CHAPTER 9

Feminism at War Sexual Selection, Darwinism, and Fin-de-Siècle Fiction Carol Colatrella

Sexual difference is the question of our age.

Elizabeth Grosz, *Becoming Undone*

Tumultuous political debates, fears of violent revolutions, and the rise of women's rights campaigns in Britain, the United States, and France in the nineteenth century provide a context for considering Charles Darwin's theory of sexual selection and its engagement with feminism. His theory of evolution by natural selection inspired radically different reactions as many writers responded to "the most disturbing question" of "what it meant to be human" rather than "uniquely privileged beings created in the divine image" (Otis, 2002: xxvi). Darwin's The Descent of Man, and Selection in Relation to Sex (1871a) provoked subsequent discussion in exploring sexual differences, male-male combat, and female choice in courtship as key elements of *animal* copulation, while insisting that male choice controls human sexual relations. Produced during a period marked in the United States and Europe by political conflicts and by developing reform movements calling for equality, Descent contributed to evolving cultural ideas of sexuality and gender roles and to new representations of women in popular media and fiction that in turn influenced social attitudes and gave rise to Darwinian feminism.¹

Nineteenth-century feminists admired and even drew upon Darwin's theory of evolution by natural selection in *The Origin of Species* (1859) and his explanation of sexual selection in *Descent*, but they rejected the latter's assessment of women's inferiority and confinement to domestic roles. Instead, feminists advocated reforms related to suffrage, education, and marriage. Social Darwinists and eugenicists in these countries extrapolated from Darwin's theories to argue that woman's domestic roles would enable her to shape the course of human evolution, eventually improving individuals and society. Fin-de-siècle fiction writers Emile Zola and Guy de Maupassant responded to both Darwinism and feminism by highlighting

women characters that resist patriarchal expectations, act patriotically, and experience varying degrees of success in battling legal limitations, social conventions, economic circumstances, and wartime dangers. Sex differences and sexual selection would continue to concern feminist politics, evolutionary biology, and realist fictions. Demonstrating the influence of Darwin's scientific theories on feminism, this chapter traces the long history of concepts of sexual difference and sexual selection in different responses to *The Descent of Man*, including social Darwinism, eugenics, naturalist and New Woman fictions, and feminist theories that propose a fluid understanding of sex and gender superseding the earlier two-sex model (Butler, 2007: 136).

9.1 Sexual Selection and Feminist Responses

Descent extends earlier work about evolution and sexual difference, incorporating Darwin's (and others') observations and experiments regarding animal attraction, male combat, female choice, and courtship behavior. Although fascinated with hermaphroditic and polysexual species in plants, Darwin built his theory of sexual selection on a two-sex hierarchical system developed before the nineteenth century. Historian Thomas Laquer explains two-sex differentiation as stemming from human anatomical comparisons ("discoverable biological distinctions") that writers extend into other dimensions: "By 1800 ... Not only are the sexes different, they are different in every conceivable respect of body and soul, in every physical and moral aspect" (1987: 2). Historian Londa Schiebinger agrees that anatomical differences were "used in the eighteenth century to prescribe very different roles for men and women" and to determine women's lower rank in the social hierarchy (1987: 46). The two-sex paradigm prevailed in the nineteenth century as biologists and botanists investigated how organisms thrive or fail in specific environments, expanded their understanding of heredity and reproduction, and developed a normative sexual politics, according to Michel Foucault's insight (LaFleur, 2018: 3-8).

Darwin's accounts of sexual differences in *Descent* generally concern animals, not humans. His theory of sexual selection notes aesthetic aspects of sexual choice affecting reproductive outcomes, looking at male display and female choice in animals as related elements of sexual attraction leading to copulation and reproduction. Males fight or display charms so that females select them, but female choice based on aesthetics does not overcome sex inequality. Darwin identifies the male animal's superior strength and combativeness; he remarks on "The law of battle for possession of

females," noticing that females have rounder faces and bodies and a broader pelvis and are "the constant cause of war" (Darwin, 1981 [1871]: v. II, pt. II, 312, 323). Philosopher Elizabeth Grosz explains that Darwin's theory of "sexual selection privileges some males over other males (or less commonly some females over other females) not in the struggle for survival, but in gaining some advantages over other males in terms of sexual attractiveness and in the ability to transmit these advantages to their male, or male and female offspring" (Grosz, 2011: 124). Darwin notes that female animals choose males based on ornament or fitness but points to different factors among humans (money, power, status) that give men more leverage than women in marital arrangements. In this way, his theory of sexual selection aligns with patriarchal ideas of anthropologists of his era, as literary scholar Rosemary Jann argues (1994: 287).

