

Early Modern Witches and Demonic Sexual Fantasies: An Evolutionary Perspective

Edward Dutton*

Asbiro University, Łódź, Poland

John Oliver Allen Rayner-Hilles

Independent Scholar, Caterham, Surrey, UK

*Corresponding author: e.c.dutton@dunelm.org.uk

Many accounts of witchcraft in the Early Modern era testify to accused witches having had sex, willingly or unwillingly, with the Devil. Historians tend to explain this in terms of hysteria or pressure to confess to a perceived template for witch-like behavior. In this study, it is argued that these accounts can be understood via evolutionary analyses of female psychology. It is shown that the females who were accused of witchcraft tended to be high in social dominance and socio-sexuality, and/or unwilling to conform to the patriarchal system. It is further demonstrated that these precise traits are correlated with intense sexual fantasies, including so-called 'rape fantasies'. It is averred that this model makes sense of the many accounts in which Early Modern witches confessed to having slept with Satan.

Keywords: Witchcraft, Rape fantasies, Incubus, Patriarchy

Between the fifteenth and eighteenth centuries, and in particular in the seventeenth century, Western Europe was gripped by a 'witch craze' in which thousands of victims, mainly female, were put to death for witchcraft (Pickering, 1998). One of the more extraordinary dimensions of Early Modern witch trials is the way in which so many of those accused of witchcraft were seemingly induced to confess that they had copulated with the Devil. Six of the seven extant pamphlets on witchcraft in England produced prior to 1640 record testimony of witches confessing to sexual intercourse with Satan or with his familiars (Millar, 2017, p. 136). Scottish 'witch' Margaret Lauder confessed that she initially refused the Devil's advances and he became so angry that she ran away. But she eventually relented and he had sex with her from behind (Martin, 2002, p. 81).

There was a case in Aragon in 1626 in which two elderly women confessed to witchcraft and having had sex with the Devil, for which they were jailed as prostitutes. In Arras in 1460, several witches were accused of having allowed the Devil to have anal intercourse with them (Goodacre, 2016).

In *Malleus Maleficarum*, a popular sixteenth century book on the subject of witchcraft, witches are understood to 'voluntarily prostitute themselves to Incubus devils' (Kramer & Sprenger, 1971, Part II, Question 2, Ch. 1). The French judge Pierre de Lancre (1553-1631) reported in 1612, based on the many cases of witchcraft over which he had presided, that up to 14,000 witches (both female and male) might meet at a night-time Sabbath and dance together, naked. They would engage in a parody of the mass, work on evil plots, have sex (including anal sex) with Satan (who would appear in the form of a man-goat), and enjoy a diabolical orgy with each other (Klaits, 1985, p. 53). In 1680, Temperance Floyd, one of the 'Bideford Witches', confessed that the Devil appeared in her bedroom and sucked her nipples until she was extremely sexually aroused, after which they had sex for nine consecutive nights (Millar, 2017, p.138). Another of the Bideford witches, Mary Trembles, confessed that the Devil 'sucked her secret parts, and that his sucking was so hard which caused her to cry out for the pain thereof' (Millar, 2017, p. 139). An English pamphlet from 1705 describes how witches confessed that the Devil appeared to them in the form of a 'black man' and that they then endured extremely unpleasant and painful sex with him (Millar, 2017, p. 139).

Why would these females, accused of witchcraft, make such seemingly bizarre confessions? One interpretation is that the authorities firmly believed that witches copulated with devils and, consequently, the unfortunate women were manipulated into making such confessions. But this begs the question of where the idea that witches had sex with devils could possibly have come from. It may begin to make sense, however, if the historical sources are examined through the lens of evolutionary psychology and, in particular, through a theory presented by two evolutionary psychologists, Rachel Grant and Tamara Montrose (2018), on the origins of the witch craze. In effect, Grant and Montrose argue that 'witches' were persecuted because they presented a challenge to the religiously up-held patriarchal system, with 'patriarchy' being defined as '... the control by males of female sexuality in the form of a system of implicit and explicit rules of conduct, of power structures, and of belief systems that support male control over women's reproduction' (Grant & Montrose, 2018, p. 388). Witches were, in that very narrow sense (as will be explicated below) proto-feminists and, often, they were 'socially dominant' females, meaning they were aggressive and assertive.

Having demonstrated their case, we will then present evidence that precisely such females are prone, in comparison to females who are less socially dominant

and less inclined to perceive themselves as feminists,¹ to having extremely powerful sexual fantasies, including fantasies of being ravished by highly dominant males and even raped by them. This may seem counter-intuitive but we will demonstrate that it, in fact, makes a great deal of sense in evolutionary terms. We will argue that this propensity potentially makes sense of the Devil-copulation confessions of many Early Modern witches. They may have had intense and strongly taboo sexual fantasies which they interpreted as being about the Devil. Females who were submissive to the patriarchy, and thus not likely to be accused of witchcraft, did not have such fantasies to any significant extent because they were less socio-sexual, as will be demonstrated in more detail below.

The relationship between witchcraft and patriarchy

Grant and Montrose (2018), before turning to witchcraft, present a novel theory for the evolution of patriarchy. In essence, they argue that females are selected to be attracted to high status males, because they and their offspring are more likely to survive if the male invests resources in them. Once the male invests resources in the female and his supposed offspring, he will suffer from 'paternity anxiety' because a male can never be entirely certain that he has not been cuckolded. From an evolutionary perspective, he would be wasting his energy if he was investing in an unfaithful wife and another man's children because this would not help to propagate his genes. However, this paternity anxiety would be reduced in a system of patriarchy in which females (and female sexuality) were strongly controlled by males, such that the males could be certain that they had not been cuckolded.

