

“Sneering Civility”: Female Intrasexual Competition for Mates in Jane Austen’s Novels

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ABSTRACT

Recent developments in evolutionary theory and research strongly suggest that women are highly competitive in vying for access to and retention of high-quality mates. However, since female tactics are often subtle and indirect, they are difficult to study empirically. Popular fiction may provide rich material for developing and testing psychological theories. I examine representations of female intrasexual competition for mates in the novels of Jane Austen. Their enduring and cross-cultural popularity strongly suggests that they capture something important about human nature and human individual variations. Austen’s female characters employ all the competitive strategies identified by modern psychologists but with a significant difference in the tactics of the antagonists and protagonists. Female antagonists often advertise their beauty and social status, use competitor derogation and competitor/mate manipulation. In contrast, female protagonists rely almost exclusively on relatively non-aggressive self-promotion emphasizing traits such as intelligence, honesty and loyalty. Protagonists’ displays of positive traits prove more successful in attracting and retaining high-quality mates than antagonists’ overt competitiveness. Although fictional stories may contain elements of wish-fulfilling fantasy, they also promote attitudes and behaviors that minimize aggression and maximize cooperation and social cohesion.

KEYWORDS

Female Intrasexual Competition, Self-Promotion, Competitor Derogation, Competitor Manipulation, Biocultural Literary Criticism, Jane Austen

INTRODUCTION

Until relatively recently, it was a truth universally acknowledged that men compete but women do not (Symons, 1979). However little the feelings and behaviors of women were studied, this truth was so well fixed in the minds of scientists that for

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decades clear evidence to the contrary simply escaped their notice.¹ Admittedly, women often employ subtle and indirect tactics, which makes female intrasexual competition relatively difficult to observe, measure, and study (Fisher, 2013; Hrdy, 1981). Indeed, it may take one to know one. For while female competition did not earn much notice from male-dominated science until well into the last quarter of the 20th century, it was described in detail by a young woman writing at the beginning of the 19th century: the novelist Jane Austen. Austen had no scientific training and her evidence is, at best, anecdotal. Still, she had acute powers of observation and analysis. Indeed, her interests and methods have been compared with those of Charles Darwin (Graham, 2008). She documented, with astounding insight, how women compete with each other and how such competition is perceived by potential mates.

Although there is still a lot of reluctance among psychologists and literary scholars to engage with each other’s research, there are some in each discipline who argue that bridging the gap between the sciences and the humanities would be beneficial for both sides (Carroll, McAdams, & Wilson, 2016). A rapidly growing body of biocultural literary scholarship demonstrates that closer attention to current knowledge within social and biological sciences can help us understand the workings and impact of fictional texts (see for example Boyd, 2009; Carroll, 2004; Carroll, Gottschall, Johnson, & Kruger, 2012; Clasen, 2017; Gottschall, 2008; Nordlund, 2007; Saunders, 2009). At the same time, some psychologists have noted that fiction is a rich source of information about evolved human behavior, motivations, and emotions (Kruger, Fisher, & Jobling, 2005; Salmon & Symons, 2001). It has even been argued that particularly popular types of fiction may serve as “unobtrusive measures” of various aspects of human psychology (Salmon & Symons, 2001, p. 55).

Jane Austen published six novels: *Sense and Sensibility* (1811), *Pride and Prejudice* (1813), *Mansfield Park* (1814), *Emma* (1815), *Persuasion* (1818), and *Northanger Abbey* (1818).² For the last 200 years, they have been some of the most popular and critically acclaimed stories in English literature (Harman, 2009; C. Johnson, 2012; Mazzeno, 2011). In a 2007 online poll to mark World Book Day, four of them were voted among the top 55 “books you can’t live without”, with *Pride and Prejudice* coming in at number one (Ezard, 2007).³ Austen’s works have been translated into dozens of languages including Chinese, Japanese, Russian, Persian, and Hebrew (Dow, 2012). All of Austen’s novels, as well as some of her minor and unfinished works, have been adapted into film, television, and stage productions too numerous to list. They have also been reinterpreted in various creative ways. For example, Helen Fielding’s best-selling *Bridget Jones’s Diary* (1996) is based on Austen’s *Pride and Prejudice* and the sequel, *Bridget Jones: The Edge of Reason* (1999) on *Persuasion*. Amy Heckerling’s film *Clueless* (1995) transports *Emma* to a Beverly Hills high school; *Metropolitan* (1990), directed by Whit Stillman, reimagines

¹For those not familiar with Austen’s work, I am paraphrasing here the opening of her most famous novel, *Pride and Prejudice*.

²Due to a large number of quotations from the novels, they will be referenced using initials of their titles: SS for *Sense and Sensibility*, PP for *Pride and Prejudice*, MP for *Mansfield Park*, E for *Emma*, P for *Persuasion*, and NA for *Northanger Abbey*.

³*The Bible* was voted number six, and *The Complete Works of Shakespeare* came in at number 14 in the same poll.

Mansfield Park in modern-day Manhattan; and Gurinder Chadha’s *Bride and Prejudice* (2004) is a Bollywood version of *Pride and Prejudice*.

This enduring and cross-cultural popularity strongly suggests that Austen not only understood her own particular time and place, and the idiosyncratic characters she invented, but that she managed to capture something important about human nature. Indeed, since the earliest reviews of her novels, Austen has been praised for her detailed and compelling psychological insight (see Wilkes, 2012). Numerous analyses by biocultural and cognitive literary critics, as well as evolutionary psychologists, demonstrate convincingly that Austen was particularly skilled at representing, and appealing to, human cognition, emotions, and sociality (see for example, Boyd, 1998; Carroll et al., 2012; Chwe, 2013; W. Jones, 2017; Kruger et al., 2014; Lau, 2017; Zunshine, 2006). Because of this, Austen has been called “an intuitive evolutionary psychologist” (Kruger et al., 2014, p. A116). She had an incredible talent for creating a wide range of highly individualized and psychologically compelling characters which turns her writing into a powerful “psychological thought-experiment: a fictive exploration of the weaknesses and strengths inherent in a wide range of personalities” (Carroll et al., 2012, p. 112). Austen was also particularly good at representing social interactions and analyzing social intelligence of her characters (Boyd, 1998; W. Jones, 2017).

Austen writes predominantly about love and marriage and, as Brian Boyd (1998) notes, the power of her stories “depends on the universal and central human problem – a problem we share with most of the animal kingdom – of choosing and winning the right sexual partner” (p. 16). Austen is especially interested in female mate choice and female mating strategies. Her understanding and representation of female sociosexuality and its individual variations is not only readily comprehended by contemporary readers but has significant overlaps with current scientific understanding (Grant, 2018; Kruger et al., 2013; Kruger et al., 2014; Lau, 2018). Austen is also very sensitive to the issue of competition, both intersexual and intrasexual. As Boyd (1998) observes, in Austen’s stories “sexual choice takes place in a crowded competitive pool” (p. 16), just as it did in our evolutionary past and just as it continues to do in our immediate present. Although it has been noted that “Austen’s women are active agents” who “actively compete for access to a limited set of desirable mates” (Kruger et al., 2014, p. A116), the nature of this competition has not been examined in much detail.