Darwin posits that in some animal species "inequality between sexes might have been acquired through natural selection," although he regards such disparity as "a rarity" that "need not be considered" (Darwin, 1981 [1871]: v. II, pt. II, 312, 316). Instead, inequality, biological and cultural, is more apparent among humans. Men are taller, heavier, and stronger than women, and they have larger brows, more hair, and deeper and more powerful voices. Men are courageous, pugnacious, energetic, and have larger brains and beards. Darwin indicates women require more training to be raised to the level of men, whose "severe struggle in order to maintain themselves and their families ... will tend to keep up or even increase their mental powers, and, as a consequence, the present inequality between the sexes" (Darwin, 1981 [1871]: v. II, pt. II, 329). Pointing to consistent male superiority, he contrasts the two sexes: "The chief distinction in the intellectual powers of the two sexes is shewn by man attaining to a higher eminence, in whatever he takes up, than woman can attain - whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands" (Darwin, 1981 [1871]: v. II, pt. II, 327).

Historians have pointed to the social and political ramifications of Darwin's theories of natural and sexual selection on culture, and to the cultural influences on his theories. G. J. Barker-Benfield explains that owing partly to Darwin's *Origin*, "the reaction to women's rights was linked to the erosion of male identity" (2000: 206). Erika Milam looks forward: "Seeking to understand the sexual behavior of humans thus raises fundamental questions about who we are, from definitions of masculinity or femininity to the nature of choice" (2010: 168). Darwin recognized male biological, intellectual, and cultural advantages in choosing sexual partners, which affected opportunities for sexual reproduction. Rosemary

Jann explains that Darwin "treated male competition as vital to human progress and female dependency as crucial to the forging of human society. Whenever Darwin imagines our semihuman ancestors, he envisions a patriarchal family group in which the males are already choosing, controlling, and jealously guarding their mates" (1997: 152). For Darwin, courtship, marriage, and bearing children benefit from shared family resources and social stability, conditions marking a society as civilized and demanding women's deference to others' needs.

Darwin's theories about natural selection and sexual selection relied on information gleaned from his and others' direct experimentation on plants and animals, field reports from valued correspondents, his observations of family and acquaintances, their observations, and research reported by other scientists (Browne, 2002: 360–361). He corresponded with a remarkable range of people, including many women, from a variety of backgrounds. Biographer Janet Browne describes Darwin's irritation with Clémence Royer, who inserted eugenic ideas into her French translation of *Origin*, and with Frances Powers Cobbe, whose antivivisectionist advocacy to limit biological experimentation threatened scientific research and knowledge acquisition (Browne, 2002: 331–332, 422). Darwin shared the gender biases of Victorian men of his generation, but these anecdotal examples should not overshadow the fact that he respected women's talents.

Historian Evelleen Richards acknowledges that "the major obstacle in Darwin's way to female choice was less a lack of information than his acculturated presumption of the predominance of male sexual preference in sexual selection"; she connects his personal beliefs with his difficulty developing the theory of sexual selection and finds that despite his "difficulty in naturalizing female choice, he was well on his way to normalizing male aesthetic selection as a major determinant in the divergence of the human races" (2017: 332, 334). Literary critic Pearl Brilmyer argues that Darwin's reference to the peacock becoming "more powerful and intelligent than the peahen" is similar to how "man had over time become more powerful and intelligent than woman. Thus woman appears a less-developed man, her anatomy more childlike or 'primitive,' her mental qualities (such as intuition and imitation) harkening back, as Darwin phrased it, to 'a past and lower state of civilisation'" (2017: 21).

