

The Mask of Love and Sexual Gullibility

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Abstract

Many people describe the time of being newly in love as one of life's peak experiences. Years later, many are dismayed by the choices they made during love, and many people divorce after thinking they were to be married for life. How did they make such a grievous mistake? Traditional theory assumes that lovers are biased in judgments about their partners. This largely speculative essay suggests that evolution has shaped people to fall in love, not just in judging their partners, but in becoming more lovable themselves. Recent data indicate that female sexual desire during courtship and newlywed phases is often followed by a loss of sexual desire that undermines both spouses' marital satisfaction. Men may therefore be gullible in terms of entering into a long-term commitment based on false assumptions about the amount of sex involved.

This may serve as a useful model for the hypothesis that people become more lovable when in love.

START

One ideal in Western civilization is that a man and a woman discover that they were meant for each other, fall deeply and mutually in love, marry, and spend the rest of their lives together. They support each other through good and bad times, raise a family, share life's chores and burdens, and make each other happy, till death do them part. Love may change in some respects but lasts forever, expressed in kindness, concern, everyday minor affection, and passionate, tender sex.

Not everyone's experience exactly lives up to that ideal, to be sure. Yet the promise is powerful. The majority of young people say they want to marry (Wang & Parker, 2014), and most do (or at least enter into a long-term cohabitation; Stepler, 2017). Wedding vows often defy statistical norms, making confident promises of lifelong devotion and fidelity that in the long run will be broken. Even though approximately 40% of U.S. marriages end in divorce (Schoen & Canudas-Romo, 2006), people are confident their own marriages will not reach the same fate (e.g., Fowers, Lyons, Montel, & Shaked, 2001; Klaczynski & Fauth, 1996; Weinstein, 1980). Many people even recite such vows at their second and third weddings, when presumably they should already know better, seeing that the promises they made at previous weddings were not kept.

How could any person marrying for the third time keep a straight face while vowing to be together “till death do us part”? Yet some do. Someone is awfully gullible.

This chapter considers some key forms of gullibility that help people make long-term commitments to romantic partners. Clearly the human form of mating is an evolutionarily radical innovation. In particular, other great ape males do not enter into long-term committed relationships in which they provide resources, including food and care, to an adult female and her offspring. From the perspective of other apes, human males would seem remarkably gullible.

The gullibility may be valuable, even crucial, for the species. Cooperative parenting is arguably essential to the evolutionary and cultural success of humankind. The complex demands of human culture require a heightened level of intelligence as compared to other non-human primates. This vast difference is also reflected in the presence of larger absolute brain size that must contend with a reorganized bipedal pelvis. Human infants must be born in a relatively altricial state to ensure passage of the head through the birth canal. It is only after a lengthy infancy, childhood, juvenile, and adolescent periods that a culturally competent adult emerges. The protracted phase of nearly helpless dependency is hardly sustainable without the presence and assistance of several adults, typically and crucially including the father — particularly if several children were all needing to be provided with enough food for all of them year after year, including when the primary caregiver is pregnant again and hence not chasing prey or climbing trees. Through much of human history and prehistory, a male provider was extremely helpful and sometimes essential for the child’s survival (at least until modern governments evolved to use tax money to support single mother families — and even

then the tax revenue is primarily dependent on male input). Parents also cooperate to teach and socialize the young, thereby providing essential preparation for the offspring to eventually ~~to~~ take on adult roles in society. In other words, humankind flourished because evolutionary sexual strategies and cultural norms set men up to be gullible enough to become long-term providers of resources to women and children.

The present analysis is therefore that nature has instilled some patterns of gullibility into human minds so as to encourage them to form lasting families marked by cooperative parenting, male provision of resources, and steady nurturance of the young.

In particular, sexual attraction and love serve functions in humans that extend beyond what other primates do: They are useful for forming and cementing interpersonal bonds between the partners, especially partners who may well become parents (see reviews by Birnbaum, 2014; Fisher, 1998; Fletcher, Simpson, Campbell, & Overall, 2015). In modern times, the bond is stabilized by societal commitments, such as religious weddings and legal obligations, but the need for cooperative parenting presumably predated these institutional pressures. Even in cultures whose marriage practices differ from the modern form, there are important cultural obligations and expectations tied to marriage.

Nobody is perfect. Therefore, an important context for all this is the need to settle for an imperfect partner and make the best of it. Many discussions of mating strategies, including evolutionary theorizing, seem to assume a large mating market with plenty of competition and a broad selection of possible mates. In practice, however, our ancestors (and especially in the hunter-gatherer societies, which constituted human life for over 90% of human history) probably had relatively few options. If they were to

reproduce, they had to select from among a very limited set of potential partners, all of whom were highly imperfect human beings. Getting oneself to commit to a long-term relationship with a flawed other person requires some gullibility and optimistic distortion.

The term *gullibility* is often used to refer to susceptibility to deliberate persuasion or misleading by others. That is not meant here. We think men and women do mislead each other — but not knowingly or deliberately, for the most part. Couples who managed to persuade each other that they were a great match may have left more offspring than their less gullible cohorts. In that way, romantic gullibility may have spread through the gene pool. Our focus is not on intentional forms of impression management and deception in mating (such as faking orgasm; Kaighobadi, Shackelford, & Weekes-Shackelford, 2012), but rather on the subtle ways nature may mold people to present themselves as a better match than they truly are, and for partners to embrace the illusion. Because we are taking an evolutionary approach, we focus our review below on heterosexual monogamous romantic relationships.

