

Domesticating the Child: Maternal Responses to Hereditary Discourse in *The Tenant of Wildfell Hall*

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Abstract

This article examines the early nineteenth century connections between human, animal and plant by placing Erasmus Darwin's *The Botanic Garden* (1791) and *The Temple of Nature* (1803) in conversation with Anne Brontë's *The Tenant of Wildfell Hall* (1848). I argue that the Romantic versions of heredity described in Darwin's poetry tended to reinscribe traditional gender roles. Brontë's *Tenant*, on the other hand, revises earlier notions of heredity and motherhood via Helen Huntingdon, the wife of an alcoholic who tries to prevent her son from activating his genetic taint. By reconfiguring the supposedly natural connections between patriarchal inheritance of the land on the one hand and biological traits on the other, and by reclaiming and reinscribing popular metaphors of breeding, Anne Brontë's female protagonist creates and attempts to implement a maternalist version of heredity while remaining entrenched within the nineteenth-century cult of motherhood. Whereas the Romantic and romanticized poetry of Erasmus Darwin and his contemporaries' approach to natural history bestowed human characteristics on plants in order to make their reproduction more comprehensible, *The Tenant of Wildfell Hall* does the opposite. Without a satisfactory framework in place to express the anxieties surrounding human heredity, Brontë turns the tables on the metaphor and applies the language of breeding and agriculture to a human child. In doing so, she creates an alternate version of heredity based on maternal strength and power rather than one predicated upon patriarchal structures of kinship and economic inheritance.

How did early nineteenth-century thinkers imagine the relationship between heredity, embryology and motherhood? What conceptual models were necessary in order to translate between inheritance in plants, animals, and humans? I answer these questions by placing Erasmus Darwin's *The Botanic Garden* (1791) and *The Temple of Nature* (1803) in conversation with Anne Brontë's *The Tenant of Wildfell Hall* (1848). I argue that the Romantic versions of heredity described in Darwin's poetry tended to reinscribe traditional gender roles. Brontë's *Tenant*, on the other hand, revises earlier notions of heredity and motherhood via Helen Huntingdon, the

wife of an alcoholic who tries to prevent her son from activating his genetic taint. By reconfiguring the supposedly natural connections between patriarchal inheritance of the land on the one hand and biological traits on the other, and by reclaiming and reinscribing popular metaphors of breeding, Anne Brontë's female protagonist creates and attempts to implement a maternalist version of heredity while remaining entrenched within the Victorian cult of motherhood. Whereas the Romantic and romanticized poetry of Erasmus Darwin and his contemporaries' approach to natural history bestowed human characteristics on plants in order to make their reproduction more comprehensible, *The Tenant of Wildfell Hall* does the opposite. Without a satisfactory framework in place to express the anxieties surrounding human heredity, Brontë turns the tables on the metaphor and applies the language of breeding and agriculture to a human child. In doing so, she creates an alternate version of heredity based on maternal strength and power rather than one predicated upon patriarchal structures of kinship and economic inheritance.

In the first half of the nineteenth century, nature and nurture were far more fluid than we usually imagine. Even as biological and environmental influences could and often were separated clearly, the line dividing the two was often blurry enough to indicate that the rigidity of the separation between gene and environment was a construct that would only begin to crystallize later in the century, and perhaps only take full root in the following one.¹ The Romantic conversation about heredity developed along the axis of education and "nurture," a term that has become shorthand in today's parlance for anything which shapes the individual's development into personhood externally, from outside the body. I want to shift this definition slightly by placing "nurture" in its early nineteenth-century context. The OED says that nurture is "The bringing up, rearing, or training of a person or animal, esp. a child; tutelage; care" or "the fact of

having been brought up in a particular social environment (in later use esp. as a factor influencing or determining personality, as opposed to a person's innate characteristics)" (OED). Nurture has always been used to describe a process of "breeding:" to rear or educate, to "foster" or "cultivate." For its part, "cultivation" is only used in the sense of education figuratively; its literal meaning relates to the "the production or raising of a 'crop' of any kind" or to the medium in which that plant or animal species is actually raised (OED). Cultivation, like nurture, always refers on some level to human effort as applied to, say, a field of crops or a herd of cattle. However, in many of these cases, this human labor is the process of breeding or of domestication over many generations of a single species or subspecies. To cultivate one's mind is a metaphor of maturation over a single lifetime; to cultivate a plant, or a variety of a plant, is to breed it, to monitor and interfere with the genetic processes that literally shape the internal and external characteristics of that species.