In Darwin's day, many questioned the supposed inferiority of women as universal or permanent. Historian Cynthia Russett references feminist social scientists who claimed that "the alleged sex differences lacked proof ... and ... were unlikely to be innate, but were probably the result of

social factors" (1989: 12). Brilmyer recognizes that women writers critiqued Darwin's comments about women's inferiority but did not reject his theories; instead they regarded his ideas as "an important touchstone for feminist activism and theory from the nineteenth century to today," particularly appreciating that cultural conditions evolve (2017: 19). She explains that, over time, "Darwin's understanding of matter as a fundamentally indeterminate and temporally conditioned phenomenon has been invoked by feminists to call into question biologically essentialist theories of sex and race, opening the door for the emergence of new, anti-essentialist accounts of the role of matter and the body in the human social world" (20). American women critics rejected being relegated to a "lesser status," as Russett argues, indicating that Antoinette Blackwell and Eliza Burt Gamble "did not denv the existence of innate differences themselves; indeed, they emphasized them," while regarding the sexes as having "equivalent strengths" (1989: 12). In The Sexes Throughout Nature, Blackwell offers a "critique of sexism in theories of evolution" and identifies the notion of women's inferiority advanced by Herbert Spencer and Darwin as "decided on both sides by inferences drawn from yet untested data" (1875: 12). Historian Kimberly Hamlin points out, "In contrast to natural selection, sexual selection suggested that human reproductive choices, conscious or otherwise, significantly shaped evolutionary development and could lead to vast social change" (2014: 152). Blackwell describes how women could work outside the home if females provided direct sustenance to young offspring and males would in turn prepare sustenance for female partners. Such reconfiguring of gender roles would relieve women of some domestic duties and allow them time for intellectual work.

Eliza Burt Gamble's *The Sexes in History and Science* (1916), a revision of *The Evolution of Woman* (1894), responds to Darwin's evolutionary theory in claiming that earlier societies offer examples of equality and that civilization makes women economically dependent on men. Science studies scholar Stacy Alaimo claims that *The Evolution of Woman* "depicts an ontology that radically departs from entrenched cultural notions of separate male and female principles and domains" (2013: 393). Gamble criticizes patriarchal notions of women's inferiority embedded in some scientific works: "So deeply entrenched has become the idea of women's subjection that it is impossible for many male writers to contemplate a state of society in which women are not dominated and controlled by men," for "all the avenues to success have for thousands of years been controlled and wholly manipulated by men while the activities of women have been distorted and repressed" (Gamble, 1916: 135, 79). Brilmyer sees Gamble's *Evolution of Woman* as endorsing female superiority in claiming

"that woman is actually more highly evolved than man," for "Darwin's observations of animals showed that males were driven in their decision-making by sexual desire. Females, on the other hand, were more intellectually motivated and thus capable of greater thought and restraint" (Brilmyer, 2017: 22). If changing circumstances could increase women's status: "as Darwin claimed, 'human nature' itself is not a fixed constant but something constantly changing, then, some of Darwin's readers argued, there can be nothing natural or permanent about the subordinate status of women in society" (19). Exemplifying "the transformable quality of all matter," Brilmyer regards Darwin as recognizing "the two sexes had emerged over time in response to environmental shifts" (20).

Grosz considers the mechanisms of change identified in Darwin's theory: sexual choice related to beauty and aesthetics motivate sexual congress and affect reproductive outcomes. For her, "sexual selection ... may exert a contrary force to the pure principle of survival" (Grosz, 2004: 75). She disagrees with "feminist egalitarians who are wary of biological discourses," for "it is not clear how much Darwin himself succumbed to such assumptions" concerning "relations of superiority and inferiority between sexes and races" (Grosz, 2004: 71–72). Darwin's belief in sexual difference did not preclude his accepting "that woman can, in addition to her skills of procreation and nurturance become as educated, as civilized, and developed as man" (Grosz, 2011: 156). Darwinian feminists acknowledged that Darwin's account of sexual selection highlighted troubling social disparities between the sexes but argued that changing social circumstances would adjust educational and professional opportunities for women.