I conducted a textual analysis of Austen’s six novels and found a consistent pattern.⁴ While all Austen’s women engage in some competitive behavior, there is a significant difference between the strategies employed by the heroines and those employed by female antagonists. Antagonists are highly competitive and their main objective is social dominance (see Carroll et al., 2012). They are singularly focused on obtaining socially dominant mates and treat all young women, including their own sisters, as potential rivals. Protagonists, on the other hand, prioritize cooperation (see Carroll et al., 2012). They do not shy away from competitive challenges but are much more interested in building cooperative relationships and demonstrating their own

⁴Since I use a standard humanistic approach, my analysis has been entirely qualitative: I focused on those interactions that are most prominent and most significant in narrative terms. A follow-up study using quantitative methods could provide additional insight into the frequency of various competitive behaviors.

worth as cooperative partners. Antagonists show just how ruthless and aggressive women can be: they derogate, manipulate, exploit, harass, and socially exclude their rivals. Heroines, meanwhile, never employ manipulative or deceptive tactics, and rely almost entirely on relatively non-aggressive displays of positive traits, such as intelligence, kindness, and loyalty. Significantly, Austen’s depiction of female competition is remarkably consistent with current scientific theory and research.

FEMALE INTRASEXUAL COMPETITION

It is generally accepted that because of their greater parental investment women are less physically aggressive than men (Arnocky & Vaillancourt, 2017; Campbell, 2004). However, recent developments in evolutionary theory and empirical evidence strongly suggest that females are highly competitive and strategic in vying for access to and retention of reproductively relevant resources, social status, and high-quality mates (Arnocky & Vaillancourt, 2017; Campbell, 2011; Fisher, 2013). The intensity and frequency of female competition may be affected by such factors as sex ratio, quality of available mates, cultural norms, socioeconomic conditions, individual differences, and developmental factors (Buunk & Fisher, 2009; Fisher, 2017; Stone, 2017; Tracy, 1991). However, in most cases, the exact mechanisms and interactions are not yet fully understood. For example, the assumption that mate scarcity, whether actual or perceived, should drive intrasexual competition has a lot of theoretical support but empirical research so far provides mixed results about how and when sex ratios influence competition amongst women (see Stone, 2017). While it is clear that some women are more competitive than others, there is still relatively little information about links between individual differences and intrasexual competition (see Buunk & Fisher, 2009).

Female competition sometimes does take the form of physical violence but women rely much more on subtle or covert tactics designed to damage each other’s reputations and relationships. These include gossiping or withholding positive information about rivals, social exclusion, harassment, and manipulation of mates and competitors (Buss & Dedden, 1990; Fisher & Cox, 2011; Reynolds, Baumaister & Maner, 2018). Many of these behaviors can be defined as indirect or relational aggression: a type of behavior designed to cause harm without revealing an overtly harmful intention (Vaillancourt, 2013). Moreover, indirect and relational aggression is often perpetrated by groups of women, intensifying the attack and making it difficult to identify the main aggressor (Simmons, 2002). I will focus on four female competitive strategies well theorized and documented in evolutionary literature: self-promotion, competitor derogation, and competitor or mate manipulation (Buss, 1988; Buss & Dedden, 1990; Fisher & Cox, 2011). All of these strategies feature prominently in Austen’s novels.

AUSTEN’S LIFE AND WORKS

During Austen’s lifetime, ideal femininity was defined in terms such as “meek and quiet spirit”, “sweetness and moderation”, and “charming tenderness” (see for example, Gisborne, 1797; Fordyce, 1787). There was also strict insistence on female passivity in matters of love and marriage. For example, a popular periodical proclaimed: “That a young lady should be in love, and the love of the young gentleman undeclared is an heterodoxy which prudence, and even policy, must not allow” (S. Johnson, 1752, p. 245).⁵ Even after the gentleman’s declaration, the young lady should be “all resignation to her parents” (S. Johnson, 1752, p. 245), and once married, “be obedient to [her] husband” (Gisborne, 1797, p. 402). In other words, women were not supposed to show any initiative in choosing their partners, let alone compete for them. At the same time, several environmental factors were likely to increase female competition for mates. Firstly, women markedly outnumbered men, and within the gentry class Austen focuses on about 25% of young women remained unmarried, mainly due to the shortage of eligible men (H. Jones, 2009). Secondly, marriage was the most likely, and for many women the only possible way to secure financial resources and social position; it was also the only socially-sanctioned avenue for reproduction. And thirdly, life-long monogamy was imposed relatively strictly for both sexes – a circumstance generally thought to increase selectivity of those searching for a spouse (Ridley, 1993). If Austen’s times seem particularly restrictive for women, they are more so in degree than in the kind of limitations imposed on them. In most human societies, men have yielded political power and largely controlled access to resources, and in order to ensure paternity certainty, they have often placed significant restrictions on female sexuality (Smuts, 1995). However, if Austen’s books, or her personal letters, are anything to go by, women did not adhere very strictly to social rules and expectations.

As listed above, Austen published six novels between 1811 and 1818. These are the texts I focus on in this article. Most of them were completed when Austen was in her mid-to-late thirties, although first versions of *Northanger Abbey*, *Sense and Sensibility*, and *Pride and Prejudice*, were written under different titles in her early twenties (between 1795 and 1798).⁶ Austen also wrote a number of shorter pieces which I have excluded from this analysis mainly for reasons of limited space, but also because their characters are not as realistically and not as fully developed – most of these texts are satires or parodies written before Austen turned 18, and some were left unfinished.

While all her novels revolve around the idea of marriage, Austen herself never married, despite at least one flirtatious romance (with Tom Lefroy in 1796) and at least one marriage proposal (from Harris Bigg-Wither in 1802) (see Tomalin, 1997). For most of her life Austen lived with her beloved sister Cassandra, who also remained single after the tragic death of her fiancé. Austen “drew from nature” (H. Austen, 1817/1968, p. 78); that is, she wrote from her personal experience and observation. She concerned herself almost exclusively with the female domestic sphere and

⁵Jane Austen refers to this famous dictum from Samuel Johnson’s *The Rambler* in *Northanger Abbey*. She also mentions Thomas Gisborne in her letters and James Fordyce in *Pride and Prejudice*.