LOVE AND IRRATIONALITY

Passionate love was for a time regarded as a peculiar invention of Western culture, but subsequent scholarship soon concluded that it is found all over the world (Jankowiak & Fischer, 1992; Neto et al., 2000). It is thus reasonable to regard passionate love as a fairly universal human experience, presumably prepared by nature. It forges strong attachments between men and women, who, again, are vitally beneficial for raising human children (e.g., Fisher, 1998; 2004; 2006; Fisher, Aron, & Brown, 2006; Fletcher [et al.](#), ~~Simpson, Campbell, & Overall~~, 2015).

Humans in fact seem to be evolutionarily predisposed to falling intensely into passionate love and maintaining long lasting romantic pair-bonds. These intense feelings stimulate the dopamine-rich centers of the brain (the ventral tegmental area and the caudate nucleus), which are vital parts of the brain's reward system. Feelings of euphoria, pleasure, arousal, compulsion, and addiction are dramatically increased by a romantic/passionate attraction (Fisher 2004; Fisher et al., 2016). Research into the neural aspects of love have also suggested that individuals in love are similar to drug addicts. Both show signs of psychological addiction influenced by dopamine production. In the presence of reciprocal love, feelings of elation are common, perhaps even to the extent of sacrificing your life for your loved one. On the other hand, rejection and even just partner absence can send the person spiraling down to depression, doubt, anxiety, and jealousy (Baumeister, Wotman, & Stillwell, 1993; Baumeister & Wotman, 1992; Fisher et al. 2016). Behaviors and reactions are often extreme and irrational depending on the context. The presence of dopamine in the brain also seems to inflate the current partner's attractiveness. When anxiety and risk taking are endured, dopamine levels spike, therefore giving the risk taker feelings of euphoria and elation (Rosenbloom 2003). This can create an individual who is addicted to thrill seeking, similar to being addicted to love, or addicted to how their brain makes them feel in those circumstances. The presence then of risky or anxious behavior influences one's perception of sexual attraction, as illustrated by [classic studies on misattribution of arousal such as the "suspension bridge" test \(Dutton & Aron, 1974\)](#). In general, human tendencies toward addictive and often irrational behavior is inexorably linked to our own evolutionary history and the evolution of the reward centers of the brain.

Some historians (e.g., Stone, 1988*) have argued that some cultures and some historical eras have recognized passionate love as an irrational state — one in which making long-term decisions would be risky. This, at least, has been an important justification for arranged marriages, namely that parents can choose what is best for the young person in the long run and thereby protect the son or daughter from entering into a permanent union with someone who will not make a suitable partner. Choosing a life partner while passionately in love would be like choosing all one's retirement investments while seriously drunk.

Underlying that assumption is the long-standing recognition that love distorts how one perceives the love object. Lovers see the ones they love in idealized fashion, ignoring or overlooking the loved one's flaws while exaggerating his or her good traits (e.g., Conley, Roesch, Peplau, & Gold, 2009; Murray & Holmes, 1993; Murray, Holmes & Griffin, 1996a; Murray, Holmes & Griffin, 1996b7). It is a commonplace observation that lovers regard their love objects as far more wonderful than disinterested, objective observers would judge them to be (Barelds, Dijkstra, Koudenburg, & Swami, 2011) or even friends (Murray, Holmes, Dolderman & Griffin, 2000). Moreover, an ironic truth is that many of the qualities that attract partners initially prove to be *fatal attractions*: these same, initially appealing qualities are viewed as the partner's worst flaws when the infatuation wears off (Felmlee, 2001; Pines, 1997). One may initially love a partner's relaxed laid-back attitude, only to later resent him or her for being irresponsible and unconscientious.

Assuming that conventional wisdom is correct as to the power of love to distort objective assessment of one's partner, this is one important form of gullibility. In an

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Stone, L. (1988). Passionate attachments in the West in historical perspective. In W. Gaylin & E. Person (Eds.), *Passionate attachments: Thinking about love*. New York: The Free Press

important sense, nature has instilled a temporary state of gullibility into human beings, so that they overestimate the quality of each other at the crucial point at which they are deciding whether to enter into a long-term relationship. Obviously, idealizing the partner will increase the chances that people will make a positive decision (see also McKay & Denneit, 2009 and Fletcher & Kerr, 2013).

How the long the idealization lasts is debatable. One line of evidence in support of idealization is the pattern of partner-serving attributions ([Bradbury & Fincham, 1990](#); [Fincham & Bradbury, 1993](#)^{REFS} [Fincham](#); [Holtzworth-Munroe, & Jacobson, 1985](#)^{Holtzworth-Munroe}). Although much research has focused on self-serving attributions, such as taking credit for success and denying blame for failure (e.g., Zuckerman, 1979; Mezulis, Abramson, Hyde, & Hankin, 2004), people in strong loving relationships have been shown to make attributions in ways that make the partner look even better than the self. Attributing mainly good things to the partner and bad things externally is apparently one important and useful aspect of sustaining a positive relationship ([at least for couples whom are facing relatively infrequent and minor problems](#); [McNulty, O'Mara, & Karney, 2008](#); [McNulty, 2010](#)). People in troubled relationships, where passionate love has presumably given way to conflict and recrimination, do not typically show these patterns of partner-serving attributions ([e.g., Fincham, Beach, & Baucom, 1987](#)). Thus, if passionate love makes people idealize their partners, their cognitive strategies continue for some time to construe events in ways that maintain that idealized view.