9.2 Darwinism, Eugenics, and the New Woman

Havelock Ellis also anticipated that social evolution would lead to sex equity (Ellis, 1926: 524). Yet Darwin's ideas about sexual selection attracted criticism from Alfred Russel Wallace, who in the 1870s objected to Darwin's idea that animals demonstrate aesthetic preferences, only to later retract this criticism. Richards characterizes Darwinism as being "in decline" at the end of the nineteenth century for "natural and sexual selection were in crisis" and "female choice was on the loose, dogged by its associations with the radical New Women, scandalous free love, secularism, and socialism" (2017: 515). In the United States, suffragists campaigned for voting rights, and Darwinian feminists, including Charlotte Perkins Gilman, published progressive essays and fictions illustrating educational, employment, and entrepreneurial opportunities for women.

Political scientist Diane Paul points to contradictory uses of Darwin's ideas, which were "invoked in support of the claim women's place was in the home, not the school or the workplace," and also used to support radical arguments of those who "argued that the continued subjugation of women thwarts sexual selection and thus endangers the future of the race" (2003: 226). Identifying eugenics as an outgrowth of social Darwinism, "an essentially conservative ideology and social movement, which appropriated the theory of evolution by natural selection to support unrestricted laissez-faire at home and colonialism abroad," Paul cites historian Richard Hofstadter's definition of social Darwinism as a belief that "the best competitors in a competitive situation would win," a principle affecting perceptions of race, class, and gender (Paul, 2003: 224). In 1840s Britain and Europe, fears of human degeneration accompanied "social turmoil and bitter class conflict" along with reports of "pauperism, violence, and crime" blamed on "rampant disease and disorder" (Paul, 1995: 22). Social Darwinists in the late nineteenth- and early twentiethcentury feared deviance associated with immigrants and the lower classes. Historian Angelique Richardson identifies what she refers to as "eugenic feminism" (2003: 34-35); she argues that this was a repressive and authoritarian aspect of fin-de-siècle thought which claimed that sexual selection could bring about changes in the class make-up of British society. (2003: 34-35). These feminist eugenicists believed in sexual selection's powers to shape human heredity and evolution.

In this period, dramas, news accounts, and fictions presented new models of behavior for women and men of different classes and outlooks. The "New Woman," a phrase first employed in 1894 in Britain, was regarded, as literary scholar Sally Ledger explains, as "wild" and as associated with free love and socialism (1997: 12, 19). Ledger references periodical articles linking the New Woman to proposed reforms aimed to enhance women's lives. Popular New Woman novelist Eliza Hepworth Dixon regarded women's reduced rate of marriage as the result of her having better education and employment, and to the "gradual acceptance of unescorted single women in towns and cities" (Ledger, 1997: 22). M. Eastwood, in an 1894 article, applied "Socio-Darwinistic principles" in characterizing "the New Woman as a product of evolution, as a 'higher' type" (Ledger, 1997: 23). New Woman writers experimented with narrative forms, reworking the realist genre to convey reform arguments about sexual and social freedom, and connecting evolution and feminism within discourses referencing sexuality and reproduction as subjects affecting women's social, economic, and political prospects (Ledger, 1997: 184, 194).