Jenny Davidson's excellent recent work *Breeding: A Partial History of the Eighteenth Century* (2008) situates this process earlier. Davidson staunchly claims that "In general, it has to be said that the eighteenth century was a period of belief in environmental culture. Heredity – heredity as a *concept* – really came into its own during the nineteenth century, and even the terminology available to eighteenth-century writers made it difficult to be precise about hereditary elements [...]" (93). Though the ideas of "prophets of the hereditary" poke through the mist here and there, she says, this is a misreading of the general trend in period thinking; these ideas "sometimes hold more interest for modern readers than they did for contemporaries" (88). Nonetheless, the claim that nurture always trumps nature before the turn of the century may be something of an exaggeration, according to the detailed work of Harriet Ritvo and Nicholas Russell on pedigree practices in contemporary agriculture. My reading suggests that there is

abundant evidence that the debate between heredity and environment was alive and well long before the eighteenth century. Reading Darwin and Brontë against one another allows us to uncover the gendered nuances of that conversation in surprising ways.

Although Erasmus Darwin and Anne Brontë were several generations apart, they shared a surprising history. Darwin was a wealthy, influential scientist who was formally educated at Cambridge and Edinburgh.² His accomplishments include a translation of the scientific works of Swedish taxonomist Carl Linnaeus from Latin to English; he founded the Lichfield Botanical Society, and was a member of the Lunar Society of Birmingham, working with top philosophers, artists and naturalists of his day: Josiah Wedgwood, Joseph Priestley, and James Watt, to name a few.³ He also watched his first wife die of alcoholism and openly took at least one mistress by whom he had two daughters, the “Misses Parker,” for whom he eventually wrote a treatise on female education. Of course, Erasmus Darwin is best known today not for his own tremendous achievements but as the grandfather of Charles – even as the younger Darwin’s work was heavily influenced by the elder’s early theories of evolution and heredity.

Anne Brontë, on the other hand, was a provincial parson’s daughter in a small Yorkshire town. Like Erasmus Darwin, she dwells in the shadows of her more famous family members, sisters Emily and Charlotte. Unlike Darwin, Anne Brontë had little access to formal education, aside from lessons with her sisters at home and several years at the school where Charlotte taught. She did, however, have at her disposal her father’s rich library, including a number of contemporary philosophers and natural historians, along with the various circulating libraries in and around Keighley, neighbors’ and relatives’ personal libraries, and her father’s periodical subscriptions.⁴ Far from wealthy, Brontë worked as a governess until forced to leave her situation because of her brother’s drinking problem and scandalous affair with the mistress of the house.

In spite of the vast social differences between an educated man of the world and a small-town parson's daughter, Darwin and Brontë shared a remarkable number of common interests and concerns. Darwin had to come to terms with his wife's alcoholism and his own struggles with gout, often linked to alcohol consumption, while Brontë watched her brother Branwell self-destruct from the same disease; both were pro-temperance as a result. Both were very much interested in theories of education: Darwin at least in part because of the boom of late-century literature about education and because of his semi-acknowledged daughters' boarding school, and Brontë as an educator and governess herself. Most importantly for this argument, both displayed a keen interest in natural history. Though Brontë is usually considered the family's socially-conscious, hard-nosed realist, the family book collections reveal her hobby of recreating drawings from illustrated collections in her father's library – a hobby, I argue, that roots itself at the foundations of *Wildfell Hall*.⁵ Stylistically and practically, these two figures may seem like rather odd bedfellows. But their interests in natural history and, perhaps more importantly, their own personal connections to alcoholism lead to a mutual concern with questions of heredity and to a body of work that clearly references the debate between nature and nurture that was beginning to take shape during the early years of the nineteenth century.

