned.

Romance novels and pornography represent, so to speak, the “places” without any compromise, i.e. logical imaginative spaces (almost possible worlds) in which, without the taboos that society constructs, one is free to manifest and express drives, loves and desires. The available data regarding the serial consumers of the romance novel and the sales of pornographic material are a good source of information. The most popular romance novels have as male protagonists men who are confident, rich, strong, skilled and very dangerous. On the other hand, the pages that tell stories about sensitive and excessively gentle men, shy, clumsy or afraid of the challenges that life presents them with,

regularly meet with market failure. The goal of the female protagonist is never sex for its own sake, and it is never impersonal sex. The sentimental novel has a plot; it tells a love story that usually ends with the male hero's conquest. The romantic relationship is the driving force that propels the story forward. Female readers must identify with the protagonist, and minute descriptions of sexual relationships are not a necessary ingredient in this genre of literature. The emotional core is the love, the declarations of commitment, the bonds that last, the safety and security finally won. The "hero" of the novel is usually older than the female protagonist, has greater stature, enjoys a good economic condition and often has excellent physical characteristics, suggesting virility. The world of romance novels is a real realm accessed by at least one woman out of three, and is the result (and source) of female fantasy and sexual psychology.

Pornographic material dedicated to a male audience represents a counterbalance to female fantasies. We ban plots and declarations of love, an absolute ban on marriages, jealousy and interpersonal relationships other than sexual unions, no involvement of an emotional nature, no family setting and attention to context, and very limited content. The women protagonists are easy to conquer, always ready and willing for promiscuous relationships. The female body is exhibited as if in an arena, as is the male body. Close-ups linger on sexual details, which become devoid of identity, and expose the predominantly visual nature of male sexuality. Impersonal sex, then, seems to be the *leitmotif* of pornography aimed at male audiences. If we try to translate the descriptions just made using the language proper to evolutionary psychology, the story might go something like this. Males and females of *Homo sapiens* reacted in a qualitatively different way to the problems posed by their environment of evolutionary adaptation. Parental investment was profoundly different between the sexes. For a male, generating a child, for which the commitment and investment of energy and resources is minimal, has a reduced cost. Hence the ease of engaging in many sexual relationships and hence also the impersonality of sex. Females had nothing to gain from more intercourse, from sexual experiences as ends in themselves, or from engaging in sex with strangers. On the contrary, the gain lay in the careful choice of mate. After all, come to think of it, what is the romance novel if not a kind of description of the choice of the ideal, or "suitable" partner? The lack of plot and the presence of impersonal sex are the essential ingredients of pornographic videos; the reciprocal declaration of the birth of love associated with the sexual encounter represent, instead, the things without which we would not be faced with a romance novel. Perhaps it really is all about the lack of symmetry.

6. What are the biological factors that determine the difference in male and female sexual fantasies?

Anthony Cox and Maryanne Fisher (2009) highlighted how the titles of romance novels also agree with predictions made by evolutionary psychology. That is, they are congruent with women's preferred mating strategies. Evolutionary psychology offers insight into human universals and suggests that women and men have sex-specific mating strategies. This diversity is ultimately due to biological differences between the sexes. That is, there is an asymmetry between the sexes dictated by a number of biological constraints. Reproductive success is not measured equally between males and females. A woman does not have the opportunity to increase her reproductive success by choosing many mates. On the contrary, a man has the possibility to increase his reproductive success by increasing the number of sexual partners (before, of course, the introduction of contraception systems).

This happens for a fairly simple reason, namely the enormous difference between the production of egg cells and spermatozoa. There are about four hundred eggs available to a woman during her entire life. A man, on the other hand, produces three thousand spermatozoa per second, with a considerable reproductive potential. It would be precisely this constraint of biological nature to characterize and influence the mode of choice of the mate and to strongly characterize what is concerned with the "reproductive psychology". On the one hand, a lower investment by males (Trivers, 1972) would lead to a search for more partners by the latter, on the other hand – because of the higher price females pay for reproduction – there is a higher rate of selection in female mate choice. All this translates into the following pattern: males court and females choose. In fact, the mode of courtship is part of the reproductive strategies found in nature. Women bear children, while men do not. Across cultures, women tend to be the primary caregivers, although men often provide paternal support (Bribiescas, 2006). These differences have led evolutionary psychologists to believe that women tend to seek basic "commitment" from their mates and prefer mates who have a propensity to accumulate resources (Buss, 1989), as they will need these resources while caring for children.

If differences in mating strategies are considered, it is possible, therefore, to have a better interpretation of the success of romance novels than current ones. To test this hypothesis, Cox and Fisher analyzed the titles of Harlequin romance novels. The predictions of the two evolutionary psychologists are as follows: a) Asymmetry in reproductive success will be seen in words such as "child," "mother," "father," and "fatherhood," which will appear frequently in the titles;

b) Women can only have a smaller number of children, compared to men, and therefore will have to select their mates more carefully because they may not be able to accumulate their own resources as they are busy caring for their offspring (Buss, 1989). Thus, it is expected that there will be a wealth-oriented theme in the sense that the hero will probably also be a wealthy man. Thus, words such as “wealth,” “tycoon,” and “billionaire” will appear frequently in the headlines; c) because of differences in parental investment it has also been hypothesized (Buss & Schmitt, 1993) that women prefer long-term committed relationships. This preference will be a theme that emerges with words such as “marriage,” “engagement,” and “bride”; d) women, as well as men, prefer attractive (Li & Kenrick, 2006) and athletic mates, which are honest signs of a good genetic quality. Therefore, words such as “handsome,” “attractive,” or “athletic” will often recur in the titles of romance novels.