Henrik Ibsen incorporated evolutionary ideas related to heredity, randomness, and lack of teleology in his dramas and provided audiences around the world with powerful examples of empowered, feminist women seeking independent lives (Aarseth, 2005: 3; Shepherd-Barr, 2017: 63–67). Considering an 1894 Daily Telegraph column questioning the value of marriage and many readers' responses to it, Margaret Gullette assessed the broad impact of this newspaper debate over whether the institution of marriage was a failure for men and women: "Women who didn't go see Ibsen's play or buy literary journals or George Gissing's *The Odd Women*, who didn't think of themselves as culturally advanced, could be caught up in this debate" (Ledger, 1997: 22). Similarly, literary critic Gillian Beer regards novels by George Eliot and Thomas Hardy as responses to Darwin's theory of sexual selection in reexamining "the role of women, whose progenitive powers physically transmitted the race" (2009b: 196). Realist and naturalist fictions highlighted dimensions of sexual selection and revised the novel's traditional treatment of relations between women and men. dispensing with "courtship, sensibility, the making of matches, women's beauty, men's dominance, inheritance in all its forms," which "became charged with new difficulty in the wake of publication of The Descent of Man" (Beer, 2009b: 198). Women characters manage sexual desire and reproduction while navigating, for better or worse, Victorian conventions demanding that sexual activity should be associated strictly with maternity (Ledger, 1997: 153). The sexuality of Hardy's characters Tess in Tess of the D'Urbervilles (1891) and Sue in Jude the Obscure (1895) transgresses social norms; these women are punished for straying from patriarchal expectations. Beer regards Hardy's depictions of natural laws and fecundity as "beyond the control of humankind" in contrast with Emile Zola's optimistic representations of female fecundity as ensuring progress (Beer, 2009b: 223).

9.3 Darwinism, French Fiction, and Womanly Power

Zola believed that literature could influence human behavior (Colatrella, 2011: 79–86). His fictions illustrate environmental forces and cultural attitudes affecting women's fortunes, and critics have noticed a nascent feminism in his empowered female characters. His diverse representations of women track with the up-and-down fortunes of French feminists, who, according to historian Claire Moses, "were concerned with winning political rights" in the nineteenth century, while "the majority of French men and women accepted the centuries-old patriarchal system that

regulated sexual roles and rights" (1984: 1). Pierre-Joseph Proudhon and Jules Michelet endorsed conservative ideas about women's roles, although feminists promoted women's education and work opportunities to enable economic sufficiency, reduce poverty, and eliminate prostitution (Moses, 1984: 161). Historian Karen Offen explains French "familial feminism" as aiming "not to overthrow the economic basis of patriarchy but to reorganize the existing society to the greater advantage of women," noting French theatergoers' criticism of Nora, deemed suspicious for abandoning her children in Ibsen's A Doll's House (1984: 653). Historian Marilyn Boxer points to feminist socialist journalist Aline Vallette, who linked "her politics with evolutionary biology," promoted "a theory called 'sexualism' that promised to reorder societal priorities in favor of mothers and children," and "represented hope for that more child- and woman-friendly society of the future" (Boxer, 2012: 1, 12). French scholar Chantal Bertrand-Jennings understands ambivalences in Zola's fictions to be inspired by Darwinism, for these texts illustrated "beliefs, fears and anxieties concerning women and femininity ... of his own time and to a lesser degree of our own era," while also outlining new possibilities for women (1984: 26).

According to philosopher and biologist Jean Gayon, French scientists, unlike their counterparts in Britain and the United States, "resisted the penetration of Darwin's evolutionary ideas" (Gayon, 2013; 243). Scientists Claude Bernard and Louis Pasteur "were explicitly antagonistic to any biological research that aimed at explaining the phenomena of life in terms of origins," which they thought speculative, and "no significant French biologist before 1900 incorporated Darwin's major hypotheses into an active research program" (Gayon, 2013: 244-248). Nevertheless, Darwin's ideas did enter popular discourse and the social sciences in France, for, as historian Linda Clark explains, despite Jean-Baptiste Lamarck's sway over French biologists, others took note of "the entry of the Darwinian catchwords 'struggle for life' (lutte pour la vie or concurrence vitale) or 'natural selection' (sélection naturelle) into either journals of high culture or the daily press" (Clark, 1981: D1025). Literary scholar Rae Beth Gordon points to Darwin's 1878 election as a correspondent member of the French Academy of Science as leading to Darwinism becoming "one of the most popular subjects of conversation in France" (2009: 60). French anthropologists in the period adopted nuanced dimensions of social Darwinism referencing eugenics, and sociologist Gustave Le Bon used Darwinian terms to describe war in 1889 in Les Premières Civilisations: "The struggle for existence is the natural and permanent state of human races as well as animal species" (Clark, 1981: D1037-D1038).