There were relatively few major advances in thinking about biological inheritance during the first half of the nineteenth century, and none of the moments of solitary genius upon which popular narratives of science tend to draw. A far cry from the supposedly epiphanic discoveries of Darwin and Mendel, most of the late Romantic and early Victorian thinkers were still relying on models established decades prior. This is not to say, however, that debates on mechanisms of heredity were not alive and well; indeed, the lack of solid evidence or even a single dominant theory is part of what made questions of identity and character so alluring - and frustrating - to

nineteenth-century novelists. Certainly the early eighteenth-century works of Carl von Linnæus, translated for an English audience by Darwin and the Lichfield society in 1783, would have formed an important and still much-respected component of a naturalists' thinking about heritability at the turn of the century. Though Linnæus imagined plant reproduction as human-like and titillating, his idyllic and eroticized system of observation found itself on far shakier ground when it came to human reproduction. Preformationists of the early eighteenth century believed that the fertilized (and for some, the unfertilized) embryo already contained all the information for the individual in miniature; development (also called, confusingly, "evolution") was simply a process of unfolding and/or expansion. As Buffon noted, this theory assumes an infinite progression all the way back through history – since an embryo would also have to contain any future children it might bear – and wouldn't allow for the possibility of change or improvement of the human race (Vol II, 26). Rather, Buffon argued, living matter contains tiny organic particles which are never fully destroyed. Epigenesists, on the other hand, believed that as the embryo developed during its gestation, it passed through stages resembling the less complicated species on the chain of being to achieve, in the end, the more technically complicated status of the human. A heritable system with contributions from both parents could not be logically possible without the basis of epigenetic thought. Outside the physiological logic of resemblance, many theorists found that environmental factors still had a role to play in theories of embryonic development. The fetus in embryo was thought to be susceptible to any number of influences during gestation, including the emotions or sensations of the mother. Later on in the century, Lamarck's theory of the heredity of acquired characteristics added a decisive shift in thinking about identity and genetics in that it suggested the possibility of heritable changes *outside* the womb, once the embryo had become a person at any stage of growth or development:

for Lamarck, habit sometimes but not always resulted in changes to the offspring of the individual.

Beyond these conversations about the embryo and fertilization, it was far more typical for naturalists in turn of the century Europe to think about heredity in terms of plants and animals rather than in terms of the human, in no small part because so much more was known about systems of breeding.⁶ Like Gilbert Markham's, the livelihood of a nation of farmers depended upon a more or less accurate way to predict traits produced by crossing varieties of stock or crops. As Nicholas Russell notes, "This confusion between the inherited and the environmentally contributed worth of an animal has always made breeding a tricky procedure" (11). Russell argues that breeders downplayed the role of heredity in favor of environment, which was both more easily controlled and easier to predict. That there was a hereditary factor in breeding, however, and that farmers recognized the importance of this factor, is undeniable, as the abundance of siring charts popular among breeders of cattle, sheep and horses demonstrates. Whereas the sexual processes of animal reproduction were far more akin to those of humans, it was more difficult to "see" the direct hereditary line of a particular plant – hence the highly romanticized and fanciful descriptions of plant reproduction described by naturalists like Darwin.

The aptly-titled realm of husbandry all too often removed the realm of reproduction from a gender-balanced world to one ordered and controlled by men. Farmers like Brontë's Markham depended on reliable mechanisms of breeding for their economic well-being – but they also relied on women's bodies and their possibilities for sexual reproduction for their emotional well-being. An easy correlation between internal makeup and external traits meant that men need not rely on a woman's word to determine paternity, but that easy correlation proved all too elusive for scientists and farmers alike. What Russell and Davidson both fail to recognize is that breeding

practices in the agricultural world also functioned as power practices in the gendered world of the human family. In spite of the attempts by Linnaeus to draw direct analogies between plant reproduction and animal (and therefore human reproduction), the world of plants remained more guarded, less obviously sexual, and therefore a powerful place to explore how environment and sex could *both* influence the makeup of internal and external characteristics.⁷ For Darwin and his contemporaries, plant reproduction put females into the mythologized role of nurturer but downplayed their efficacy as hereditary agents – a role Brontë would both embrace and revise.