THE MASK OF LOVE: HELPING GULLIBILITY ALONG

What natural selection presumably favored were cases in which a man and a woman forged a strong and lasting bond to each other, which sustained them through raising healthy, thriving children into adulthood. Moreover, in evolutionary past there were often not many alternative available partners: The hunter-gatherers did not have Match.com or eHarmony, nor did the early farming villagers, so they had to choose a mate from among a limited set of locally available candidates. When people have to settle for someone who is far from ideal, it helps to improve gullibility. The previous section suggested love accomplished this partly by making the lovers see each other as better than they really are. This section develops the more radical idea that love has a second way of increasing matings among imperfect people. Love may temporarily make someone actually become a better person — a kind of false advertising.

The false advertising has been called the “mask of love,” in conversations with Kathleen Vohs and several others (e.g., Eli Finkel). That is, the person who is in love metaphorically (and likely unintentionally) puts on a mask that is far more attractive than the real face. Passionate love thus brings about a temporary revision of behavior patterns and other traits, thereby making the person more lovable — hence increasing the partner’s tendency to fall in love too.

The mask of love complements the perceptual biases that glorify the beloved person. To illustrate, if Harry loves Sally, he will see her as better than she really or normally is — *and* he becomes better than *he* really or normally is. If Sally is inclined to love him in return, then she too will become more lovable (thereby warranting his love all the more) and will see him in idealized form. Thus, each of them undergoes a double boost in attraction. Skepticism, the standard deterrent to gullibility, will be swept away.

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Congruent with this hypothesis is research suggesting that over time, individuals come to see themselves in the idealized way their partner had (Murray, Holmes & Griffin, 1996**b**). Harry will come to see himself in the positive way Sally saw him initially. Moreover, research on the *Michelangelo phenomenon* suggests that one's romantic partners can help one become closer to one's ideal versions of oneself (Drigotas, Rusbult, Wieselquist, & Whitton, 1999; [see review by –Rusbult, Finkel, & Kumashiro, ~~et al.~~](#), 2009). That is, Sally can help elicit behaviors to shape Harry into the better man he wants to become.

Combining the mask of love hypothesis with the Michelangelo effect suggests an intriguing form of human gullibility combined with genuine progress. When in love, Harry becomes temporarily a better person, and Sally's attentions help move him toward actually being that better person. Still, sustaining this over a 50-year marriage must be difficult. Gullibility must therefore continue to help. Research suggests that when couples are very committed to one another, they change their standards to fit their partner's existing characteristics (Fletcher & Kerr, 2013; Neff & Karney, 2003). In other words, if the mask comes off but you are already committed to your partner, you strive to be happy with what is actually behind the mask. From existing research it is hard to tell whether becoming the best versions of oneself when in love is a permanent change, though a priori this seems doubtful (Michelangelo effects notwithstanding). Because most studies rely on self and partner reports of traits, it is difficult to get an objective, unbiased assessment of partner's true traits, especially given as discussed, motivated reasoning alters assessment of traits and partner ideals (e.g., Murray et al., 1996**a**; Neff & Karney, 2003). And although there is research on how one's self-concept may shift

following relationship dissolution (Slotter, Gardner, & Finkel, 2010), to the best of our knowledge there is no work on whether one's personality reverts to pre-love levels.

Thus, at present there is not much research available to directly inform the mask of love hypothesis, for two reasons. First, the hypothesis is relatively new, so there has not been time for prospective empirical tests. Second, the optimal research design is seriously inconvenient, as it would involve measuring people's traits and behavior patterns when not in love (baseline), then measuring them again after they fall in love to assess changes, and again after the love is over, to see whether they revert to their less appealing versions of self. (To be sure, the ideal design would randomly assign them to fall in love or not, but implementing that would face a daunting cluster of practical and ethical hurdles!)

Still, there are assorted encouraging signs. Longitudinal data tracking students over a semester found that those who reported falling in love during the semester reported reduced symptoms of depression and reduced alcohol consumption (Fincham, personal communication). [There is also robust evidence from longitudinal studies that becoming involved in a romantic relationship is associated with lower alcohol and substance use \(e.g., Rauer et al., 2016; Staff et al., 2010\) and reductions in other undesirable behavior such as committing crimes \(Barr & Simons, 2015\).](#) (There should be some other data on reduced depression during passionate love.) Passionate love appears to be a state of ongoing or frequent positive emotion. A cursory skim of Google images for "people in love" reveals abundant happy, smiling faces. If there is any validity to that sample, the implication is that people in love exude positive emotion, which would certainly make them appealing to partners.

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The stifling of depression and depressive symptoms, to be replaced with pervasive positive emotion, seems eminently well designed to improve someone's attractiveness in the mating market. Abundant evidence indicates that people dislike interacting with depressed people (e.g., Gotlib & Robinson, 1982; Hammen, & Peters, 1978). Almost certainly, most lovers would prefer non-depressed over depressed partners. Depression is also related to poorer romantic relationship quality (Segrin, Powell, Givertz, & Brackin, 2003) and can burden one's romantic partner (Coyne, Kessler, Tal, Turnbull, 1987). Advice for positive interactions, including getting others to like one, typically emphasize smiling and showing positive emotion (e.g., Dale Carnegie, 1936), and research on ingratiation confirms that positive emotions elicit liking (Jones & Wortman, 1973), as does humor (McGee, & Shevlin, 2009). If being in love can stifle or hide depression, it would facilitate bonding.

Careful laboratory studies by Gonzaga, Keltner, Londahl, and Smith (2001) found evidence for the broader point that love functions as a commitment-enhancing device. The effects of love were different from merely feeling happy or feeling sexual desire. Feeling love led to more affiliative nonverbal behaviors toward the partner and increased other markers of commitment, such as trust, constructive conflict resolution, and mutual influence. They concluded that feelings of love motivate approach behaviors toward the love object and produce expressive behaviors that signal commitment to the other person.