⁶That early version of *Northanger Abbey* was revised around 1803 and sold to a publisher but was not published until 1818, the year following Austen’s death.

limited her scope to “3 or 4 families in a country village” (Letter to Anna Austen, September 9, 1814 reprinted in Le Faye, 1995). Nevertheless, she makes her women navigate complex and challenging networks of social connections full of more or less pronounced rivalries. Austen shows women competing in many different domains and at all stages of their lives: from unacknowledged rivalries of girls for the affection of their parents (for example, in *Pride and Prejudice* and *Persuasion*), to open arguments of mothers over the beauty, accomplishments and even height of their children (in *Pride and Prejudice*, *Northanger Abbey* and *Sense and Sensibility*); from who has the most charitable heart (in *Emma* and *Mansfield Park*) to who is wearing the most fashionable dress (in *Emma* and *Northanger Abbey*). Still, in each novel Austen is mainly preoccupied with young women (her heroines are aged between 16 and 27) searching and competing for suitable husbands.

In all of her novels, Austen clearly contrasts competitive strategies employed by the heroines and those used by the antagonists, who are usually heroines’ main rivals. Before I discuss these strategies in more detail, I will briefly introduce each novel’s main rivalries.

In *Sense and Sensibility*, the heroine Elinor Dashwood and the antagonist Lucy Steele both want to marry Edward Ferrars. Elinor also has to withstand the open dislike of Edward’s sister and mother who want to climb the social ladder with the help of Edward’s marriage to a richer, more influential woman.

In *Pride and Prejudice*, Caroline Bingley quickly notices Mr. Darcy’s interest in the heroine, Elizabeth Bennet, and treats her as a serious rival. Even though Elizabeth is genuinely not interested in marrying Darcy until much later in the novel, she is very aware of Miss Bingley’s attitude. Elizabeth’s motivation to show Miss Bingley up is increased by the fact that Caroline and her sister try to prevent their brother, Charles Bingley, from getting involved with Elizabeth’s older sister, Jane. They want him to marry Darcy’s sister, Georgiana, which would improve the social standing of the Bingley family and make the marriage between Caroline and Mr. Darcy more likely (or so Miss Bingley hopes).

In *Mansfield Park*, Fanny Price and her nemesis, Mary Crawford, are both interested in Edmund Bertram. While Fanny is consciously trying to retain Edmund’s affection in the face of his infatuation with Miss Crawford, she also unwittingly attracts Henry Crawford (Mary’s brother). In doing so, Fanny – inadvertently – triumphs over her cousins, Maria and Julia Bertram, who for years have been neglecting and humiliating Fanny, with the help of their mother and aunt.

The protagonist of *Persuasion*, Anne Elliot, faces competition from Louisa Musgrove for the heart of Captain Wentworth. This rivalry is not as antagonistic as the ones mentioned above: Louisa is exuberant but not nasty. Anne’s older sister, Elizabeth, and to a lesser degree her younger sister, Mary, are more maliciously competitive: they humiliate and exploit Anne. Still, without any deliberate effort to do so, Anne wins the competition with both of them over potential marriage prospects. She was the first choice of Charles Musgrove who married Mary only after Anne refused him. She also unwittingly attracts Mr. Elliot, who is set to inherit her father’s title and property, while Elizabeth fails in her very calculated efforts to do so at two separate points in her life. Another antagonist in this story is Mrs. Clay who maneuvers to marry Anne’s father, Sir Walter Elliot, and provides further contrast to Anne’s non-competitive attitude.

In *Northanger Abbey*, Catherine Morland (the heroine) and Isabella Thorpe (the antagonist) do not compete for the same man. Catherine is in love with Henry Tilney; Isabella first seduces Catherine’s brother, James, and then flirts with Henry’s brother, Captain Tilney. Still, the two women are compared and evaluated by Henry and his sister Eleanor in terms of their desirability as Eleanor’s sister-in-law.

Finally, in *Emma*, the titular heroine is primarily competing for social leadership: she is jealous of the admiration her community bestows on Jane Fairfax and Mrs. Elton. However, these rivalries are also connected to more or less unconscious competition for mates, even if for most of the novel Emma professes no interest in getting married. When Emma openly flirts with the dashing newcomer, Frank Churchill, she is not aware just how much pain it is causing to his secret fiancée, Jane, but she does take a lot of pleasure from being able to monopolize his attention. Emma is also threatened by the possibility of Jane, and then her own protégé Harriet Smith, attracting Mr. Knightley, the hero of the novel. Neither Jane nor Harriet is positioned as an antagonist, though. Indeed, for some time it is Emma who uses antagonistic tactics – the only one of Austen’s heroines to do so. Encouraged by Frank, she gossips about Jane. She also manipulates Harriet’s feelings deluding herself that it is in Harriet’s best interest. Emma eventually realizes her mistakes and repents, unlike the real antagonist of the novel, Mrs. Elton: aware of the fact that Emma was her husband’s first choice, and that she promoted the idea of Harriet marrying Mr. Elton, she continues the rivalry for social superiority, and tries to take revenge on both women.

STRATEGIES OF FEMALE INTRASEXUAL COMPETITION IN AUSTEN’S NOVELS

Austen’s novels are full of female rivalries and her women use a wide range of competitive strategies: self-promotion, competitor derogation, and competitor or mate manipulation. However, these strategies are employed differently by heroines and antagonists.

Self-Promotion

Self-promotion is one of the most commonly discussed and best documented strategies of intrasexual competition (Buss, 1988; Buss & Dedden, 1990; Fisher & Cox, 2011; Walters & Crawford, 1994). It involves enhancing and advertising of various personal characteristics in order to improve one’s odds of winning the competition. People tend to promote those traits that are thought desirable by prospective mates. For example, men have been shown to brag about their material resources, whereas women often focus on enhancing their physical appearance (Buss, 1988).

In Austen’s fiction, self-promotion is used by both antagonists and protagonists but each group focuses on displaying those attributes they consider most important and valuable. Thus, antagonists explicitly advertise their beauty, elegance, social connections, and feminine accomplishments, such as playing an instrument – and many of them have some advantages in these areas. They also make calculated displays of generosity and benevolence but sooner or later it becomes clear that their

motivations are selfish and instrumental. Importantly, antagonists almost invariably use self-promotion with a deliberate goal of contrasting themselves with their rivals and winning a contest. Protagonists, meanwhile, demonstrate the superior qualities of their minds and characters: intelligence, kindness, honesty, and loyalty. Their behavior, often unwittingly, brings into sharp focus the selfishness, vanity, and insincerity of the antagonists.

For example, when Miss Bingley invites Elizabeth Bennet for a walk around the room in order to show off her own figure and grace, she succeeds in drawing Mr. Darcy’s attention but it is Elizabeth who manages to hold it with her witty conversation. Elizabeth is able to match Mr. Darcy’s intelligence and understands his sense of humor, unlike Miss Bingley who can only flatter him. Miss Bingley is convinced that a woman’s greatest achievements are “singing, drawing, dancing, ... manner of walking, ... tone of her voice” but Darcy wants something “more substantial, in the improvement of her mind by extensive reading” (PP, p. 25) – and the conversation is taking place just as Elizabeth is reading a book and Miss Bingley is playing cards.