I. Darwinian Geometries: On Parental Contributions to Offspring and the ‘Golden Chains’ of Society

Though critics have focused mainly on Erasmus Darwin’s *The Loves of the Plants* (1789), I will focus instead on two of Darwin’s lesser-known works, pieces in which he explicitly connects the plant and animal world to that of human society: the first part of *The Botanic Garden*, “The Economy of Vegetation,” and *The Temple of Nature: Or, the Origin of Society*. Darwin’s work comprises a masterly synthesis of contemporary scientific research and fanciful embroidery. Not only does Darwin help his readers to link allegory and naturalism, but also the Linnaean kingdoms of animal, plant and human organisms. A contemporary review complained that “instead of copying from the great volume of Nature which now lies open to our view [...Darwin] affects to disclose, with all the confidence of an observer, an imaginary order and progress of things” (492).⁸ To paint fanciful pictures of flowers as upper-class ladies is one thing – but to claim factual connections outside the realm of metaphor between asexual creatures and humans is distinctly more uncomfortable.

Like his contemporaries, Darwin relied extensively on metaphors about and descriptions of the birth process and embryology to describe the birth of the world. Plants, as Darwin never seems to tire of reminding his readers, pattern the known world; they also give birth, feed and clothe their young – and, in an earlier work, we learn that plants even have ideas.⁹ Though he imagines the plant world as a highly sexual one charged with the gendered and suggestive language of pregnancy (“vaulted womb”) and sensuality (“sweet juices,” “downy hair”), the reality, particularly in this first half of the poem, is far more gruesome than that of the visions of courtly dancing couples in the poem’s second half, and more akin to the “eat or be eaten!” version of nature Darwin had described in *Phytologia*.¹⁰ Our understanding of nature relies on our ability to read ourselves – our habits, our bodies, our predispositions – onto it, but this also means that the human is perhaps too close for comfort to the animality and prodigality of the natural condition. In his most mature work, Darwin claims that what really separates humans from our animal and botanical cousins is, so to speak, our roots: a biological, not analogical, connection.

In *The Botanic Garden*, Darwin imagines the embryological development – of plants, at least – to be preformationist rather than epigenetic.

Lo! On each SEED within its slender rind

Life’s golden threads in endless circles wind;

Maze within maze the lucid webs are roll’d,

And, as they burst, the living flame unfold. (IV.381-4)

Seeds contain the webs of “life’s golden threads,” the filaments that connect matter with matter but also generation with generation. A later footnote on “Vegetable Impregnation,” however, seems to contradict this in favor of a view more traditionally associated with epigenesis. Citing a

study by Spalanzani on the properties of semen in dogs and frogs, Darwin notes that both parents contribute matter to the embryo – making pure preformationism logically impossible: “A conjunction however of both the male and female influence seems necessary for the purpose of reproduction throughout all organized nature,” both plants and animals (footnote XXXVIII). Whereas Buffon had imagined the “organic particles” of male and female seminal fluids uniting with the most plentiful particle to determine the sex of the offspring, Darwin theorized that each parent had a particular role to play in the process of reproduction: from the male, the “speck of animation” in the egg or the “heart” of the seed, and from the female, the “nidus” or “nest for reception,” and the “nutritive material” from the womb (*Phytologia* 19).¹¹ This narrative remains no less gender-normative than those in *The Loves of the Plants*; indeed, an understanding of this narrative is essential to understanding Brontë’s *Tenants*. Women cannot help but provide a nurturing environment for offspring, Darwin says; they have a biological mandate that operates at the level of plants, animals – and humans.

In following with this later, anti-preformationist logic, Canto II of *The Temple of Nature* compares the processes of sexual and asexual reproduction, enabling him to continue the logic of active masculine influences and downplaying the biological role of women in favor of “nurture”. Asexuality logically precedes sexual relationships on the chain of being, he says, connecting the process specifically to the sexualized plant beings of *The Loves of the Plants*: once “the living Ens” or essences of pure being reproduce, the “sires” produce “sons” and both are “unknown to sex” (II.64-5). The process of embryonic development Darwin describes here once again looks epigenesist:

New buds and bulbs the living fibre shoots

On lengthening branches, and protruding roots;

Or on the father's side from bursting glands
The adhering young its nascent form expands;
In branching lines the parent-trunk adorns,
And parts ere long like plumage, hairs, or horns. (II.65-70)

The young plant "shoots from paternal roots" and fails to develop sexual organs: "No seed-born offspring lives by female love" (II.72-4). Asexuality is presented here as a process entirely divorced from the female, but not from the phallic "parent trunk," "plumage" and "horns" (which Darwin's grandson would argue, decades later, were so central to the process of sexual selection).