Here (tab 3) are the 20 words that recur most often in the Harlequin romance novel title database.

Word Stem	Frequency Count
Love	840
Bride	835
Baby	696
Man	672
Marriage	612
Heart	478
Secret	399
Wife	397
Doctor	388
Night	340
Christmas	337
Cowboy	314
Wedding	298
Child	260
Family	248
Texas	227
Nurse	224
Woman	207
Lady	202
Husband	192

Table 1: The 20 most frequent words in harlequin romance novel titles with stemming (Cox & Fisher 2009: 394)

As can be seen, words related to long-term relationships (“bride,” “marriage,” “wife,” “marriage,” “husband”), and reproductive success (“boy,” “girl”), are among the most frequent. However, the survey also shows that words related to physical fitness and resources do not appear. It can be seen that, however, oc-

cupations that are normally related to physical fitness (“cowboy” for example) and prestige and high income (e.g., “doctors”) do appear.

The authors then moved on to identify the 20 occupations that appear most often in the titles of Harlequin novels (Table 4.). Three of these occupations are female (“nurse,” “secretary,” “midwife”). The other occupations can be divided into two major groups, namely resource-based jobs (“doctors,” “surgeons,” “CEOs,” “kings”) and jobs in which physical performance is required (e.g., “cowboys,” “cattlemen”). Professions such as “sheriffs,” “soldiers,” and “lawmen” also appear that require physical performance but also reference their connection to protection and safety.

Occupation	Frequency Count
Doctor	388
Cowboy	314
Nurse	224
Boss	142
Prince	122
Rancher	79
Knight	77
Surgeon	77
King	55
Bodyguard	41
Sheriff	40
Soldier	38
Lawman	32
Pirate	28
Secretary	23
Consultant	21
Midwife	21
Cattleman	16
CEO	15
Executive	13

Table 2: The 20 most frequently occurring professions in harlequin romance novels (Cox & Fisher 2009: 395).

According to Cox and Fisher, in addition:

Our analysis revealed eight themes, which are presented in order from the largest to the smallest, based on the total number of words each theme contained. The first was a theme of commitment, which included the words: marriage, wedding, bride, groom, husband, wife, honeymoon, engagement, fiancé, alter, and bachelor, with a cumulative total of 2,793. That is, these words appeared a total of 2,793 times in the database. The second theme was reproduction, composed of the words: baby, child, mommy, daddy, mother, father, daughter, son, pregnant, paternity, and maternity, with a cumulative total of 1,830. The third theme was a Western theme, including the words:

cowboy, Texas, Montana, Wyoming, cattleman, horseman, lawman, horse, rodeo, western, wrangler, shotgun, sheriff, outlaw, and ranch, with a cumulative total of 1,015. The fourth theme involved resources, and composed of the words: millionaire, billionaire, tycoon, fortune, wealth, money, diamond, dollar, inheritance, heir, gift, treasure, rich, and gold, with a cumulative total of 796. The fifth theme was medical, composed of the words: doctor, nurse, surgeon, operation, medical, hospital, and surgery, which had a cumulative total of 771. The sixth theme was Christmas, which included the words: Christmas, holiday, Santa, mistletoe, and angel, with a cumulative total of 551. The seventh theme was royalty, composed of the words: king, prince, royal, castle, knight, queen, duke, duchess, and palace, with a cumulative total of 489. The final, eighth theme was professional, which contained words: professional, consultant, executive, boss, secretary, corporate, CEO, office, business, company, boardroom and assistant, with a cumulative total of 302 occurrences (Cox & Fisher 2009: 394–395).

7. Final comments

The difference that characterizes the two sexes with regard to couple relationships, sexual fantasies, and their respective narratives, does not prevent the identification of a vast area of overlap that, outside of the pages of erotic stories or descriptions of romantic heroes, is made up of things that appeal to both males and females. These studies, however, highlight that the existence of two such barely overlapping realms testifies to the fact that each sex needs to fantasize in a territory that is entirely congenial to it in order to construct its identity, for self-actualization, or simply to evade or diminish compromises in its relationship with the other. These territories are so specific that they allow us to demarcate the differences in desires and fantasies between the two sexes.

If this difference exists, as I have tried to demonstrate, and if this difference is so generalized and widespread, it means that it is innate, that is, inscribed in the genetic program of human beings, and therefore it is possible to offer an adaptationist explanation. This thesis is now challenged by the strong contemporary culturalist pressures that seem to free the sexes, at least in part, from any natural constraint. The social organization of Western countries, the movements for women's emancipation and, more generally, the contemporary tendency to transform every natural drive into a cultural convention, transform the evolutionary constraints just mentioned into socially contested social constructs. It is impossible to determine the outcome of this theoretical juxtaposition. But it is interesting to note that this tension shapes the cultural conjuncture of the time in which we live, making it a crucial point in the evolutionary and cultural

history of our species. Future research should strive to understand more fully the multiple dimensions of romantic and erotic experiences and the reasons that are leading to the overcoming of the biological and natural constraints to which humans are also subjected.

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