Thus, argue Grant and Montrose, patriarchy can be regarded as a consequence of the female demand for investment in return for exclusive sexual intercourse. Once this system developed — manifestations of which included chaperoning, veiling, foot-binding (so that women could not be independent) and genital mutilation (so they could not enjoy sexual intercourse) — then females who would not conform would be unlikely to attain high-status husbands, with socioeconomic status predicting completed fertility in most pre-industrial societies (Dutton & Woodley of Menie, 2018, Ch. 3). Consequently, argue Grant and Montrose, considering the relatively high heritability of psychological traits of around 0.5 (Nettle, 2007), females who were disinclined to conform to patriarchal norms would be increasingly removed from the gene pool, though they might still manifest each generation through mutation, unlikely gene combinations, and/or

¹ We define a 'feminist' in the conventional fashion as being one who believes in the social, political and economic equality of the sexes. We appreciate that there is much debate over precisely what constitutes 'feminism' (see McAfee, 2018).

environmental factors.² Grant and Montrose provide evidence that, in pre-industrial societies, it is often females themselves who rigorously enforce and police patriarchal norms.

There is certainly a case for arguing that those accused of witchcraft subverted these patriarchal norms. Grant and Montrose (2018, p. 396) explain:

‘One historical example of the consequences of resistance to patriarchy is the witch hunts which took place between the 11th and 17th centuries in Europe. Women who resisted patriarchal norms (marriage and child-bearing) were viewed with extreme suspicion, tortured to extract confession and usually killed (. . .). Witch hunting targeted primarily single women (. . .). Women could also be branded as witches and killed as scapegoats for misfortune occurring in communities or for the “crime” of being sexually abused and made pregnant outside marriage (. . .). The persecution of females was legitimized by both the Church and the state and it is thought to be an example of sexual and social control of women by inducing fear of torture, imprisonment and death.’

With regard to witchcraft allegations being levelled against females who had become pregnant out of wedlock, in witch trials in Essex in southeast England in 1582 and in 1589, the fact of having an illegitimate child was used as evidence against the accused. This was because popular superstition held that witches had an ‘excess of passion’ which made them commit ‘sexually deviant acts’ (Findlay, 1994, p. 52). It could also be argued, though in some cases their predicament would have been unavoidable, that such women may have broken the patriarchal norms by being un-chaperoned in the presence of a male who was neither their husband nor their relative.

² It is worth noting that in some parts of Europe, such as Carinthia or Finland, the majority of those convicted of witchcraft were actually male (Goodacre, 2016; Hester, 1998, p. 288). These were often very poor men, such as beggars, or men who were anti-social and widely reviled (Goodacre, 2016). Thus, one possible interpretation is that witchcraft was an acceptable means of shunning and purging those at the very bottom of society. This would prevent them from being a drain on the community and, in that falling into penury is associated with anti-social personality traits (see Nettle, 2007), it would stop them undermining societal cohesion through negative social epistasis (see Woodley of Menie et al., 2017). Accusing anti-social men of witchcraft would work in the same way. In the case of females, the focus would be on the very specific societal damage of undermining the patriarchy. That the witchcraft ‘craze’ manifested when it did, in the seventeenth century, is likely a result of previous intense selection for religiousness (see Dutton & Madison, 2018), combined with the extreme cold of the period, leading to greater mortality salience, greater religiosity (as this is elevated by mortality salience), and greater levels of inter-group conflict (see Norenzayan & Shariff, 2008; Woodley & Figueredo, 2014).

It might be averred that the court records should not be used as evidence because they are biased in favor of ensuring that women are found guilty of witchcraft and, also, that all of the allegations are concocted or extracted under torture. But this is simply inaccurate. In general, courts acquitted people who were put on trial for witchcraft. For example, in the assizes held in England's home circuit between 1560 and 1600, only 23% of those tried for witchcraft were found guilty. Even in the following century, during the 'witch craze,' more than half of English witchcraft trials culminated in acquittal (Dolan, 2013, p. 265, note 26). The use of torture, though not uncommon on the Continent, was extremely rare in English witchcraft cases. It has been proposed that this explains why the more bizarre confessions by witches – such as flying through the night to gather and lick Satan's anus – are not found in English cases. The use of sleep deprivation on English witches was 'exceptional,' limited to the case of the corrupt 'Witch-Finder General' Matthew Hopkins (c.1620-1647) during the heights of the witch craze (Geis & Bunn, 1997, p. 53). English witches, therefore, confessed to forms of sexual congress with Satan without torture and as part of a legal system which was skeptical of witchcraft and tended to acquit defendants of witchcraft.

But returning to the association between witchcraft allegations and non-patriarchal females, prostitutes — often financially independent females — were frequent targets for witchcraft allegations. There is evidence from early seventeenth century German records that two women who were found guilty of witchcraft in their sixties had been prostitutes when they were younger (Durrant, 2007, p. 174), meaning that having been a financially independent female led to witchcraft allegations. And this was far from the only example of crossover between prostitution and witchcraft. In 1637, in Venice, widow Marietta Battaglia (b. 1599) worked both as a prostitute and as a witch, casting 'love spells' on men in return for money. She was tried for witchcraft in 1637, in 1645 and in 1649, and on the final occasion she was sentenced to 'jail and perpetual banishment' (Scully, 1995, p. 859). Interestingly, it has been found that females who are prepared to have sex without commitment tend to be relatively high in Dark Triad traits such as psychopathy (Fernandez del Rio et al., 2019). Female sex workers have been found to score lower in the personality traits of Agreeableness and Conscientiousness than female controls (Cabrera, 2020). In that males score lower than females on these traits (see Nettle, 2007), prostitutes are, thus, more psychologically masculinized and so less submissive to patriarchy than the average female.

Witches also tended to be old and single. Approximately 85% of people convicted of witchcraft in England between 1566 and 1666 were women over the age of 50. Roughly 40% of this subset were widows and the rest never married at all (Pickering, 1998). No more than 20% of people were unmarried in their

forties at the end of the seventeenth century and at the beginning of the century it was fewer than 10% (Volk & Atkinson, 2008), so singles were over-represented. In many regions over half of convicted witches had never been married (Levack, 2016). These women could be regarded as implicitly undermining the 'patriarchy' simply due to their survival as single women who were not under the control of males. In other words, they are not creating paternity anxiety but their survival as independent females might induce others to question the need for patriarchal controls and thus obedience to the system in general.