Several other changes may be hypothesized, and these may be particularly effective if they play to well-entrenched sources of gullibility (see next sections). The woman seeks a man who will provide her a steady stream of resources. Hence if the

man appears to adore her and to be endlessly concerned with making her happy, including by providing her with dinners and other gifts, this would strengthen his appeal to her. The man in love should therefore pay considerable attention to the woman and in many ways should express how much he wants to improve her feelings and well-being. Once he has won her heart, however, his attention may shift to other priorities. This was one of the themes of Flaubert's prototypical novel *Madame Bovary* (1867): At first, Charles was obsessed with winning ~~the~~ her heart of Emma and making her happy, but after the wedding his interests shifted back to business and other matters. Emma ~~She~~ was disappointed that his overriding concern with her happiness proved so temporary.

Meanwhile, the man seeks someone who appreciates his providing. For the woman to show considerable gratitude bordering on hero-worship would encourage him to bond with her. After all, if his lot is going to be to toil to produce surplus resources to give to her and her children, this will be much more tolerable insofar as she is lavishly grateful and looks up to him for doing so.

Perhaps even more important to the man is that he desires frequent and highly satisfying sex. The hypothesis that love increases female sexual desire seems uncontroversial, but we shall return for relevant evidence later in this chapter.

FEMALE GULLIBILITY?

Evolution works based on reproductive success. The analysis up ~~until~~ now has argued that human reproductive success depended substantially on forming lasting male-female partnerships to nurture and educate the children, with women typically providing direct care and men providing food and other resources to both. These next

sections will speculate about what sorts of gullibility would plausibly be selected for, because they would enhance reproductive success by making men and women enter into such committed parenting partnerships.

Gullibility is a negative trait, and we respect contemporary norms in social science that hold that attributing negative traits to women is offensive and sexist. Our focus has therefore been on male gullibility. However, it is useful to consider whether in some respects nature made have made women vulnerable as well, as long as this contributes to rather than detracts from their claim on universal victim status, as affirmed by contemporary feminist-inspired social science.

One line of analysis that is relevant to this chapter's focus on sexuality would involve concealed ovulation. In most nonhuman primates, the female's ovulation is readily apparent to herself and others. This encourages sexual behavior, which confers the selection advantage that sex leads to reproduction. It is a long-standing puzzle as to why evolution favored human women who do not know whether they are ovulating or not. Indeed, the general trend in evolution has been toward greater awareness, supporting self-regulation and control, so this odd trend in the opposite direction is both unusual and puzzling.

A gullibility explanation is that concealed ovulation makes women more willing to engage in sex when they do not want to get pregnant but would be at risk. In other words, concealed ovulation conceals the woman's current impregnability from her. Our ape ancestors presumably knew when they were ovulating, because of overt physical signs. The argument would be that pre-human or early human women became able to anticipate what sex during ovulation could do to them: months of pregnancy

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accompanied by discomfort and impaired physical functions, followed by a very painful birth process — followed then by years of needing to care for a dependent child. Sensible women might avoid subjecting themselves to all of that and confine their sex lives to times safe from the dangers of pregnancy (and only have intercourse when definitely wishing to become pregnant). But of course such sensible women might not reproduce, so modern women are descended from those who lacked such sensible restraint or, more likely, from those who were unable to tell whether they were fertile at the moment.

Concealed ovulation meant that women could act on their sexual desires in the (sometimes mistaken) hope that sex would be safe from pregnancy. Throughout history, all over the world, women have engaged in sex and become pregnant against their wishes (e.g., Finer, Henshaw, 2006; Sedgh, Singh, & Hussain, 2014). It is hard to avoid the conclusion that the rate of unplanned, unwanted pregnancies would be much lower if ovulation were marked by unmistakable physical signs. Concealed ovulation has meant heartache and tragedy for countless individual women, but nature of course rewards reproduction, and so hominins with concealed ovulation out-reproduced those who knew when they were at high risk of impregnation.

Insofar as women use sex to entice men to form long-term relationships involving the man providing for the woman, then the woman would favor having sex with a man who seems a promising candidate. Above all, that would include him being in love with her. Phony or at least inflated declarations of love are presumably a staple of male seduction efforts. Female gullibility might mean being susceptible to such communications and failing to be appropriately skeptical. Buss (1989) found that one

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Buss, D. M. (1989). Conflict between the sexes: Strategic interference and the evocation of anger and upset. *Journal of Personality and Social Psychology*, 56, 735–747.

of women's principal complaints about men was that some of them declared love or otherwise expressed strong interest in a lasting relationship — but then skedaddled after sex had been consummated. These cases presumably reflect a form of female gullibility (though the complaints indicate that women are somewhat aware of the pattern and normally can be appropriately skeptical). Men did not generally offer that kind of complaint about women, though they had other complaints.

Undoubtedly, hearing a desirable romantic partner declare love for you is a welcome signal that elicits both positive emotion and a boost in self-esteem. But women may know that devious men may overstate or misrepresent their love as a means to obtain sex. Relevant findings by Ackerman, Griskevicius, and Li (2011) indicated that women reported feeling happier if their male partner first declared his love *after* sexual activity had occurred in a relationship rather than before, presumably because such declarations prior to sex were suspect. Men showed the opposite pattern, reacting more favorably to declarations of love *prior* to the commencement of sexual intercourse. Thus, specifically women are often adaptively on guard against being gullible.