While these with appetencies nice invite,
And those with apt propensities unite;
New embryo fibrils round the trunk combine
With quick embrace, and form the living line" (II.77-80).

The "Parturient Sires" Darwin describes here are pictured in overwhelmingly male terms, even in spite of their being "unknown to sex" (II.89-91). Indeed, the accompanying footnote describes asexual reproduction as "propagated by the father only, not requiring a cradle, or nutriment, or oxygenation from a mother" (35).¹²

But there is, in fact, a female presence in this world: Storge, the emblematic principle of parental love, produces "soft affections [...] along the line" of births; and

On angel-wings the Goddess Form descends;
Round her fond broods her silver arms she bends;
White streams of milk her tumid bosom swell,
And on her lips ambrosial kisses dwell" (II.95-98).

Ultimately Darwin's universe cannot operate outside the paradigm of traditional heterosexual gender and relationship dynamics. Organisms without sexual organs are defined as male. But a benevolently female Mother Nature still stands behind the scenes as a figure of fertility and maternity. The mother's power, Part III of Canto II tells us, is to "nourish" and to "defend," as well as to provide "nutrient streams" (II.104-5) – but the role of Mother Nature in particular, and mothers in general, is to provide variation to the species, as opposed to the homosexual/homosocial asexual process, in which "Birth after birth the line unchanging runs, / And fathers live transmitted in their sons" (II.107-8). What finally tips the balance towards the development of sexual reproduction, Darwin claims, is desire, "the fond wish to form a softer sex," "the potent wish in the productive hour" which "calls to its aid Imagination's power" in order to "interweave at length / The mother's beauty with the father's strength" (II.113-24). The mother's love of her offspring is so instinctual and so rooted in the body that it actually gives the mother a necessary pleasure that is irreplaceable.¹³

Without the mother's protection, without the nurture of her womb and bosom, the organism – and indeed, the entire species – is left vulnerable to degeneration: without her, Darwin writes,

The clime unkind, or noxious food instills

To embryon nerves hereditary ills;

The feeble births acquired diseases chase,

Till Death extinguish the degenerate race. (II.163-6).

Mixing and variation is the key to a healthy species; sexual reproduction is essential to this healthy variation. Since asexual reproduction offers only a straight transmission from father to son, the dangers of "a waning lineage, verging to decay" are just as prominent:

E'en where unmix'd the breed, in sexual tribes

Parental taints the nascent babe imbibes;

Eternal war the Gout and Mania wage

With fierce uncheck'd hereditary rage (II.177-80).

As John Waller notes, and as Darwin had good reason to know, being a sufferer himself, gout, mania, scrofula and consumption were all thought to be highly hereditary and particularly prominent in aristocratic families with unvaried lines.¹⁴ Though nineteenth-century scholars often associate fears of degeneration with the end of the century, these same fears were alive and well in the late eighteenth century. Even if they lacked the technical apparatus to describe the detrimental effects of class inbreeding, there was a clear recognition that certain diseases “belonged to” – and therefore threatened the power and stability of – the aristocracy.

When Darwin proclaims, in the next section of the Canto, “hail the Deities of Sexual Love!” and defines heterosexual union as that which “give[s] Society his golden chain,” he reaffirms that the unique process of reproduction in organisms has the power to “perpetually improve” the species, and that without the (female) introduction of new traits, the father-son hereditary lines would quickly degenerate. The female influence is described here in terms of positive variation, that which can save the patriarchal line from its own rigid unchanging nature: the horizontal “golden chains” that keep society functioning rather than the vertical links between father and son, which alone are not strong enough to keep the social universe intact. Most of the evidence for hereditary disease exists within the aristocracy, Darwin notes, and many have been “the consequence of drinking much fermented or spirituous liquor” (44). Intriguingly for a reading of *The Tenant of Wildfell Hall*, Darwin cites alcoholism in addition to gout, scrofula and other diseases common to the degenerative aristocracy as a hereditary danger. Alcoholism, he