Moreover, in that females would have evolved to a system of patriarchy in which father or husband tells them what to do, it has been proposed that, in its absence, they will behave in ways that are socially problematic, so damaging the good of the group (Apostolou, 2014). Consistent with this argument, in some cultures, such as India, widows were immolated upon their husbands' deaths, such an apparent problem were they (Narasimhan, 1992). Of course, it may be argued that widows were a financial burden on the family, but this begs the question of why they were not permitted to simply work, as widows did in many other cultures.

There is also indirect evidence, beyond the association between witchcraft and prostitution, that such females would have been, in certain respects, masculinized, in the sense that they were displaying more stereotypically 'male' behavior, including aggression, low impulse control, and low empathy. It has been consistently shown that these traits are more pronounced in males than in females (see Soto et al., 2011). Most obviously, witches would curse people who, believing in the power of the witch's curse, could become seriously ill and even die as a consequence, via the nocebo effect (the opposite of the placebo effect). According to American literary scholar Katy Stravreva (2015) these kinds of witch's curses 'hurled the enemy's body to the ground, racked it, burned or froze it, caused suffocation or bloating, crippled the legs and the arms' because people believed in the power of the witch's curse. Such women, argues Stravreva, were often physically violent as well and it was these kinds of women who would often subsequently be accused of witchcraft. In the 1640s, in Kent, in southern England, for example, an old woman called Joan Cariden was accused of witchcraft. It was written of her in 1635 that she: 'doth wraile against her neighbours and saith they shall never prosper, Because she hath curst them' (Gaskill, 2001, p. 267).

In addition, according to historians' summaries of the available historical sources, women who were targeted tended to be physically unattractive: 'Anyone with a squint, with eyebrows that joined in the middle, or with a generally unattractive physical appearance' (Pickering, 1998). As a rule, markers of high testosterone — the male sex hormone — are found unattractive in females (Little

et al., 2007, 2010). This same hormone is associated with aggressive behavior, social dominance, and other stereotypically male traits. Thus, the evidence that 'witches' were in general physically unattractive would be congruous with the stereotypes that exist with regard to their modal personalities. However, what we can say with more certainty is that those accused of witchcraft were, as a rule, the kind of females who were relatively non-submissive to the patriarchal norms of the period, whether because they were socially dominant and independent females or whether because they were sociosexual and were prepared to act upon their sexual desires.

Objections to Grant and Montrose's witchcraft model

It might be countered that this theory turns 'patriarchy' into an enormous conspiracy theory, in which females are suppressed for the sake of it, and that there is no evolutionary logic to this. In response, it can be argued that patriarchy is favored because it promotes group cohesion, with more cohesive and internally cooperative groups tending to survive. There is abundant evidence that ethnic groups are extended genotypes, meaning you can assist copies of your genes in others by favoring kin over non-kin (kin selection), but also by acting altruistically to members of your ethnic group rather than to members of other groups (group selection). This is because people are genetically more similar to those within than to those outside their ethnic group (see Salter, 2006). People would also be likely to marry within their local community because in preindustrial times most people married within a narrow radius of their home village, therefore people living in the same or neighboring communities were closer genetically than the more distant members of one's ethnic group.

The only arguments of which we are aware against this group selection model commit the essentialist fallacy of averring that there must be some concrete distinction between 'kin' and 'group', such that kin selection is possible but group selection is impossible. This objection ignores the fluid nature of the boundaries between nuclear family, extended kin group, and the community in which the kin group exists. It has also been averred that early human groups were too small and sparse for group selection, but this has been comprehensively refuted by abundant evidence of genocide among such groups, with genocide levels increasing with adoption of agriculture (see Kiernan, 2007). So, as far as we can see, those who object to the concept of group-selection simply harbor some kind of personal prejudice against it for reasons that are their own. Patriarchy would reduce inter-male conflict, leading to cooperation within the group and high 'positive ethnocentrism'. Computer models show that groups that are high in positive ethnocentrism are more likely to dominate and displace other groups (Hammond & Axelrod, 2006). Accordingly, the group that persecuted

witches would have elevated its evolutionary fitness by promoting patriarchy and thus ethnocentrism. Clergy were historically celibate (in theory), and this could in part be explained by group selection. Such males would invest all of their energy inspiring the society to be highly religious, and specifically adherent to a patriarchal religion, thus elevating the group's chances in the battle of group selection and also indirectly helping to pass on their own genes (see Dutton, 2018).

A second objection to Grant and Montrose's model is that a simpler explanation for witch persecution is that witches were unpleasant old women who antagonized their neighbors, leading to their neighbors wanting to kill them. Certainly, their unpleasantness may have been a part of why they were targeted, but the evolutionary logic to this would be that they undermined in-group cooperation. But, anyway, such a proposal begs the question of why it was women who were targeted, when there were surely unpleasant old men. It also makes one wonder why witchcraft was tolerated for long periods of English history, for example, with the witch craze only manifesting in earnest during the seventeenth century.

It has been demonstrated that there was selection for religiousness over time in England between the Middle Ages and the sixteenth century and thus selection for patriarchy. In modern Western countries, the heritability of religiousness is at least 0.4 and it is associated with genetic mental and physical health, a group-oriented worldview including pro-social personality traits, and with fertility, meaning it is selected for, especially under harsh Darwinian conditions (Dutton & Madison, 2018). Even though the extremely religious in Medieval England were also (in theory) celibate, Dutton and Madison (2018) have shown that religiousness increased across time, as evidenced in a higher and higher percentage of the population being so religious that they joined monasteries and nunneries. They also used the Breeder's Equation to show that the Medieval system of executing almost all criminals, who were overwhelmingly young males, acted to increase religiousness across time. As Grant and Montrose (2018) note, this religiousness was tightly linked to patriarchy, which was upheld as God's will. Accordingly, their model is more parsimonious than the alternative. It explains more and is less question-begging.