(Note, one could interpret the male pattern as also being a defense against gullibility, that is, getting roped into a long-term commitment to provide for a sex partner. Women are suspicious of declarations of love prior to sex because they might just be attempts to get sex. In contrast, men might be suspicious of post-sex declarations of love because they might be gestures aimed at securing a long-term commitment.)

MALE GULLIBILITY

Our emphasis is on male gullibility, which is prominent in a mating context. The human male takes on a role and responsibility far beyond what most other primate males do, and he has to sacrifice and suffer a fair amount (though he also gets some benefits). He has to be rendered much more gullible than a chimpanzee or gorilla if he is to acquiesce in being a long-term steady provider of resources to his offspring (and even to their mother), as well as bodyguard and high-powered workhorse.

As already noted, simple acceptance of his male role of being a long-term steady provider of resources (and protection) to his children and their mother is a huge step beyond what all other male primates do. In that sense, some powerful gullibility could have abetted the acceptance of these new obligations. But note that this is entirely plausible, because of the powerful selection factors. Let us imagine that in some prehistoric time, half the men were strongly gullible to female enticements and readily succumbed to providing for them for decades, while the other men remained like other “sensible” primate males and only sought food for themselves. From whom are today’s human population descended? The ones who provided well and reliably were heavily favored by the women as sex partners and hence left copious offspring, while the non-suckers frequently removed themselves from the gene pool. Human men were heavily bred to be domesticatable and, well, suckers.

Clearly one adaptation was to select in favor of men who came to love their children. Again, this may be evolutionarily novel, as most apes show no such feelings. But human men do. Loving their children should make the men more willing to continue providing resources and protection over many years. To be sure, this will not seem to him a form of gullibility. The gullibility is perhaps most apparent to the man whose wife

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Write about declining levels of testosterone of men with long term partners. Particularly when they have had children

divorces him and minimizes his subsequent contact with his children, often while continuing to extract resources. Farrell's (1993) observation epitomizes the man's discovery of how gullible he has been: He wrote that many a modern American divorced man feels that he is working his life away to provide money for people (ex-wife and children) who hate him.

Long-term emotional attachment to the woman would be another adaptation. The man may be so captivated by the experience of passionate love that he expects it to last forever and cannot understand why the woman no longer treats him with the heady mix of overflowing positive emotion, gratitude, hero worship, and sexual desire that marked their passionate love phase. Hence he may cling on to his attachment to her and his love for her, even when objective observers could probably tell that all those positive things are gone for good. Research has found that men fall in love more rapidly than women (e.g., Ackerman *et al.*, Griskevicius, & Li, 2011), and women fall out of love more rapidly than men (Rubin, Peplau, & Hill, 1981). That pattern is consistent with the depiction of men as the more romantic gender — and romantic notions seem prime candidates for psychological gullibility. Women initiate more divorces than men (Hewitt *et al.*, 2006; Kalmijn and Poortman, 2006), and men suffer poorer physical and mental health after divorce than women (Kölves, Ide, & De Leo, 2010; Kölves, 2010; Robards, Evandrou, Falkingham, & Vlachantoni, 2012) — again suggesting that men remain emotionally attached for longer. Male gullibility may thus be reflected in remaining emotionally attached to a woman beyond the point that is good for the man. Further supporting this notion is evidence that men report more experiences of unrequited love in young adulthood relative to experiences of mutual love, and more unrequited love

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Farrell, W. (1993). *The myth of male power: Why men are the disposable sex*. New York, NY, US: Simon & Schuster.

than women (Hill, Blakemore & Drumm, 1997; see also Baumeister [et al.](#), [Wotman](#), & [Stillwell](#), 1993); again suggesting men may naively remain attached to unreciprocating women.

One speculative and possibly controversial extension of this argument would suggest that men's sense of fairness constitutes a useful vulnerability, to women's advantage. Whether women and men think differently about morality has been debated (cf. Gilligan, 1982; Jaffee & Hyde, 2000). In practice, however, there is a stronger empirical case to be made that males are much more concerned with abstract rules than females are. Gilligan (1982) noted that boys have developed complex group games with complex rules, and when there is a dispute, many boys enter the debate, which is carried on at a somewhat abstract level (and if unresolvable, then the boys resort to do-over). In contrast, girls play less complex games, and if there is a dispute, the game ends abruptly and without resolution. Benenson (2014) provided extensive observations consistent with these views, including the fact that girls' own games typically are no more complex than taking turns in jump-rope, and that even when playing games borrowed from boys, girls show considerably less interest in rules (especially debating the rules). The broader context is presumably that males evolved partly to work in somewhat large groups with fairly shallow relationships, so that group cohesion and performance depended on fairness as guided by abstract rules applying to everyone. If so, then the man's greater respect for notions of fairness makes him vulnerable to female requests that are carefully couched in terms of fairness.

A meta-analysis on gender and cooperation by Balliet, [Mulder](#), and [Van Lange](#) [et al.](#) (2011) provided some relevant findings. Although there was no overall gender

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[Benenson, J. F. \(2014\). Warriors and worriers: The survival of the sexes. New York, NY: Oxford University Press](#)

difference in cooperativeness and cooperative behavior, the patterns differed. In particular, women showed low cooperation with other women, whereas both men and women cooperated with men. Moreover, in multi-trial economic games, the gender difference in same-sex cooperation increased over trials. The implication is that male willingness to cooperate can survive an occasional bad action by the partner, whereas female cooperation ends abruptly if the partner disappoints her (as with the playground games, noted earlier). This also dovetails with the fact that women initiate more divorces than men.