Zola embedded references to Darwinism and to social Darwinism in his fictions and his literary manifestos about naturalism, describing his scientific study in literature in *The Experimental Novel* (1880), in which he indicated a novelist should observe and analyze social milieux much as a doctor studies human anatomy (Colatrella, 2016; Pagano, 1999: 48). He characterized his twenty-volume Rougon-Macquart series as detailing "the natural and social history of a family under the Second Empire" and claimed the first novel "should be scientifically entitled 'The Origin'" (Zola, 1871). Literary critic David Baguley remarks "Zola wrote very much in the spirit of Darwin's heritage, never a disciple but undoubtedly a 'darwinisant'" (2011: 211–212.)

Zola and his contemporary Guy de Maupassant reference hereditary differences and social competition between individuals of enemy nations in terms familiar to social Darwinists. The anthology Les Soirées de Médan (Zola, 1880) includes Zola's "The Attack on the Mill" and Maupassant's "Boule de Suif" as antiwar responses to the Franco-Prussian War (1870–1871). A "naturalist manifesto," the collection describes how selfish ambitions of French political leaders caused an imperial nation to lose a war and descend into chaos, and the stories underscore burdens placed on women (Zola, 1984: 356). Zola and Maupassant acknowledge the high costs of the war; they represent the failings of French soldiers who can only dream of Napoleon's heroic victories and contrast patriotic French women who confront the enemy. Maupassant's fictions feature courageous prostitutes whose integrity contrasts with the greed and self-interest of aristocratic and bourgeois French citizens. "Boule de Suif" identifies the costs of the German occupation during which "the conquerors demanded money" and subjugation, prompting "obscure acts of vengeance," "savage but justifiable, unknown acts of heroism" committed by French citizens on uniformed Germans (Maupassant, 2015: 189). Fellow passengers prevail upon a prostitute to accept the forced sexual advances of the officer who blocks their travel; however, the prostitute's generous self-sacrifice gains her no respect, as the story ends with those she protected scorning her. In "Mademoiselle Fifi," an enemy officer annoys the prostitute assigned as his dinner companion by blowing smoke in her mouth, pinching, and biting her, acting from "a vicious desire to ravage her" (Maupassant, 2015: 122). After the German officer insults all men and women in France, the prostitute stabs him, flees the scene, and finds protection by hiding in a church.

Characterizations, settings, and plots in these fictions reconfigure patriarchal assumptions about man's superiority and woman's inferiority to acknowledge the latter's courage and bravery and to appreciate that future

gender equality could serve national interests. Unprepared male French commanders and soldiers in The Debacle mismanage the war, a failure represented by the soldier Maurice's thoughts: "The degeneration of his race, which explained how France, victorious with the grandfathers, could be beaten in the time of their grandsons, weighed down on his heart like a hereditary disease getting steadily worse and leading to inevitable destruction when the appointed hour came France was dead" (Zola, 1972: 322). Many female ordinary citizens in the novel play heroic, familial feminist roles during the war. Maurice's twin sister Henriette bravely scurries through fighting to look for her husband Weiss, finding him in front of a Prussian firing squad. Unable to save him, she asks the enemy to kill her too. After they refuse, Henriette spends the rest of the war compassionately nursing French and enemy soldiers. Seduced by the Prussian spy Goliath after her boyfriend Honoré joins the army, Silvine gives birth to the spy's son but remains devoted to Honoré even after his death and travels through grotesque scenes of dead soldiers and devastated villages to retrieve his body. Goliath's threats against her and the child provoke Silvine to arrange the spy's brutal murder by French brigands. Although constrained by the occupation, women navigate around the enemy's authority. Henriette's married friend Gilberte flirts with the enemy Prussian captain billeting in her family's home so that he will release Henriette's uncle from jail. Gilberte's straitlaced mother-in-law ignores Gilberte's love affair with a young Frenchman because she is relieved that her son's wife maintains an unconsummated flirtation with the Prussian captain, a relationship that allows her to seek favors for the townspeople.