A third argument is that witchcraft—with its belief in Satanic sex—is a highly convoluted way of repressing females, and there are surely simpler means (Clark, 1999). It can be countered that many forms of patriarchal repression might be regarded as extremely elaborate compared to others, but are still accepted as such. There are surely easier ways to repress women than foot-binding or circumcision. In an evolutionary power battle between males (and females) imposing patriarchy and other females resisting can be expected to lead to a kind

of arms race in which methods become ever-more elaborate and complicated. Moreover, as we will demonstrate, there is good reason to believe that males did not simply concoct the basic components of 'witchcraft,' so the entire argument is based on a highly questionable premise.

The evolutionary origin of rape fantasies: A life history perspective

So, now we have established, albeit cautiously, the psychological type that was likely to be accused of witchcraft, we can better understand Early Modern witches by exploring modern sociosexuality research on these psychological types. This brings us onto the subject of rape fantasies.

It has been found that many men are more aroused by violent or sadomasochistic sexual encounters than by normal sexual encounters. It has been proposed that this is because, in pre-history, males who raped passed on more of their genes. Rape is a fusion of sex and violence and, thus, it would make sense for men to be acutely aroused by sexual violence (Thornhill & Palmer 2001, p. 76). In line with this, some studies indicate that in sado-masochistic sexual relationships, males are more likely to be aroused by taking the sadistic or dominant role while females are more aroused by taking the submissive or masochistic role (see De Neef et al., 2019).³ In general, however, women are much more likely than men to be aroused by the idea of being sexually dominated, rather than by the idea of sexually dominating others (Bivona et al., 2012). Though both males and females have rape fantasies, males are likely to fantasize about raping a desirable female, while females are more likely to fantasize about being raped by a dominant man (Hawley & Hensley, 2009).

³ This, in fact, is not inconsistent with anecdotal evidence of men liking dominatrix prostitutes. We have explored the nature of Life History Strategy (LHS) within the text. Fast LHS men, who are more inclined to sexual violence and rape, tend to be attracted to fast LHS (similarly sociosexual) women (Steiner, 1980), presumably because such traits are significantly heritable and offspring are more likely to survive if correctly adapted to the ecology, and also because people with the same life history speed will be more compatible in terms of mutual desires. These women are more dominant and therefore be likely harder to rape. Difficulty in raping her, by the fact that she defends herself, evidences that she would be a fast life history strategist and, thus, ironically, such a male might have *both* sadistic *and* masochistic fantasies; if the female is able and willing to hurt him then she is definitively the fast LH type that he finds attractive. So, having such fantasies is a by-product of finding dominant women attractive, just as women who will behave in this way surely are dominant. Consistent with this, it has been found that more men than women are aroused by both sadism and masochism, rather than just one or the other (Donnelly & Fraser, 1998)

But despite this apparently symmetrical arrangement between the sexes with regards to preferences for, and identification with, dominant and submissive roles, it has nevertheless been revealed that in internet pornography and novel erotica, enactments or depictions of the most extreme forms of sexually explicit 'BDSM' (bondage, dominance, sado-masochism) material (violent, abusive and non-consensual sexual acts against women) are, by a large majority, consumed by women (Ogas & Gaddam 2011, ch. 6; Stephens-Davidowitz 2017, ch. 4). Bivona et al. (2012) find evidence that about 2 in 3 female undergraduates report having had sexual fantasies where they are raped, according to the legal definition of rape. Bivona & Critelli (2009) found these self-reported rape fantasies fell along a positively skewed distribution of erotic to aversive in nature. They posit and test numerous proximate explanations as to why women would have these sexual fantasies, including:

1. *Sexual Blame Avoidance Theory*: a desire to be able to blame and charge the perpetrator for any sex act taking place and preserve and project an image of the self as still pure, innocent and deserving of compassion or compensation,
2. *Sexual Desirability Theory*: a desire to experience oneself as a powerful, overwhelming object of desire,
3. *Openness to Sexual Experience Theory*: a general openness to, and desire for, diverse sexual experiences,
4. *Sympathetic Action Theory*: a proclivity to be additionally aroused by sympathetic stimulation; from physically violent and frightening situations,
5. *Ovulation Theory*: a desire to mate with extremely dominant and aggressive males specifically at the time of ovulation.

A key limitation of the theoretical framework used by Bivona et al. is the lack of provision of any explanation as to why the reported frequency of rape-fantasies varies so extremely; where, among a randomly selected group of six taken from their female undergraduate population, we would expect two to report never having rape fantasies, and one to report having a rape fantasy at least once a week. Bivona et al. found no support for 1) Sexual Blame Avoidance Theory, but did find support for 2) Sexual Desirability and 3) Openness to Sexual Experience Theory. We would argue that a Life History perspective (see below) from the field of evolutionary biology is critical to understanding this variation. Furthermore, though Bivona et al. could not test 4) Sympathetic Action Theory and 5) Ovulation Theory, we shall provide arguments and extraneous literature that link the same to faster life history, where 'faster' life history connotes an individual's, or species' relatively faster rate of maturation and reproduction. It has already been

advanced that Life History Theory is of crucial import in the evolutionary logic underlying competitiveness and sexuality in humans (Geary, 2002), through the varying personality traits which the same gives rise to (Figueredo et al., 2005). There is research that connects life history strategy (LHS) with predisposition towards sexual coercion (Gladden et al., 2008).