Thus, another line of male gullibility may involve forgiving the occasional misdeed by the partner. This may have evolved to facilitate male-male cooperation but may be a useful form of gullibility in male-female relationships. Meanwhile, the woman has not developed such a pattern (apparently not in her relationships with other women). From nature's perspective, a couple is more durable if at least one of them is inclined to overlook, forgive, and forget various misdeeds and conflicts. Presumably the effect would be additive, so its prospects would be best if both partners are forgiving, but most of the benefit would arise from the first one being forgiving.

Above all, male gullibility may involve high sexual attraction to the woman. High sex drive (e.g., stimulated by seeing attractive women) has been shown to lead to various irrational patterns, such as future discounting (Wilson & Daly, 2004), and greater risk-taking in a card game (Baker & Maner, 2008) and skateboarding (Ronay & von Hippel, 2010). The strength of the motivation is also evident in that when males are sexually aroused (relative to not aroused) they report being more willing to engage in morally questionable behavior to obtain sex, and more willing to engage in

unprotected sex (Ariely & Loewenstein, 2006). Like other primates, the male's primary interest in the female involves sexual opportunity. The woman can use this productively to entice him in to a committed sexual relationship. For best results, male gullibility should lead to believing that the woman's sexuality that he enjoys during the passionate love phase will be permanent. That is, he should believe her mask of love is no mask but the real thing.

FEMALE SEX DRIVE AS MASK OF LOVE

Men want sex from women. Women want long-term commitments from men to provide resources. One solution would be for the woman to have endless, boundless sexual desire for the man, who then gladly continues to provide resources. However, this may not be possible for various energy reasons. In particular, once the relationship is established and the man is providing, the woman's energy may turn to focus on the children, so frequently getting the sexual hots for the man may be an unaffordable distraction. It would moreover require a possibly huge evolutionary adjustment. In contrast, a temporary state of high sexual desire, especially occurring prior to children, would seemingly be more possible. This is consistent with theorizing that sexual desire serves to bond individuals long enough for both partners to raise their children together (Birnbaum, 2014; Birnbaum & Finkel, 2015; Hazan & Zeifman, 1994; 1999).

The core hypothesis here is that *female sexual desire is in substantial part an adaptation to facilitate recruiting a male provider*, that is, attracting him and enticing him to form a long-term relationship in which he will provide her with food, protection, and other resources. Once he has entered into this relationship, there is less use for female

Commented [TG10]: Helen Fishers work on the Caudate Nucleus and Ventral tegmental areas
Put a 4-5 year peak on passionate love – enough time for a couple to have a few children ...

sexual desire, so it may diminish. At that point, her sex drive has served its main function. There is indeed evidence that increased female sexual activity may serve to accomplish females' ultimate goal of securing partner resources (Rodriguez-Girones & Enquist, 2001). Research on extended sexuality indicates that women are more likely to initiate sex—even when they are not fertile and no pregnancy could result—if their partner is less invested in the relationship (Grebe & Gangestad, Garver-Apgar, & Thornhill, 2013). Taken together this evidence suggests that it was functional for a woman to have high desire early on in a relationship to promote her partner's commitment.

There are competing theories about female orgasms. Although all female mammals have a clitoris and are thus capable of sexual pleasure, and a few animals have been stimulated in the laboratory to the point of vaginal contractions, there is not much evidence of frequent orgasms occurring in the wild among nonhuman animals, and the brief, fairly rough nature of much animal copulation seems poorly suited to produce female orgasms. Human women may not be absolutely the first animals to have female orgasms, but they certainly have far more than other animals. There are various theories about this ([see review by Puts, Dawood, & Welling, 2012](#)), some of which emphasize the value of female orgasm for cementing bonds between man and woman ([e.g., Eibl-Eibesfeldt, 1989](#); [although this perspective has been challenged, e.g., Zietsch, Miller, Bailey, & Martin, 2011](#)). The orgasm may intensify the woman's positive feelings and love for the man, her evident pleasure and affection may be reinforcing to him. This is likely multiplied tenfold by the human innovation of face-to-face intercourse. (This position has been occasionally observed in chimps, bonobos,

and gorillas, though it is unusual among them, whereas it is the favored style among humans. Most animal sex uses positions in which the female faces away from the male.) Face-to-face intercourse facilitates rapid and ongoing exchange of affection, including eye contact, talking, smiling, and kissing. One could say it seems well designed for turning sex into love.

In short, human evolution redesigned sexual intercourse in ways well suited to increasing emotional communication, and it especially enhanced the communication of female pleasure to the man. This may well serve to strengthen the man's love for the woman and to encourage him to make the long-term commitment. Her blissful face may feel like hero worship to him, so that he feels a bit like superman making love to her. Indeed there is evidence that men report feeling more masculine if a female partner orgasms (as opposed to her not having orgasm) in an imagined sexual encounter (Chadwick & van Anders, 2017). Both genders acknowledge a female's orgasm is a boost to the male's ego (Salisbury & Fisher, 2014).

Intense momentary pleasure is addictive to males. Men generally show much greater pursuit of such pleasures than women, including not just sex but also pornography and related milieu, and obsessive involvement in music or sports, and extending to chemical sources of bliss. Men outnumber women in nearly all forms of alcohol and drug addiction (e.g., Brady, & Randall, 1999; O'Malley & Johnston, 2002; [Substance Abuse and Mental Health Services Administration, 2012](#)CITE). The male susceptibility to the pursuit of remembered pleasure is another key aspect of male gullibility. Male susceptibility to addiction to intense pleasures may have evolved to facilitate men becoming attached to their female sex partners.