Mary Crawford takes every opportunity to show off her talents and sophistication and uses the shy Fanny Price as a kind of contrasting backdrop for these displays. But every time she flaunts her advantages, Miss Crawford also inadvertently reveals her flaws. For instance, when she borrows Fanny’s horse, everyone is impressed with her fearless riding, but soon Edmund realizes that both he and Miss Crawford were selfish and inconsiderate towards Fanny who, in contrast, is always generous and accommodating. Everyone is also delighted by Miss Crawford’s harp playing, but her anger at farmers who refused to lend her a cart in the middle of hay harvest to transport the instrument shows both her ignorance and her utter lack of concern for anything other than her own amusement. Miss Crawford confidently voices her opinions but they often make Edmund cringe. Fanny, meanwhile, is very quiet, but when she speaks it is often to show that her views are different from Mary’s and better aligned with Edmund’s. Edmund overlooks Miss Crawford’s blunders until – in an effort to show her worldliness and benevolence – she makes light of his sister’s adulterous affair. This display of tolerance backfires so spectacularly because it suggests that Miss Crawford’s own standards of marital fidelity might not be as strict as Edmund would hope for. It makes Edmund realize the difference between Miss Crawford’s “corrupted, vitiated mind” (MP, p. 470) and Fanny’s amply demonstrated moral integrity and unwavering devotion to him.

Louisa Musgrove is never as malicious as Miss Bingley or Miss Crawford. Still, to contrast herself with the older, subdued Anne Elliot, she displays her youthful energy and exuberance. Moreover, she clearly wants to impress on Captain Wentworth that, unlike Anne, she is not “easily persuaded” (P, p. 78). She succeeds, up to a point: Captain Wentworth is drawn to her vivacity and admires her firmness of mind. But Louisa soon proves herself foolhardy and seriously injures herself. In the aftermath of her accident, Anne demonstrates her own strength of character and presence of mind. She is sure that Captain Wentworth must have noticed it. He did, and it made him reevaluate his feelings.

Mrs. Elton always tries to dress better than other women and is very happy to see “very few pearls in the room except [hers]” (E, p. 279). She is also constantly fishing for compliments: “How do you like my gown?— How do you like my trimming?— How has Wright done my hair?” (E, p. 278). Emma, meanwhile, is “a

perfect beauty” but not “personally vain” (E, p.31). As Mr. Knightley notes, “Considering how very handsome she is, she appears to be little occupied with it” (E, p. 31).

Isabella Thorpe revels in her beauty, fashion, and self-assurance but invariably reveals just how selfish, shallow, and insincere she is. Although she does not directly compete for Henry Tilney, he notices that Catherine Morland is everything that Isabella is not: “Open, candid, artless, guileless, with affections strong but simple, forming no pretensions, and knowing no disguise” (NA, p. 133). In this case, as in all other cases of female competition in Austen’s novels, “honest simplicity” wins against “shallow artifice” (NA, pp. 138, 142).

Austen does not pretend that female appearance is unimportant: being beautiful is undoubtedly one of Emma’s assets; Edward Ferrars and Edmund Bertram are quickly charmed by the obvious beauty of Lucy Steel and Maria Crawford, respectively; Captain Wentworth is initially shocked by Anne Elliot’s “loss of bloom” (P, p. 22); and Mr. Darcy at first dismisses Elizabeth Bennet as “tolerable but not handsome enough to tempt [him]” (PP, p. 7). However, the conspicuous beauty of the antagonists loses its appeal in light of their competitiveness and the heroines become gradually more attractive as their characters are revealed.

Antagonists are so focused on winning that they treat all women, including their own sisters, as real or potential rivals. For example, the Bertram sisters compete for the attentions of Henry Crawford, and for a time, one sister becomes the other’s “greatest enemy” (MP, p. 165). In *Persuasion*, the arrival of Captain Wentworth causes a temporary rift between the otherwise affectionate Musgrove sisters. Lydia Bennet competes with her four sisters over who is going to get married first, and takes a lot of satisfaction in displacing Jane in the family hierarchy. Both Isabella Thorpe and Lucy Steele are haughty and unkind towards their sisters. Moreover, antagonists often fake friendships with other women for their own competitive advantage. Lucy Steele, under the pretense of friendship, ruthlessly exploits the kindness and integrity of Elinor Dashwood, while Elinor never uses Lucy’s secret against her (she does not even divulge it to her sisters or mother). Isabella Thorpe befriends Catherine Morland and preys on her naivety in order to get closer to her brother. Admittedly, Catherine also befriends the sister of her desired mate but the quality of her friendship with Eleanor Tilney is dramatically different. Finally, Miss Crawford’s kindness towards Fanny Price is disingenuous and designed to soften Edmund’s heart.

In contrast, one of the most convincing arguments in heroines’ favor is their genuine kindness and loyalty to friends and family. Even more importantly, heroines display these traits unconsciously, without a specific goal of self-promotion. For instance, Elizabeth Bennet walks three miles in bad weather in order to comfort her sick sister. When she arrives at Netherfield, Miss Bingley criticizes her dirty petticoat and her “indifference to decorum” (PP, p. 23). However, both Mr. Bingley and Mr. Darcy notice Elizabeth’s love and devotion for her sister.⁷ Incidentally, they also both comment on how well she looks after such vigorous exercise. Elizabeth further demonstrates her loyalty to Jane when she rejects Mr. Darcy’s first proposal because he helped separate Jane from Mr. Bingley. Elizabeth tells Darcy that she cannot

⁷Unlike Mr. Bingley, Mr. Darcy does not comment on it immediately, but later praises Elizabeth for her “affectionate behavior to Jane while she was ill at Netherfield?” (PP, p. 248).

“accept the man who has been the means of ruining ... the happiness of a most beloved sister” (PP, p. 125). Elizabeth continues to support her sister Lydia even though she disapproves of Lydia’s behavior. The same can be said about Elinor Dashwood and her sister Marianne who remain devoted to each other despite their differences. Anne Elliot remains loyal to her sisters even though the older excludes and humiliates her, and the younger exploits her benevolence. Similarly, Fanny Price continues in her affection for her cousins, despite their mistreatment and neglect of her. While Emma blunders in her behavior towards Harriet Smith and Jane Fairfax, she also repeatedly confirms Mrs. Weston’s positive opinion of her: “Where shall we see a better daughter, or a kinder sister, or a truer friend?” (E, p. 31). By emphasizing her heroines’ capacity for cooperation and commitment, as well as their strong sense of loyalty to kin, Austen taps into some of the most significant features of the human breeding system and social organization (Hrdy, 2009; Nesse, 2001; Seabright, 2012). No wonder that these traits give the heroines substantial advantage in competition with other women.