Life history is intimately tied up with r/K selection theory, an ecological theory postulating that throughout nature there is a trade-off between the high mating effort of fast LHS and the high parental effort of slow LHS, physiologically mediated in part by testosterone (McGlothlin, 2007). Fast LH strategists are evolved to a plentiful but unstable ecology and, thus, invest most of their energy in copulation, or reproduction, to pass on their genes quickly. As the ecology reaches its carrying capacity, there is more intra-species competition to become increasingly adapted to the specific environment, especially if it is stable and harsh. The result is a move to a slower LHS in which more energy is invested in the nurture of (fewer) offspring to ensure that they can compete successfully. This causes a rise in various interrelated traits, among them elevated desire to nurture, and results in closer bonding and the development of larger and more strongly bonded social groups.

In sexual selection, fast LHS females will select for males purely on the basis of their genetics, preferring those heritable traits that make males adapted to winning the battle of sexual competition. In humans, slow LHS females participate in a socio-economic paradigm of sexual selection, where monogamous marriages are arranged through familial networks (Apostolou, 2007). In a suitable ecology it is adaptive for a slow LHS woman to long-term pair-bond with a man who will invest resources and care in herself and her offspring, for without that additional support, she risks the premature death of all her offspring. This is not so in the case of fast LHS females and their ecology (Rushton, 1995). Thus, a slow LHS may trade male traits such as dominance and physical prowess for 'caring,' a desire to invest and be a loving father to her children. The theories of Bivona and Critelli (2009) would fit into life history theory as follows:

1. *Sexual Blame Avoidance Theory* presumes sexual guilt on the part of the rape fantasist that wants to be displaced onto a perpetrator in order to preserve a self-image of innocence and victimhood. This implies a social environment in which innocence has value and victimhood earns compensatory benefits from altruistic sympathizers. Such a social environment is only possible within the cooperative, socially-driven slow LHS context. Bivona et al. (2012) found no support for Sexual Blame Avoidance Theory, and Shulman and Home (2010) found levels of sexual guilt *negatively* correlated with the chance of having a rape fantasy, and very strongly negatively correlated with levels of erotophilia. Erotophilia was shown to

be the best predictor of a female having a rape fantasy in the Shulman and Horne study.

2. & 3. *Sexual Desirability Theory* and *Openness to Sexual Experience Theory* cannot be indicative of the long-term pair-bonding paradigm of slow LHS, except perhaps in the case of secretive adultery on the part of the female, but this would carry the very steep risk of losing both the partner's investment and the reputation of her kin, not to mention retribution. Women may in *some* faster LHS contexts, compete with other women to gain priority access to attention and short-term relationships with males for social power and economic resources on a 'beauty pageant' basis, where females display their superior genetic fitness by growing large secondary sexual characteristics and flaunting themselves sexually for male appraisal. However a context in which it is both possible and adaptive to short-term bond with males that possess social influence and economic means, wouldn't be the maximally fast LHS ecology endpoint where neither society nor scarcity exist.

If a fast LHS female does desire to be competitively sexually-attractive, the specter of a male, especially an attractive and wealthy influential male, who goes to an extreme effort and takes an extreme risk in order to copulate with her, specifically her, then this would be a gratifying confirmation of her attractiveness to males from whom she stands to gain. Bivona et al. (2012) examined this theory and found moderate support for sexual desirability, which made 'significant contributions... when the effects of openness theory predictor were held constant.' It was noted also in the study that fantasies of performing as a stripper 'showed consistent positive relationships with frequency of rape fantasies, but fantasies of being desired by one's partner did not.'

A limitation on the fast LHS context implied by *Sexual Desirability Theory* and *Openness to Sexual Experience Theory* is that neither can explain those more uncommon rape fantasies that fall towards the aversive end of Bivona's erotic-aversive spectrum. This is because, if fast LHS females aim to benefit from any 'shallow' relationships they form with their male adversary, then coercive sexual fantasies that express not merely dominance or run-away desire on the part of the male, but also complete indifference if not outright animosity, would not fit. *Sexual Desirability Theory* would, by definition, be an explanation of a rape fantasy that was inherently more erotic than adverse.

3. *Sympathetic Action Theory* and *Ovulation Theory*. *Openness to Sexual Experience Theory* could potentially combine the erotic and the adverse, as it meets with *Sympathetic Action Theory*: the physiological phenomenon of actually being aroused by kinetically violent and frightening events. There is some evidence that this indeed exists in females (Meston, 2000). Such an extraordinary

and paradoxical mode of sexuality could only evolve in an environment where it was adaptive to be impregnated with the genes of the most physically dominant and aggressive man around. This is the implicit basis of the Ovulation Theory, and it makes sense only within the confines of a near *maximally* fast LHS context where survival of a male's genes is predicated almost entirely upon winning in a murderously violent arena of sexual competition. In such an extreme ecology, women do not gain much by being sexually attractive to men, but, as we will discuss, do enjoy a fitness benefit themselves from 'masculinizing' in order to attain an ideal amount of physical prowess to fight off rapists whilst not physiologically sacrificing their fecundity; to raise their reproductive 'quality' without sacrificing their reproductive 'quantity.'

Sexually antagonistic co-evolution is a paradoxical but well studied subject in the field of evolutionary biology. It is predicated on the principle that in order for a female to maximize her fitness, she must enjoy maximum agency over her own reproductive physiology, yet at the same time beget male descendants who are maximally efficient at hijacking the reproductive physiology of other females (Holland & Rice, 1998). This is a difficult recursive equation of sexual selection and it can split in many different directions, depending in part on how large a part sexual selection plays in that species' overall evolution in the first. Where the force of sexual selection has been great, sexually antagonistic co-evolution has given rise to species for which normal *necessary* reproductive behavior is violent in character, whilst maintaining the more familiar characteristics of attraction and seduction. Yet in applying sexually antagonistic co-evolutionary theory to humans, it cannot be ascertained for certain whether females principally select for brutal male genes in order to maximize their sons' control over females, or to do battle with other males in fighting over females. Both forms of antagonism can lead to their own peculiar run-away effects in the evolution of physiognomy and behavior. What we do know from history and anthropology is that quite a lot of both forms of antagonism occurred in the past, concomitantly (Barash, 2016; Betzig, 1986).