claims in the note on “Old Age and Death,” looks a lot like aging: the sufferer loses control of muscles and emotions. The cause of alcoholism is a “defect of voluntary power to correct the streams of ideas by intuitive analogy” or rather “to correct their trains of ideas caused by sensation” (25). In other words, the body takes control of the mind even as it becomes weaker and weaker. When parents abuse a particular substance, their organs and organ systems are weakened; they pass along these weakened systems to their children, in Lamarckian fashion, who are thus more prone to those diseases: “A tendency to these diseases is certainly hereditary, though perhaps not the diseases themselves; thus a less quantity of ale, cider, wine, or spirit, will induce the gout and dropsy in those constitutions, whose parents have been intemperate in the use of those liquors” (45). To improve the quality of the offspring for plants or animals – though we might suspect Darwin of mentally adding humans to the list, given the conclusion to the note – it is best to choose two individuals of high quality who are highly unlike each other. As for human families, he says, “it is often hazardous to marry an heiress, as she is not unfrequently the last of a diseased family” (45)!

For Erasmus Darwin and his contemporaries, there was surprisingly little dispute over the hereditary nature of disease and particularly of alcoholism. It is worth emphasizing that which Darwin takes for granted before moving on to a reading of Brontë’s novel: in this discourse, alcoholism is a *male* disease, both socially and biologically. Because he aligns it with the “unhealthy” father-son (male-male) line of pure descent, the only logical way to prevent alcoholism in Darwin’s biological economy is the introduction of a female, who provides both biological diversity and the “nidus,” the nurturing presence that prevents the disease and others like it from taking control. The next section demonstrates how this female presence becomes both a burden and a source of power for women trapped into aristocratic marriages. Ultimately, I

will argue, in spite of the novel's bleakness, *Tenant* presents an alternative to the determinism of hereditary degeneration, one predicated on a woman's tenuous power of nurture.

II. Tenantry and Maternalism in *Wildfell Hall*

In her Preface to the second edition of *Wildfell Hall* (1848), Anne Brontë writes (as Acton Bell) that her aim is not art but truth. Brontë positions herself as a naturalist, recalling her pastime of copying drawings in the margins of her father's texts on natural history. *Agnes Grey*, she says, "was accused of extravagant over-colouring in those very parts that were carefully copied from the life, with a most scrupulous avoidance of all exaggeration" (3), but both works are those of an empiricist, one who observes and copies from nature. This second novel tells the story of Helen Huntingdon, who flees her abusive and alcoholic husband with her son Arthur. Her flight is less about protecting Arthur from physical abuse levied on him than it is about protecting him from the *influence* of his father, based on a firm belief that her son has inherited a tendency to his father's weaknesses – a tendency which may yet be avoided if he spends his time in the right environment. Meanwhile, as a "widow" who arrives suddenly and shuns all company, she excites the curiosity of her neighbors and the extreme, passionate and occasionally disturbing admiration of farmer Gilbert Markham, who pursues her as relentlessly as her still-living husband. *Wildfell Hall* has received significantly less critical attention than contemporary novels by Emily and Charlotte Brontë; those who have written about the novel have focused mainly on its peculiar narrative strategies and the legal status of motherhood in mid-century Britain.¹⁵ However, Brontë's use of agricultural metaphors reveals a rich engagement with the tradition of natural history and a keen interest in investigating the questionable impact of heredity.