Competitor Derogation

Competitor derogation involves attempts to make one’s rival appear less attractive to potential mates (Buss & Dedden, 1990). According to evolutionary psychologists, women focus mainly on criticizing other women’s appearance and sexual behaviour (Buss, 1988). Austen depicts striking examples of verbal and non-verbal derogation of rivals’ appearance, behavior, character, intelligence, and social connections. She also shows that women can ingeniously derogate their rivals through insincere compliments. And, that they often do it in teams, an observation made by contemporary researchers as well (Simmons, 2002).

The most open and prolific derogator is Caroline Bingley, who is keenly assisted by her sister, Mrs. Hurst. In their opinion, Elizabeth Bennet has “nothing to recommend her”: her manners are “very bad indeed”, she has “no conversation, no style, no taste, no beauty”; her hair is “so untidy, so blowsy!” (PP, p. 22); “her face is too thin; her complexion has no brilliancy; and her features are not at all handsome” (PP, p. 175). Miss Bingley is also very good at delivering “insolent smiles” (PP, p. 67) which, unlike her comments, she does not hide from Elizabeth. Ironically, she accuses Elizabeth of being “one of those young ladies who seek to recommend themselves to the other sex by undervaluing their own; and with many men, I dare say, it succeeds. But, in my opinion, it is a paltry device, a very mean art” (PP, p. 25).

This “mean art” is used against other heroines as well. Fanny Price’s two cousins and two aunts all dismiss her appearance with “easy indifference” (MP, p. 13) and agree that she is “prodigiously stupid” (MP, p. 18). Mary Crawford, meanwhile, excels at saying nice things about Fanny without really meaning them. She often speaks of Fanny with “high praise and warm affection” but it always comes with “a dash of evil” (MP, p. 469). Similarly, Lucy Steel repeatedly commends Elinor’s discretion and wisdom only to cause her more pain. Isabella Thorpe usually qualifies her compliments with an insult, as when she admires her friend, Miss Andrews, for being “as beautiful as an angel” but also notes that “there is something amazingly insipid about her” (NA, pp. 22). She constantly accuses Catherine Morland of being

“sly” and scolds her to show “a little common honesty” (NA, p. 91) – a criticism much more applicable to Isabella herself.

An important aspect of female competition in Austen’s environment was social and financial status, and antagonists repeatedly attack the heroines on that basis. Miss Bingley takes particular pleasure in reminding Mr. Darcy about Elizabeth’s “low connections” and “vulgar relations” (PP, p. 23). Her comments are deliberately designed to “provoke Darcy into disliking [Elizabeth]” (PP, p. 34). Mrs. Ferrars and her daughter openly show their utter disdain for Elinor Dashwood’s relative poverty. And Fanny Price is constantly reminded by the words and actions of her cousins and aunts that she is “the lowest and last” (MP, p. 226). This is not to say that antagonists are always higher in status. Elizabeth Bennet does not have as much money as Miss Bingley but she does have the pedigree her rival is missing: Elizabeth is “a gentleman’s daughter” (PP, p. 232) while the Bingley’s fortune was “acquired by trade” (PP, p. 9). Lucy Steele and Isabella Thorpe are decidedly lower in the social hierarchy than Elinor Dashwood and Catherine Morland respectively, but the heroines do not exploit this advantage. Emma is the only heroine who, especially at the beginning of the novel, looks down on other women but eventually regrets it. Moreover, her sense of superiority is relatively benign, and much more justified, than Mrs. Elton’s vicious pretensions.

Modern research shows that women often derogate each other’s sexual behavior, sometimes under the cover of worrying about others (Reynolds, Baumaister & Maner, 2018). In Austen’s time, women’s sexual reputation was incredibly important and it is a serious narrative concern in most of her novels: her female (and male) characters are often contrasted and evaluated on the basis of their attitudes to sexual behaviors.⁸ However, it is not a frequent topic of conversation for her female characters. It is true that Elizabeth Bennet calls her sister Lydia “the most determined flirt that ever made herself or her family ridiculous; a flirt too, in the worst and meanest degree of flirtation” (PP, p. 150); and Catherine Morland once exclaims that Isabella is a “vain coquette” (NA, p. 142), but neither of these comments are direct attempts to derogate a rival. Fanny Price is concerned about Maria Bertram’s too encouraging behavior towards Henry Crawford, and about the inappropriateness of her cousin and Mary Crawford acting love scenes in the family’s theatre production, but keeps these thoughts to herself – or rather, shares them only with the reader. The inexperienced Catherine Morland is genuinely puzzled by Isabella’s proclivity to flirt with every man she meets, and it is left to Henry Tilney – and to the reader – to judge her.

One instance of a female character discussing another woman’s sexual behavior with a potential mate is in *Emma*. The heroine gossips with Frank Churchill about an illicit love affair she suspects Jane Fairfax might have had with her friend’s husband, Mr. Dixon. Since it is actually Frank that Jane is secretly engaged to, the gossip is not very damaging. Still, Emma later reflects that she “transgressed the duty of woman by woman” and that “it was hardly right” (E, p.198). Another episode worth

⁸Austen’s treatment of the issue of female chastity is a complex one. She consistently challenges the ideals of female sexual passivity and validates female desire – although usually within the context of committed relationships. In most of her stories she includes themes of dangerous attractions, impulsive infatuations and even illicit sex. Whether these behaviors are related to men or women, Austen portrays them as motivated by selfishness and vanity, and disapproves of them on that basis. For an extended discussion of Austen’s treatment of female unrestricted sexuality see Grant, 2018.

mentioning is in *Pride and Prejudice* when Darcy’s aunt, Lady Catherine, reminds Elizabeth about her sister’s “infamous elopement” (PP, p. 233). Lady Catherine tries to prevent Darcy’s marriage to Elizabeth in the hope that he would marry his cousin – a great example of a mother competing on behalf of her daughter, and of the fact that one sister’s reputation may affect marital prospects of all others.

While Austen’s antagonists are proficient derogators, Austen’s heroines are much more willing to genuinely acknowledge their rival’s merits. They do notice antagonists’ deficiencies in terms of moral judgement and integrity, respect and gratitude, altruism and empathy but hardly ever directly voice these criticisms. Instead, negative comments about antagonists are usually presented as heroines’ private thoughts, or as the narrator’s objective assessment – and due to Austen’s narrative technique, the two are often hard to tell apart. Moreover, negative comments about the antagonists are often presented as proof of the heroines’ exceptional perceptiveness, their ability to accurately read others, especially their rivals. Consider this example from *Sense and Sensibility* introducing the relationship between Elinor Dashwood and Lucy Steel:

Lucy was naturally clever; her remarks were often just and amusing; and as a companion for half an hour Elinor frequently found her agreeable; but her powers had received no aid from education: she was ignorant and illiterate; and her deficiency of all mental improvement, her want of information in the most common particulars, *could not be concealed* from Miss Dashwood, in spite of her constant endeavour to appear to advantage. Elinor *saw, and pitied* her for, the neglect of abilities which education might have rendered so respectable; but she *saw*, with less tenderness of feeling, the thorough want of delicacy, of rectitude, and integrity of mind, which her attentions, her assiduities, her flatteries at the Park betrayed; and she could have no lasting satisfaction in the company of a person who joined insincerity with ignorance; whose want of instruction prevented their meeting in conversation on terms of equality, and whose conduct toward others made every shew of attention and deference towards herself perfectly valueless (SS, pp. 122-123, emphasis added).