To examine the degree to which female sexuality has been impacted by these violent forces of sexual selection in our evolutionary past, a brief review of what is known about female sexuality in this regard is worth reiterating. In our species, females systematically regulate their readiness and willingness to receive and procreate across three time frames:

- 1) most broadly: the time between puberty and menopause,
- 2) more narrowly: the few days of ovulation in the menstrual cycle, the proximity of which greatly determines the chance of a male successfully fertilizing an egg,

3) acutely: the time during sex itself wherein a female may or may not experience orgasm to promote uptake of sperm into the uterus (Baker & Bellis, 1993, 1995; Fox & Fox, 1971; King et al., 2016).

All three of these 'fertility' time windows coincide with a significant increase in sexual preference by women for what counts as 'dominant masculinized appearance and behavior':

- 1) between puberty and menopause (Little et al., 2010),
- 2) during ovulation (Durante et al., 2012),
- 3) and for orgasm (Puts et al., 2012).

And throughout these peculiar time scales, the essential principle remains that women's general preference for male-typical traits increases in precise proportion to the degree to which they are acclimatized to a fast life history environment (Little et al. 2007). In keeping with the rest of nature, females measured with higher salivary testosterone show greater sexual preference for men with masculine features (Welling et al., 2007).

It should be noted however that more recent research casts doubt as to whether the ovulation effect can be reliably measured in the general population (Jones et al., 2019). We would posit, following the evolutionary framework we have outlined, that this is because the genetic basis for the ovulation effect can only exist within a narrow, peculiarly fast-LHS subpopulation, as an adaptive trait for a violent fast-LHS ecology.

Orgasm itself is worth closer examination in the context of rape, being a fitness-critical reaction that may or may not occur during rape. Female orgasm has a reputation for being slower and more difficult to induce in women during sexual intercourse, as it is easy and quick to induce in men. Salisbury and Fisher (2014) note failure on the part of the male to induce orgasm in the female is a common, though by no means universal concern in heterosexual interactions. Though masculinized, dominant appearance and behavior in sex can help towards female orgasm (Puts et al., 2012), the literature again paints a complex picture that you would expect of a species with great diversity in LHS. Levin and Van Berlo (2004) found that among their sample of female victims of modern criminal rape, self-reports of having orgasmed during the event were only about 5%, which we might contrast with the women in the Shirazi et al. (2018) internet survey reported orgasming during intercourse (unassisted by additional stimulation) at 21-30% rates. However, the 5% number is assumed to be a considerable underestimate due to shame on the part of rape victims. If we directly examine rates of pregnancy resulting from rape, Gottschall and Gottschall (2003) found: "per-incident rape-pregnancy rates exceed per-incident consensual

pregnancy rates by a sizable margin, even before adjusting for the use of relevant forms of birth control.”

Adapting to rape in a fast life history context and the feminist stereotype

Rape fantasies, especially in their most violent and adverse form, are indicative of a fast life history psychological profile, and rape would be a normal occurrence in a fast-LHS environment to which such people would be adapted. In their daily lives, fantasists would have to face the prospect of either fighting off aggressive sexual advances or passively submitting to them. A naive point of view would be to presume that rape-fantasists would, by definition, prefer the latter option. Meeting aggressive male sexual advances with passivity or enthusiasm might indeed save the energy otherwise expended in constant vigilance and self-defense, but calories are not a scarce resource in a fast-LHS environment, most of the time. Against the weak advantage of saving calories, invariably submitting to rape would expose women to sexually transmitted diseases, and more critically for our study, it would impede their ability to sexually select for the sperm of the fittest male. The evolutionary implications here are to her descendants who would be outcompeted by the superior genes of descendants of other women who did manage to sexually select more acutely, by generally resisting and frustrating male sexual assailants.

In principle therefore, we would expect fast life-history women to aim at resisting rape to the extent that only the fittest male assailants can impregnate them. This would require quite a degree of physical prowess, and perhaps the employment of other tactics, like participation in female-only ‘Amazonian-like’ groups, in which the women protected each other and alloparented each other’s offspring (Mesnick, 1997; Smuts & Smuts, 1993). This dynamic can be compared to a more elementary form of sexual selection: sperm selection. The female immune system fights off millions of spermatozoa such that only the fittest sperm fertilizes the egg. But even this sperm is fought off until the very final moment (Wigby et al., 2019). The individual or collective resistance mounted against the sexual assaults of rapist men would be acting as a test of the male assailant’s fitness.

From this perspective, we might conclude that rape fantasies are indeed a flat contradiction of interests for a fast life history strategist, who apparently has a strong evolutionary incentive to resist rape as far as possible. However, let us consider what would happen if a given male would decisively gain the upper hand in a sexual assault: not only would further resistance be futile and risk further harm, but it might, paradoxical as it may sound, actually be just at that point of transition to a grim foregone conclusion, that it becomes adaptive to submissively succumb to the instance of rape, especially in a context where thus far, the female

has fought off previous male assailants to the extent of remaining unimpregnated for a maladaptively long period of time — for this would indicate that the male assailant happens to be the fittest male around; the male that the female would otherwise choose to mate with.

As was touched on before in abstract terms, regarding sexually antagonistic co-evolution, this pattern of behavior has evolved in quite a number of other species. These other species also put up manifold kinds of filtrating-boundaries to copulation in order to be more selective and discriminatory of males, in an especially violent mating paradigm (Clutton-Brock & Parker, 1995, Gowaty & Buschhaus, 1998).

It is this subtle conflict between the will to repel the member, from the vaginal tract, of those males judged as weaker, and thus of inferior genetic quality, for failing to subject the woman's own person by force and violence, and the will to be penetrated by the member of a male who is judged as stronger, and thus of superior genetic quality, for succeeding at subjecting the woman's own person by force and violence, that forms the evolutionary logic underlying the rape fantasy, and the overall seemingly contradictory character of the female fast life history strategist's sexuality.