For present purposes, however, the key point is that this passionate sexuality is part of the woman's mask of love. That is, nature has selected in favor of women feeling and showing a strong sexual response to the man with whom she is in the process of forming a long-term relationship. High sexual desire and orgasmic responsiveness are not an inherent part of her permanent nature but rather a transitory phase associated with securing a long-term provider. They are for closing the deal, not a permanent part of the deal. And he may not realize this (thus he is gullible).

To be sure, the man may typically not realize that female sexual passion is a temporary condition designed by nature to entice him into a provider role. This is a key aspect of male gullibility. Presumably he believes that sex with her will always be the way it is during this passionate phase: thrilling, mutual, satisfying, and frequent. [Indeed, a recent study of engaged men and women revealed that both sexes anticipated having sex approximately 11-12 times per month when married \(Maxwell, Joel, & MacDonald, unpublished data\), which is far above the typical frequency of sex in long-term relationships of once or twice per week \(e.g., Blanchflower & Oswald, 2004; Call, Sprecher, & Schwartz, 1995\).](#)

A crucial prediction deriving from that view of female sexuality as instrumental is that female desire for and even willingness to engage in sex will drop off once the man is committed. The first author's own thinking along these lines was stimulated by Arndt's (2009) book, *The Sex Diaries*. Arndt, a journalist and sex therapist, developed a plan for a racy bestseller based on having an assortment of couples keep diary records of their sex lives. When she perused the diaries, she did find some titillating scenes. But far more frequent were scenes of men begging and groveling for sex, while the women

refused and sometimes developed elaborate stratagems for avoiding sex. For example, one confided to her friends that it was often useful to start a small argument with her husband late in the evening, which would preempt any romantic mood or sexual overtures. Arndt concluded that some mysterious process causes many women to lose interest in sex as soon as they settle into a long-term relationship.

Archival data provide some support for that conclusion. Ard (1977~~xx?~~) surveyed married couples across many ages. The women typically thought their marriages had about the right frequency of sex, whereas the men wished for much more (indeed twice as much) sex as they were having. This suggests that already back then, many couples adjusted their sexual frequency to the lower rate of desire by the wife. The feminist movement has encouraged women to be much more assertive about insisting that the husband should wait for sex until the woman wants it too — which happens to be much less often than the husband wants, unfortunately for him. XX (19xx) surveyed a sample of couples in marriage therapy about their sexual problems. They found no cases in which the wife complained about not enough sex (including wishing for specific sex acts, even if others took place). That was always the husband's complaint.

Probably the most thorough and rigorous data come from a pair of recent longitudinal studies that tracked newlywed couples across the first few years of marriage (McNulty et al., 2018, submitted). All couples began the study either just before or within a few months after their wedding day and were surveyed about twice per year for about five years.

Our overarching hypothesis is that nature has instilled gullibility into men and women to bind them together. The mask of love hypothesis suggests that during the

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Hawton, K., & Catalan, J. (1986). Prognostic factors in sex therapy. *Behaviour Research and Therapy*, 24, 377–385.

peaks of romantic attraction, men and women actually change so as to become more appealing partners to each other, in addition to viewing each other in idealized manner. Part of the female mask of love involves high sexual passion. The man thinks he has found a wonderful sex partner to provide him with delightful, fulfilling sex for the rest of his life. This reflects the female's changes during love as well as the man's vulnerability to believing it will always be like this. The gullible male forms a strong attachment that entails he will provide her with food, protection, and other resources for years to come.

In effect, nature has arranged a kind of "bait and switch" process that, like its marketing equivalent, functions to tempt people into commitments that they might not choose if fully informed and that can operate to the detriment of their personal well-being. (As is often repeated, nature does not care about individual happiness and mainly rewards reproduction.) The mask of love entails that the person one comes to love and marry is not the same as the person with whom one ends up married, and the actual partner is a less appealing version than what one thought one was getting. The temporary flowering of the female sex drive is merely one of the more salient and problematic forms of the mask of love. But insofar as nature's goal is to promote reproductive success via partnered parenting, it works.

"Bait and switch" is legally prohibited as a deliberate deceptive technique, and we do not think that most men and women are deliberately deceptive. The term is used as an imperfect analogy. Still, it does introduce an economic perspective on mating. Before closing, we develop the economic analysis further.

SEXUAL ECONOMICS AND DIFFERENT UNDERSTANDINGS

The mismatch in sexual desire that emerges over the early years of marriage points to further forms of gullibility in both men and women. When they negotiate and commit to a long-term relationship, they may have different understandings of what the commitment involves, even just in terms of sex. Both man and woman may exhibit some gullibility, albeit in different forms.

A conceptual scheme for analyzing these sexual negotiations is sexual economics theory. This is a decidedly unromantic approach to analyzing love and sex, but a vast amount of evidence fits it, as reviewed by Baumeister and Vohs (2004). The core idea is that sex functions as a resource or service that men want from women, and so men must give women some other resources in exchange. Male sexuality has no exchange value, whereas female sexuality can be traded for many things women want: not just money but also food, attention, drugs, respect, career advancement, forgiveness, reduced punishment for misdeeds, high grades for academic work, and more.

The theory was originally focused on forming a new sexual relationship, or commencing to have sex for the first time even if that is also the last time. Its applicability to marriage is unclear. In modern marriage, the wife already owns all the husband's assets (jointly), so there is not much more he can give her, making there no economic reason for her to give him sex. Insofar as her sex drive is based on extracting resources from him, it has no more utility once he has made a permanent commitment.