Zola and Maupassant represent Frenchwomen who retrieve their partners' corpses, engage in relationships with the enemy to protect fellow citizens, and act as patriotic saboteurs who employ feminine ingenuity, flirting, and resistance to survive, rescue, and protect others. Fictional battlefields and bedrooms become competitive environments testing sexual differences and sexual relationships. Circumstances of war press individual women to cast off deferential submission and to adopt heroic, patriotic roles to preserve family and country. Female characters adapt to wartime circumstances, retaining femininity as they exhibit courage, intelligence, and generosity that belie assumptions about women's supposed inferiority. Their intuitions, capacities, and actions are inspirational: they rely on their knowledge, intelligence, and networks to navigate wartime hazards. Female characters employ deceit to protect loved ones and show compassion for the weak. Their stories demonstrate that social circumstances and cultural values concerning the appropriate roles for women change over

time, requiring individuals to summon whatever resources they have to protect themselves, their families, and their nation.

9.4 Conclusion

Darwin's theories of natural selection and sexual selection provoked feminist responses and shaped how naturalist and realist fictions applied, reconfigured, or resisted what social Darwinism had to say about sexual attraction and reproduction and women's status in relation to men's. Scholarship about Darwinism and feminism aligns principles of sexual difference and sexual selection with shifting cultural formations affecting gender equality. Alaimo praises Grosz, who "has asserted the value of Darwinian theory for feminism as well as for the humanities more generally, emphasizing this 'new and surprising conception of life' as 'dynamic, collective, change'" (Alaimo, 2013: 391). Brilmyer notes Simone de Beauvoir's claim in The Second Sex (1949: 301) that "one is not born, but rather becomes, a woman"; she resists the idea of "sex as a rigid, stable biological phenomenon, emphasizing instead the socially constructed nature of sexual subjectivity" (Brilmyer, 2017: 24). Species transform over time, according to evolutionary theory, and prospects for gender equity also evolve depending on social context.

As a social construct, gender fluctuates depending on individual behaviors and social conventions. From early modern to recent times, observed anatomical differences have structured biological theories and social roles, but anatomy does not determine social destiny. Judith Butler's *Gender Trouble* (2007) asserts "the fluid nature of gender": "what appears to be a biologically given binary is actually a dynamic set of social behaviors that, taken together, produce the appearance of a rigid or stable sex" (Brilmyer, 2017: 24). Human beings adapt our bodies, and we build and reconfigure our environments. Individuals manage significant bodily transformations, including augmentations and other surgeries, as well as hormone and other drug treatments undertaken for personal and medical reasons. Such adjustments produce a variety of bodies, sexualities, and sexual orientations, and demonstrate gender fluidity.

Darwin was fascinated with hermaphroditic plants, including those that adopt a sex, an action indicating that sex distinctions are not fixed. According to John Pannell, Darwin appreciated that there might be evolutionary advantages for plants being male/female or being hermaphrodite: "He was puzzled about why hermaphroditism should ever have evolved towards separate sexes but realised that hermaphrodites might benefit by

becoming specialists in one sexual function or the other" (Pannell, 2009). Humans manage their embodiment, choose their sex, and design sensuous environmental experiences. Eva Hayward draws on Darwin's account of the aesthetics of sexual selection in "Spider City Sex," which contemplates how environment matters to those changing sex. Hayward discusses "the conditions of transsexual transitioning, or trans-becoming, what makes transsexuality possible," reminds us that "the animal has always been present" in transitioning, and finds a powerful symbol of a self-architect in Louise Bourgeois's bronze Crouching Spider sculpture overseeing San Francisco's Embarcadero (Hayward, 2010: 226, 228). Hayward draws on Darwin's ideas about the aesthetics of sexual selection to link organism, environment, and creativity in a discursive nexus connecting spiders, streets, and trans-selves. Instead of dichotomies, binaries, and hierarchies of a Linnean classification system or a two-sex paradigm, we have a new version of the entangled bank: entanglements linking transitioning and transitioned bodies mobilizing in urban networks. This scene of transforming, with its variant organisms and environments, is an exuberant image of what literary critic George Levine terms "the extraordinary richness and diversity of ... life" represented by Darwin (Levine, 2011: 220).

Note

I For further discussion of the relation between Darwin, later feminisms, and the interpretation of gender, see Chapter 14 by Angelique Richardson.