With these principles in mind, we might try to uncover the practical logic behind exactly how a daytime rape fantasy is supposed to operate — and one of the interesting predictions that comes out of this evolutionary theory is that we should expect rape fantasies to coincide with fear and paranoia of rape; even 'rape nightmares' if you will. Perhaps it makes evolutionary sense for fast life history women to regularly and interiorly rehearse hypothetical events of rape or attempted sexual assault, on the supposition of the likelihood of it happening, and the need therein to respond, with optimum adaptiveness, to the varied possible outcomes, like a mental fire-drill. Such an unconscious tendency might perhaps manifest itself as far as a 'morbid fascination' with rape, or perhaps an 'eroticized animosity' against the most physically intimidating male or males around, who would make good candidates of being the most dominant and physically fittest to procreate with — an instinctual drive to seek such males out in an attempt to preempt a hypothetical sexual assault, and perhaps even in the process cause multiple males to fight among each other for sexual conquest, as an additional layer of selectivity. All this would be entirely in keeping with standard mating season behavior observed in many other animal species.

Moving back to our discussion on witches, it is meant for the reader to notice a connection between the violent nature of fast LHS female sexuality, and the new cultural reality of modern and radical feminism together with the commonly held stereotypes about feminists and their preoccupations (Paglia, 2018). The Feminist sex wars of the 1980s, in particular between the 'sex-positive' and the

'sex-negative' feminists, seem to offer particularly interesting artefacts of fast LHS sexual anthropology (e.g. Dworkin, 1987). Congruent with this hypothetical connection, previous research has found that feminists are physiologically and psychologically of a fast LHS makeup, as evidenced in their markers of masculinity (Madison et al., 2014) and their observed social dominance, also consistent with a fast LHS (Zucker & Bay-Cheng, 2010).

It might be argued that, stereotypically, feminists are picky about who they will have sex with, turning to lesbianism if they cannot find a desirable male, but that this pickiness is a slow LHS trait. However, it can be countered that lesbians tend to be masculinized females and that the inclination to turn to lesbianism is a sign of a fast LHS. Such a female is evolved to a polygamous ecology (meaning little investment in wife and offspring) in which the male will cast off the older females, who will survive with their offspring by co-parenting in a strongly bonded relationship (see Jeffery et al., 2019). Some feminists might supposedly desire a bonded relationship with a specific kind of male, high status and tough, able to dominate in an unstable ecology. Unable in practice to obtain him, homosexual tendencies might exist as a backup strategy, as predicted by a fast LHS context. A slow LHS female, however, would lack such tendencies and would anyway be attracted not only to a male of status and physical prowess, but also one who would be a caring husband and father. Indeed, she might even further discount 'status' for 'caring'. Unable to obtain a desirable male, we would expect her, beyond exercising patience — being evolved to an ecology of large, bonded groups — to pursue kin selection or even wider spheres of inclusive fitness, that is group-selection strategies.

Witches, life history strategy, and rape fantasies

When we look at the women who were accused of witchcraft, one thing we observe is that they were 'sociosexual'. They were sexually promiscuous, refusing to conform to the patriarchal expectations of chaste female behavior, according to court records. It has been found that evidence of sociosexuality predicts having rape and other intense sexual fantasies in females, where the female is so alluring that the males cannot keep their hands off her (Bivona et al., 2012). In addition, the higher females score in so-called erotophilia and the lower they score in 'sex guilt' (feelings of often religiously-induced guilt about sex), the more likely they are to have rape fantasies (Shulman & Home, 2006).

We have also noted that women targeted with witchcraft allegations would tend to be aggressive and uncooperative, traits that are summarized as 'social dominance', in contrast to socially submissive people who are pro-social and who attempt to get along with everybody. Social submission was expected of women, meaning that aggressive, obnoxious women were implicitly challenging the

patriarchal system. It has been shown that the more socially dominant a woman is, the more likely she is to fantasize about being raped. It has been suggested that this is adaptive because it allows dominant females to be attracted to dominant males who would, it might be argued, be evolved to the same unstable ecology (Hawley & Hensley, 2009).

In addition, Feminist identification is related to having intense rape fantasies. Obviously, Early Modern witches would not have conceived of 'Feminism', but there is evidence that they were 'socially dominant' and modern day 'Feminists' score higher on social dominance than non-Feminists (Zucker & Bay-Cheng, 2010) as already noted. And, as already observed, there is at least a case for arguing that many Early Modern witches were, in a sense, proto-Feminists. As with self-identified Feminists, they challenged and otherwise refused to conform to the patriarchal system, meaning that it is probable that they were, in key respects, psychologically similar to modern-day Feminists, with high social dominance being a potential example of this. Though it may be commonly presupposed, by way of general stress and animosity taken towards men, that feminists are the least likely to have rape fantasies, interpret a mental fantasy of a rape scenario as a 'fantasy,' or even to admit honestly to having one, nevertheless it has in fact been shown that there is a weak but still statistically significant *positive* correlation of .12 between strength of 'Feminist' identification and having fantasies about being raped (Shulman & Home, 2006).

Discussion

Based on the foregoing, we would submit that there is a persuasive case for arguing that widespread confessions to sex with Satan that are found in Early Modern witch trials are not simply cases of tortured, brow-beaten and exhausted women saying what they are told to or what they think their interrogators want to hear. Indeed, it should be noted that there were many cases of accused witches who genuinely believed that they were witches and who confessed to witchcraft unprompted. For example, in March 1612, a young woman called Alison Device (c.1593-1612), who believed herself to be a witch, and whose family were known to practice folk magic in return for money, was walking near her home village of Pendle in Lancashire where she passed a peddler, from Halifax in Yorkshire, called John Law. Alison asked Law to sell her some pins, but Law refused. So Device cursed him. Law promptly dropped to the ground, possibly having a stroke. The peddler later accused Device of witchcraft, of which she voluntarily confessed to be guilty. Device was hanged later that year (see Almond, 2017).