Lucy’s merits are duly listed, but her faults are more prominent, and Elinor can see through them all. She does not attack Lucy, but pities her, and any lack of warmth beyond that is perfectly understandable. The whole passage is completely aligned with Elinor’s perspective but delivered in the objective voice of the narrator. In other words, here and throughout her novels, Austen derogates on her heroines’ behalf and minimizes any appearance of their spitefulness, jealousy, or pettiness. Research shows that while derogation can be an effective competitive strategy, it also carries serious risks: known derogators are evaluated as less friendly, kind, and trustworthy, and overall less desirable as mates (Fisher, Shaw, Worth, Smith & Reeve, 2010). By using third person narration and mixing heroines’ internal monologues with seemingly impartial comments of the narrator, Austen lets her heroines derogate their rivals with impunity.

One place where the heroines are more likely to voice their opinions about antagonists is at the end of the story, once they are assured of the heroes’ love for them. For example, Elizabeth Bennet talks to Darcy about Miss Bingley’s flattery, Catherine Morland discusses Isabella’s insincerity with Henry Tilney, and even the utterly timid Fanny Price, “now at liberty to speak openly”, feels “more than justified” to add “some hint” to Edmund’s “knowledge of [Miss Crawford’s] real character” (MP, p. 473).

Competitor and Mate Manipulation

Mate manipulation involves reducing or eliminating the need for competition by sequestering the mate or diverting his attention from a potential rival (Fisher & Cox, 2011). Competitor manipulation involves convincing the rival to withdraw from competition, either because the mate is not worth the cost of competition, or because the contest cannot be won (Fisher & Cox, 2011). The two strategies can be used together and often depend on deception or dishonesty. Both strategies are commonly used by Austen’s antagonists but not by her protagonists.

The most conniving antagonist is Lucy Steele: she manipulates her rival, Elinor Dashwood, as well as two potential mates and their family. A few years before the main action of the novel, Lucy got secretly engaged to a very young and naïve Edward Ferrars because of his prospects of a substantial inheritance. Under the pretense of looking for Elinor’s advice in her difficult situation, Lucy feigns a friendship with her and swears her into secrecy. She tries to convince Elinor that Edward is completely devoted to his unlikely fiancée. At the same time, she keeps Edward convinced that she is deeply in love with him. Lucy is right to think that Elinor’s personal integrity will stop her from interfering with the engagement while social custom and sense of duty will prevent Edward from breaking the engagement. When the secret is revealed, Edward is disowned by her mother. Through skillful flattery, Lucy then maneuvers Edward’s brother into marrying her, and eventually even manages to ingratiate herself with Edward’s sister and mother.

Other antagonists are also skilled manipulators. Caroline Bingley tries to dissuade Elizabeth and Jane Bennet from any interest in Mr. Darcy and Mr. Bingley respectively by falsely implying an impending marriage between Mr. Bingley and Darcy’s sister, Georgiana, which would likely lead to Miss Bingley’s own desired union with Mr. Darcy. She then contrives to remove the two gentlemen from the Bennets’ neighborhood. And she never tells her brother that Jane followed him to London. Mary Crawford often talks to Fanny about Edmund’s obvious infatuation trying to reinforce that any hopes on Fanny’s part would be futile. She also helps her brother, Henry, in his unsuccessful attempts to seduce Fanny, and consequently remove her as a rival for Edmund. At the same time, she does her best to monopolize Edmund’s time and attention: he often spends long hours horse-riding with Miss Crawford or listening to her playing the harp. Her friendship with Fanny is also cleverly calculated to gain Edmund’s approval. Louisa Musgrove manages to eliminate the competition for Captain Wentworth from her sister by promoting Henrietta’s relationship with their cousin. She keeps Captain Wentworth to herself by drawing him away for long walks. She also makes Anne Elliot aware of a few seemingly unfavorable comments Captain Wentworth made about her, thus diminishing Anne’s hope. Louisa’s efforts, however,

pale in comparison with Mrs. Clay’s: through her flattery and apparent deference she manipulates Sir Walter and Elizabeth Elliot, further diminishing Anne’s position in the family. Isabella Thorpe pretends to be passionately in love with James Morland, thus manipulating him into a marriage proposal. While engaged, she maneuvers to seduce Captain Tilney but is outsmarted by him. Although these efforts are not directed at Henry Tilney, they make him even more aware of Catherine Morland’s sincerity and constancy.

Emma Woodhouse is the only heroine who dabs in a bit of scheming and manipulation. While ostensibly not interested in marriage, she uses all her charms to monopolize Mr. Elton (on Harriet’s behalf), Frank Churchill (without any serious intentions) and Mr. Knightley (as a friend, of course). She does not hide her dislike of Mrs. Elton, enjoys gossiping about Jane Fairfax with Frank, and “rejoices” at being able to draw Mr. Knightley into admitting that Jane is not perfect and that he does not plan to marry her (E, p. 248). The whole point of the novel, however, is for Emma to see the error of her ways and reform.

The fault that Mr. Knightley finds with Jane is her lack of “open temper which a man would wish for in a wife” (E, p. 248). All other Austen’s heroes also value openness and honesty in their prospective wives and thoroughly disapprove of any deceit. As Mr. Darcy pointedly tells Miss Bingley: “there is a meanness in all the arts which ladies sometimes condescend to employ for captivation. Whatever bears affinity to cunning is despicable” (PP, p. 25). Not surprisingly, Austen’s heroines never attempt to deceive their mates, or even their rivals. In her treatment of deception as a competitive tactic, Austen once again highlights one of the most serious problems not only for romantic relationships but for human sociality and cooperation in general (Boehm, 2012; see also Flesch, 2007).