A revealing insight emerged from recent research on female competition. Women pass along gossip about their rivals, especially attractive ones (Reynolds, [Baumeister, & Maner, -et al.,](#) in press). The content of the gossip is that the woman is sexually

unrestricted, that is, has plenty of sex with different partners. That seems to clash with the sexual economics analysis. To discredit a competitor, they say that she has a low price. Hardly any business marketers advertise that their rivals have lower prices. Why would this occur in the human mating market?

To resolve this dilemma (see Baumeister, Reynolds, Winegard, & Vohs, 2017), it is necessary to consider carefully what is being sold. Sexual economics theory began by assuming that sexual intercourse and pleasure were what was traded. But human mating commitments often involve exclusivity, and very much female more often than male exclusivity. The man thinks he is getting lots of great sex, augmented by her promise not to fornicate with anyone else. But perhaps she thinks she is mainly giving her promise not to bang anyone else, augmented by a little bit of great sex. And she has already provided that, to her way of thinking.

The couple can conceivably function just fine despite this difference in perspectival emphasis. They can make their commitment to each other, form a household as a cooperative team, start a family, and so forth.

Alas, however, the emerging sexual mismatch brings the different understandings to the fore. The man thought there would be plenty of sex, but his wife no longer wishes to express her love by performing the carnal act of oneness. She only wants to have sex occasionally, and indeed less and less often. Many wives would be fine if sex were to stop altogether. Arndt (2009) told one story of a couple in which the man tried many different ways of initiating sex but received only angry rebuffs from his wife. Frustrated and exasperated, but trying to be respectful, he proposed that he should not be the one to initiate sex — that is, the next time they had sex would be up to

her to initiate it, whenever she felt like it. Nine years later, he was still waiting. Thus, despite being married, he had not had intercourse for nine years. For men in such a position, the marriage vow is a vow of chastity.

To the husband, then, it may seem that the wife is renegeing on the deal. He married her partly in expectation of lots of good sex, but she is not providing that.

From her perspective, however, she is totally fulfilling her part of the bargain, and his complaints are unreasonable. To her, the main promise was that she would not have sex with anyone else, and she is succeeding at that. (Admittedly, this may be quite easy for her, insofar as women tend to have lower sexual desire than men; Baumeister, Catanese, & Vohs, 2001). Still, from her perspective, fidelity counts. That is precisely what she promised at the wedding. The church ceremony contained no vows about twice-weekly blowjobs. She never thought that the deal included having sex when she did not desire it. During the passionate courtship, she desired it plenty, and so she was happy to make him happy in that way, and she even wanted it. But nowadays, not so much. Her sexual commitment likely assumed that sex would occur by mutual desire, not as an obligation to do something she does not really wish. In sex, engaging in acts when one does not desire them has many negative connotations (e.g., Impett, Peplau, & Gable, 2005; Smith, 2007). As the woman fail to appreciate that her desire for her partner will dwindle over time and that consequently instance of mutual desire will become less frequent, she may not realize that sex will start to become more of a chore and less of a delight.

It is even possible that she thinks that he is the one who is not living up to the deal. If he accepts her unwillingness to have sex, he may resort to pornography and

other outside stimulations — which to her may be a betrayal of the more important form of their commitment, namely to forsake all others. There are reports that some women object to their husband looking at pornography (e.g., Bridges, Bergner, & Hesson-McInnis, 2003, although admittedly women have a range of attitudes regarding their husband' porn use; Kohut, Fisher, & Campbell, 2017; Zitzman & Butler, 2009), presumably even if she is not having frequent sex with him. This is a moral and pragmatic dilemma for the man: His partner is not interested in having sex, while he is, but she objects to him finding alternative outlets. In effect she has all but stopped sexual activity and expects him to do the same, but his sex drive remains as strong as ever.

The problem thus arises because of bilateral gullibility. Each one promises something and expects something in return, but the couple does not quite match on what is being given and claimed. The young couple in love are both happy with what they have and want to make it permanent, but they have different understandings of what it is they are making permanent.

CONCLUSION

Sexual gullibility is plausibly an innate tendency in humankind, because it likely improved reproductive success. It works differently in men and women. The gullibility helps them form a lasting attachment, which is optimal and adaptive for the babies that come along as a result of their having sex.

We emphasize again that the gullibility patterns do not at all imply deliberate deception. The mask of love hypothesis holds that these changes in behavior seem to occur naturally to the newly in love, and the individual may not realize the changes beyond the pervasive positive feeling. With the female sex drive findings, we suspect

the wife may be as baffled as her husband at her loss of desire for sex across her early years of marriage. If she thinks about it, explanations may focus on the stresses on her or on the newly visible faults in her husband (e.g., Sims & Meana, 2010). It does not occur to her during the passionate love phase that her high sexual response to her husband would have given him a misleading picture of what future decades of life will be like for him as her husband. In parallel, the man in love really does think constantly about his beloved and searches for multiple little ways to make her happy, and this too is a false advertisement or what he might be like as a husband. But again, he does not reflect on his own fakery and is probably not aware of it.

To commit to spending the rest of one's life with an imperfect person who may change in unpredictable and possibly unwelcome ways across future decades requires a major leap of faith. Even to commit to stay together with someone for long enough to raise a crop of children from birth to young adulthood may require such a leap. Couples who successfully did this left a larger footprint in the gene pool than those who avoided such a risky and dubious commitment. We have proposed that both men and women have been shaped by nature to be gullible to optimism about how well these forecasts will go. They overestimate their partner's positive qualities, and indeed during the commitment phase (passionate love) they themselves change so as to match up well with the partner's gullibility.

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