Rather, what may have been happening is that women who were high in social dominance and low in patriarchal conformity, and who believed in the reality of witchcraft, had undergone intense sexual fantasies, including rape

fantasies. That they would experience these, and experience them intensely, would be predicted by the psychological type that was prevalent among women accused of witchcraft. It can be proposed that, when accused of witchcraft, they interpreted these experiences as sexual congress with the Devil. Of course, it might be argued that these confessions, and more general confessions of witchcraft, were simply coerced and there is certainly evidence of coercion. However, it is a matter of historical fact that many of these confessions simply were not coerced (see Ginzberg, 2011), so some other explanation is required to make sense of all the available information. It could be argued that the witches were deluded and were manipulated into confessing to a specific narrative, but this raises the question of where the idea of 'night devils' could have come from. The idea of the incubus — a night devil that copulates with females — is extremely ancient, being recorded in ancient Near Eastern texts (see Patai, 1990). This would imply that the incubus is an interpretation, by religious people, of some psychological event.

There is, however, variation in how the relationship with the Devil is described. In her book *Witchcraft, the Devil and Emotions in Early Modern England*, Charlotte-Rose Millar has presented an in-depth discussion of all extant English accounts of witches having had relationships with the Devil and has concluded that 'we are able to suggest that feelings may have been attached to them' (Millar, 2017, p. 135). In 1646, Elizabeth Weed, a widow from Huntingdonshire, explained that she had a devil 'spirit' 'in the likeness of a young man or boy . . . he came to bed with her and had carnal knowledge of her and so did divers times after.' Weed, it seems, desires the Devil and the Devil sexually obliges. So, this is merely sexual fantasy, in which a widow takes pleasure in being an object of desire. However, there are a number of extant testimonies which are clearer 'rape fantasies'. For example, a pamphlet from 1646 tells of a Suffolk spinster, Ellen Greenlief, who was accused of witchcraft. She confessed that 'the Devil had use of her body and used to come to bed with her' (Millar, 2017, p. 136). She is passive in this narrative; and 'use of her body' was a well-known euphemism for 'rape' in the English law courts at the time (Varholý, 2008, p. 49).

Another difference is that the earlier English witchcraft pamphlets do not tend to discuss sexual intercourse between the Devil and the witch, as the later pamphlets do. The earlier pamphlets, prior to 1640, tend to report the witch experiencing cunnilingus and anal-lingus and this often from animal familiars rather than from a familiar who takes a human or semi-human form (Millar, 2017, p. 136). Naturally, we must be cautious in attempting to make sense of historical witchcraft narratives via evolutionary psychology. The narratives can only realistically be assessed in a qualitative fashion, which is obviously an inherent

limitation. However, as already noted, these narratives would make a great deal of sense if the women in question were having intense sexual fantasies, including rape fantasies. At the time, female sexuality was strongly taboo and any kind of sexual longing for someone other than your husband was considered to be extremely deviant and shameful (see Millar, 2017).

Nevertheless, it is clear that many women believed that they were actually witches and they seem to have genuinely believed that they had copulated with Satan. They were living in a society that strongly believed in the existence of the Devil and in the activity of the Devil and his demons in the world. If these women were experiencing rape fantasies and other sexual fantasies, in a society in which such thoughts were considered wicked and taboo, we can begin to understand that such woman might assume that these fantasies were inspired by the Devil or simply involved the Devil. Thus, they might believe themselves to be witches by virtue of having experienced such intense and disturbing erotic fantasies. It is an uncontroversial view among historians that many witches, confessing without torture, genuinely believed that they had made a pact with the Devil, genuinely believed that they had perceived him (such as in an intense dream) and felt genuinely ashamed of what they had done (see Levack, 2016, p. 18). It has been suggested that some of these 'witches' may have experienced intense nightmares and even sleep paralysis (Adler, 2010), but this does not specifically explain the sexual element to their fantasies. Our model feasibly makes sense of where some of the more shocking beliefs held by these women, that they had copulated with the Devil, would come from.

As already noted, alternative models to explain witchcraft-copulation have been presented, but these are not congruous with the available data. For example, historian Walter Stephens (2002) has averred that the idea that witches had sex with devils was created in order to uphold religiosity. According to Stephens, the authorities were not confident in their demonology so they became fixated on demonic copulation as one efficient way of establishing the reality of the spirit realm, a reality that had been destabilized by scholastic philosophers in the thirteenth and fourteenth centuries. However, it has been documented that we were under intense selection for religiousness and people became more religious between the Middle Ages and the seventeenth century (see Dutton & Madison, 2018; Klaitz, 1985). Also, why would devil-copulation, specifically, persuade the populace to be more religious? And most importantly, as already shown, the belief in devil-copulation was of ancient origin and found in different parts of the world (see Patai, 1990). This would be congruous with a psychological explanation rather than seventeenth century religious men fabricating the idea.

Another possibility is that these were not fantasies, but real experiences, with men stalking women and having sex with them and telling them that they were

devils or the women making sense of what had happened as the work of the Devil. Sociosexual women would have been more likely to have received such attention. However, this seems unlikely for a variety of reasons. (1) Rapes occurred and were reported as such during this period, and women would realize that a rape by a real person was taking place. (2) These women would have lived in small villages where everyone knew everyone else, seeing them in church once a week, so would likely know who their rapists were. (3) Many witches were elderly, unattractive spinsters and it seems most improbable that someone would want to stalk and rape them. Similarly, it might be averred that in a very repressive religious environment, persecuting a witch (a lone and unprotected female) was an excuse for particular males to indulge themselves in rape, torture and coercion. Again, this seems highly improbable — as a general explanation — considering that it was unattractive, old women who tended to be accused of witchcraft.

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