CONCLUSION

Women are undeniably highly competitive and Austen’s fiction provides a compelling picture of female intrasexual competition. All her women, even the shy and timid ones, compete with others for desirable mates. However, Austen creates a big contrast between the tactics of her protagonists and antagonists. Antagonists treat most other women as rivals and their female relationships are often superficial and exploitative. Their competitive strategies are aggressive, manipulative, and deceitful. They rely heavily on displays of beauty, talents, and social status. They derogate other women and manipulate both their rivals and their potential mates. Heroines, on the other hand, do not use deception or manipulation. They rarely derogate other women, although many negative comments about the antagonists are delivered by the narrator. They rely almost exclusively on relatively non-aggressive displays of positive character traits, especially intelligence, honesty, integrity, and loyalty. The effectiveness of these displays is enhanced by the fact that they are usually not consciously calculated. Heroines also demonstrate their capacity for cooperation by building supportive networks with relatives and friends. These relatively non-aggressive tactics prove much more successful. Heroines invariably triumph over their rivals and secure the best quality mates. Some antagonists do manage to attract mates but either fail to retain them long-term (for example, Maria Bertram and Isabella

Thorpe) or the relationships they build are just as exploitative and dysfunctional as the means of obtaining them (for example, in the case of Lucy Steele and Mrs. Elton). Other antagonists, such as Caroline Bingley or Mary Crawford, remain single and disappointed. The happy endings of Austen’s stories have often been dismissed as unrealistic, escapist fantasies. Undoubtedly, they do contain elements of wish-fulfilment. However, they also reflect important aspects of human psychology and sociality. Cross-cultural research confirms that when it comes to long-term relationships, both men and women prioritize kindness, emotional stability, and sexual fidelity (Buss, 1989; Shackelford, Schmitt, & Buss, 2005). Austen heroines win intrasexual contests because they are able to display exactly those traits.

In many ways, Austen’s depiction of female intrasexual competition is consistent with modern research, although her emphasis is often different. For example, evolutionary psychologists focus on physical appearance as one of the main areas of female competition. Austen, meanwhile, insists that competing mainly on that basis is ineffectual: the conspicuous beauty of the antagonists is invariably trumped by other desirable traits of the protagonists. Interestingly, Austen’s insight aligns with strong empirical evidence that estimations of physical attractiveness change as other personal attributes are revealed (Geher & Kaufman, 2013) but this idea has not been adequately explored yet in relation to female intrasexual competition. Austen also depicts other female interactions that remain severely understudied, such as competition – and cooperation – between young girls, mothers, or older women. These aspects were beyond the scope of this article but deserve scrutiny. Indeed, closer attention to fiction and a broader application of interdisciplinary methods is likely to contribute to a more comprehensive understanding of human nature and individual variations.

Clearly, competition is part of our evolutionary heritage. Being able to compete for scarce resources is crucial to our survival and reproduction, but being able to identify the right tactics determines how effective this competition will be. In fiction and in life, we dislike those who are hell-bent on winning, and we prefer to interact with those who can cooperate. This approach may be particularly valuable for women who often need to rely on the “tend and befriend” strategy to enhance their survival and reproductive success (Hrdy, 2009; Taylor, 2006). Austen’s novels vividly illustrate how competitive women can be, but they also suggest that in the ultra-social human environment, being consistently able to demonstrate empathy, honesty, and loyalty may be the best competitive tactic. Her fiction encourages readers to follow models of behavior that minimize aggression and maximize cooperation and social cohesion.

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REFERENCES

- Arnocky, S., & Vaillancourt, T. (2017). Sexual competition among women: A review of the theory and supporting evidence. In M. L. Fisher (Ed.), *The Oxford handbook of women and competition* (pp. 25-39). Oxford University Press.
- Austen, H. (1817/1968). Biographical notice of the author. In B. C. Southam (Ed.), *Jane Austen: The critical heritage* (pp. 73-78). London: Routledge & Kegan Paul.
- Austen, J. (1811/2003). *Sense and sensibility*. London: Penguin.
- Austen, J. (1813). *Pride and prejudice*. Kindle edition.
- Austen, J. (1814/2008). *Mansfield Park*. London: Vintage Books.
- Austen, J. (1815). *Emma*. Kindle edition.
- Austen, J. (1818/1998). *Persuasion*. London: John Murray. Kindle edition.
- Austen, J. (1818). *Northanger Abbey*. Signet Classic. Kindle edition.
- Boehm, C. (2012). *Moral origins: The evolution of virtue, altruism, and shame*. Basic Books. Kindle edition.
- Boyd, B. (1998). Jane, meet Charles: Literature, evolution, and human nature. *Philosophy and Literature*, 22(1), 1-30.
- Boyd, B. (2009). *On the origin of stories: Evolution, cognition, and fiction*. Cambridge: Belknap Press of Harvard University Press.
- Bride and Prejudice*. (2004). [Motion picture]. Chadha, G. (Director). Miramax.
- Buss, D. M. (1988). The evolution of human intrasexual competition: Tactics of mate attraction. *Journal of Personality and Social Psychology*, 54, 616–628. <http://dx.doi.org/10.1037/0022-3514.54.4.616>.
- Buss, D. M. (1989). Sex differences in human mate preferences: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12(01), 1-14. doi:10.1017/S0140525X00023992
- Buss, D. M., & Dedden, L. A. (1990). Derogation of competitors. *Journal of Social and Personal Relationships*, 7, 395–422.
- Buunk, A. P., & Fisher, M. L. (2009). Individual differences in intrasexual competition. *Journal of Evolutionary Psychology*, 7(1), 37-48.
- Campbell, A. (2004). Female competition: Causes, constraints, content, and contexts. *Journal of Sex Research*, 41(1), 16-26, doi:10.1080/00224490409552210
- Campbell, A. (2011). Ladies, choose your weapons. *The Evolutionary Review: Art, Science, Culture*, 2(1), 106-112.
- Carroll, J. (2004). *Literary Darwinism: Evolution, human nature, and literature*. New York: Routledge.
- Carroll, J., Gottschall, J., Johnson, J. A., & Kruger, D. J. (2012). *Graphing Jane Austen: The evolutionary basis of literary meaning*. New York: Palgrave Macmillan.
- Carroll, J., McAdams, D. P., & Wilson, E. O. (Eds.). (2016). *Darwin’s bridge: Uniting the humanities and social sciences*. New York: Oxford University Press.
- Chwe, M. S.-Y. (2013). *Jane Austen, game theorist*. Princeton: Princeton University Press.
- Clasen, M. (2017). *Why horror seduces*. New York: Oxford University Press.
- Clueless*. (1995). [Motion picture]. Heckerling, A. (Director). Paramount Pictures.

- Dow, G. (2012). Uses of translation: The global Jane Austen. In G. Dow & C. Hanson (Eds.), *Uses of Austen: Jane's afterlives* (pp. 153-172). New York: Palgrave Macmillan.
- Ezard, J. (2007). *Pride and prejudice* the most precious as modern readers turn over an old leaf. *The Guardian*.
<https://www.theguardian.com/uk/2007/mar/01/topstories3.books>
- Fielding, H. (1996). *Bridget Jones's diary: A novel*. London: Picador.
- Fielding, H. (1999). *Bridget Jones: The edge of reason*. London: Picador.
- Fisher, M. L. (2013). Women's intrasexual competition for mates. In M. L. Fisher, J. R. Garcia, & R. Sokol Chang (Eds.), *Evolution's empress: Darwinian perspectives on the nature of women* (pp. 19-42). New York: Oxford University Press.
- Fisher, M. L. (2017). Introduction. In M. L. Fisher (Ed.), *The Oxford handbook of women and competition* (pp. 3-12). Oxford University Press.
- Fisher, M. L., & Cox, A. (2011). Four strategies used during intrasexual competition for mates. *Personal Relationships*, 18, 20-38.
- Fisher M. L., Shaw S., Worth K., Smith L., & Reeve C. (2010). How we view those who derogate: Perceptions of female competitor derogators. *Journal of Social, Evolutionary, and Cultural Psychology*, 4, 265–276.
- Flesch, W. (2007). *Comeuppance: Costly signaling, altruistic punishment, and other biological components of fiction*. Harvard University Press.
- Fordyce, J. (1787). *Sermons to young women*. Philadelphia: Thomas Dobson. Gale: Eighteenth Century Collections Online.
- Geher, G., & Kaufman, S. B. (2013). *Mating intelligence unleashed: The role of the mind in sex, dating, and love*. New York: Oxford University Press.
- Gisborne, T. (1797). *An enquiry into the duties of the female sex*. Printed for T. Cadell Jun. and W. Davies. Gale Primary Sources: Nineteenth Century Collections Online.
- Gottschall, J. (2008). *The Rape of Troy: Evolution, violence, and the world of Homer*. Cambridge: Cambridge University Press.
- Graham, P. W. (2008). *Jane Austen and Charles Darwin: Naturalists and novelists*. Burlington: Ashgate Publishing.
- Grant, A. (2018). *From Mr. Darcy to Mr. Big: An evolutionary-feminist account of love and choice in popular romantic fiction*. [Unpublished PhD thesis]. University of Auckland.
- Harman, C. (2009). *Jane's fame: How Jane Austen conquered the world*. Edinburgh, New York: Canongate.
- Hrdy, S. B. (1981). *The woman that never evolved*. Cambridge: Harvard University Press.
- Hrdy, S. B. (2009). *Mothers and others: The evolutionary origins of mutual understanding*. Cambridge: Belknap Press of Harvard University Press.
- Johnson, C. (2012). *Jane Austen's cults and cultures*. Chicago: University of Chicago Press.
- Johnson, S. (1752). *The Rambler, No. 97*. In *Works of Samuel Johnson*. Gale: Eighteenth Century Collections Online.
- Jones, H. (2009). *Jane Austen and marriage*. London, New York: Continuum.

- Jones, W. (2017). *Jane on the brain: Exploring the science of social intelligence with Jane Austen*. Pegasus Books. Kindle edition.
- Kruger, D. J., Fisher, M. L., & Jobling, I. (2005). Proper hero dads and dark hero cads: Alternate mating strategies exemplified in British romantic literature. In J. Gottschall & D. S. Wilson (Eds.), *The literary animal: Evolution and the nature of narrative* (pp. 225-243). Evanston: Northwestern University Press.
- Kruger, D. J., Fisher, M. L., Strout, S. L., Clark, S., Lewis, S., & Wehbe, M. (2014). *Pride and prejudice* or family and flirtation?: Jane Austen’s depiction of women’s mating strategies. *Philosophy and Literature*, 38(1), A114-A128.
- Kruger, D. J., Fisher, M. L., Strout, S. L., Wehbe, M., Lewis, S., & Clark, S. (2013). Variation in women’s mating strategies depicted in the works and words of Jane Austen. *Journal of Social, Evolutionary, and Cultural Psychology*, 7(3), 197-210.
- Lau, B. (Ed.). (2017). *Jane Austen and sciences of the mind*. Routledge.
- Lau, B. (2018). Sexual selection and female choice in Austen’s *Northanger Abbey*. *Studies in the Novel*, 50(4), 465-482.
- Le Faye, D. (Ed.) (1995). *Jane Austen’s letters* (3rd ed.). Oxford, New York: Oxford University Press.
- Mazzeno, L. W. (2011). *Jane Austen: Two centuries of criticism*. Rochester, NY: Camden House.
- Metropolitan*. (1990). [Motion picture]. Stillman, W. (Director).
- Nesse, R. M. (2001). Natural selection and the capacity for subjective commitment. In R. M. Nesse (Ed.), *Evolution and the capacity for commitment* (pp. 1-44). New York: Russell Sage Foundation.
- Nordlund, M. (2007). *Shakespeare and the nature of love: Literature, culture, evolution*. Evanston: Northwestern University Press.
- Reynolds, T., Baumaister, R. F., & Maner, J. K. (2018). Competitive reputation manipulation: Women strategically transmit social information about romantic rivals. *Journal of Experimental Social Psychology*, 78, 195-209
<https://doi.org/10.1016/j.jesp.2018.03.011>
- Ridley, M. (1993). *The red queen: Sex and the evolution of human nature*. London: Penguin Books.
- Salmon, C., & Symons, D. (2001). *Warrior lovers: Erotic fiction, evolution and female sexuality*. London: Weidenfeld & Nicolson.
- Saunders, J. P. (2009). *Reading Edith Wharton through a Darwinian lens: Evolutionary biological issues in her fiction*. Jefferson: McFarland & Co.
- Seabright, P. (2012). *The war of the sexes: How conflict and cooperation have shaped men and women from prehistory to the present*. Princeton: Princeton University Press. Kindle edition.
- Shackelford, T. K., Schmitt, D. P., & Buss, D. M. (2005). Universal dimensions of human mate preferences. *Personality and Individual Differences*, 39(2), 447-458.
- Simmons, R. (2002). *Odd girl out: The hidden culture of aggression in girls*. New York: Harcourt.
- Smuts, B. (1995). The evolutionary origins of patriarchy. *Human Nature*, 6(1), 1-32.
doi:10.1007/bf02734133
- Stone, E. A. (2017). Do women compete for mates when men are scarce? Sex ratio imbalances and women’s mate competition cross-culturally. In M. L. Fisher

- (Ed.), *Oxford handbook of women and competition* (pp. 249-264). Oxford University Press.
- Symons, D. (1979). *The evolution of human sexuality*. New York: Oxford University Press.
- Taylor, S. E. (2006). Tend and befriend: Biobehavioral bases of affiliation under stress. *Current Directions in Psychological Science*, 15(6), 273-277.
- Tomalin, C. (1997). *Jane Austen: A life*. New York: Alfred A. Knopf.
- Tracy, L. (1991). *The secret between us: Competition among women*. Boston: Little, Brown.
- Vaillancourt, T. (2013). Do human females use indirect aggression as an intrasexual competition strategy? *Philosophical Transactions: Biological Sciences*, 368(1631), 1-7. <https://www.jstor.org/stable/24500107>
- Walters S., & Crawford C. B. (1994). The importance of mate attraction for intrasexual competition in men and women. *Ethology and Sociobiology*, 15, 5-30.
- Wilkes, J. (2012). *Pride and prejudice: The critical reception*. In L. W. Mazzeno (Ed.), *Pride and prejudice: Critical insights*. Pasadena, Hackensack: Salem Press.
- Zunshine, L. (2006). *Why we read fiction: Theory of mind and the novel*. Columbus: Ohio State University Press.