Helen's first strategy in fighting the effects of Arthur Huntingdon's hereditary degeneracy upon their son is to limit young Arthur's exposure to his father's potentially detrimental influence – and, indeed, any other possible influence as well. She owes her own moral standing to her upbringing, she notes: “Thanks to you, aunt, I have been well brought up, and had good examples always before me, which he, most likely, has not” (140). Not only has Arthur's family failed to provide the genetic ground for well-adjusted offspring (though, we find out in a side note, Helen's own father also died of alcoholism), they have also allowed him to wallow in an unsavory environment: as Helen's aunt tells her before marriage, he is “banded with a set of loose, profligate young men, whom he calls his friends – his jolly companions, and whose chief delight is to wallow in vice, and vie with each other who can run fastest and farthest down the headlong road, to the place prepared for the devil and his angels” (142). Nor will simply changing his environment at this point in his life effect a positive behavioral shift; it is only during the formative years of youth, and the genetically formative years of one's historical predecessors, that this kind of change can occur. Helen takes this lesson of a wife's inability to educate her husband to heart by applying it with a vengeance to her son, whose every move she keeps herself abreast of. Much to the dismay of Gilbert and her other neighbors, Helen keeps Arthur near her at all times, refusing even to leave him alone with her servant. That a mother should keep her son from male society and from the masculine pursuits of social drinking scandalizes the Markhams, who declare that she is “treat[ing] him like a girl,” “spoil[ing] his spirit]” and “mak[ing] a mere Miss Nancy of him” (29). The local reverend agrees, noting that Arthur should be sent to school – both to learn to socialize with his male peers, and to learn independence from his mother: in other words, to learn to be masculine without a father's influence. “If you would have your son to walk honourably through the world,” Gilbert tells her,

“you must not attempt to clear the stones from his path, but teach him to walk firmly over them – not insist upon leading him by the hand, but let him learn to go alone” (28).

The villagers echo the abusive critiques of Arthur Huntingdon, Sr., who brings a mistress posing as governess into the house before Helen has fled with her son. He justifies his new choice to Helen by telling her that “I was not fit to teach children, or to be with them: I had already reduced the boy to little better than an automaton, I had broken his fine spirit with my rigid severity; and I should freeze all the sunshine out of his heart, and make him as gloomy an ascetic as myself, if I had the handling of him much longer” (366). For Arthur Sr., childrearing shares its key impulse with horse-rearing; the key is to tame the horse without breaking its spirit or reducing its wildness. To allow a horse to run too wild, he claims, is simply recklessness, akin to the masculine pursuits of drinking and gambling run wild. Similarly, Helen writes that Huntingdon and his friends “delighted to encourage” Arthur “in all the embryo vices a little child can show, and to instruct in all the evil habits he could acquire – in a word, to ‘make a man of him’ was one of their staple amusements” (335). The raw material for vice is already present in “embryo” form, but the question of how to “make a man” of her son without making him like the man that is his father is Helen’s chief concern. The profligate Hattersley, upon his reform, learns to “avoid the temptations of the town” and choose instead “the usual pursuits of a hearty, active country gentleman; his occupations being those of farming, and breeding horses and cattle, diversified with a little hunting and shooting” when not surrounded by “his fine family of stalwart sons and blooming daughters,” whose health is echoed in “his noble breed of horses” for which he is renowned throughout the country (440-1). By learning to breed – on the farm, through husbandry, and in his own healthy family – Hattersley becomes a true model of masculinity, of gentlemanliness, rather than a man like Huntingdon (and his horses) run wild.

Helen's reframes the breeding metaphor, focusing not on the masculinized world of horse-taming but on the more gender-neutral realm of gardening. Upon meeting the impertinent Fergus Markham, who asks why she should choose a place such as Wildfell Hall, Helen defends her choice by claiming the garden as a main attraction of the property and listing the "improvement" she has already made by planting vegetables and flowers "already in bloom" (57). Fergus almost immediately adopts her metaphor himself but attempts to assert his own dominance by referring to himself and his neighbors as "the indigenous plants of the soil" and inquiring after her "birth, extraction, and previous residence" (58). He thus questions her genealogy but also accuses her, via the gardening metaphor, of being "foreign," though Darwin's accounts of the potential ravages committed by mixing of domestic and foreign species had not yet been published, other works certainly pointed toward dangerous consequences of dropping one's guard against carefully controlled breeding and seeding practices.¹⁶ Gilbert himself takes up the metaphor in referring to himself as helpless victim of a manipulative/monstrous she-gardener, noting that Helen took "pleasure in mortifying my vanity and crushing my presumption – relentlessly nipping off bud by bud as they ventured to appear" (67). As gardener, Helen would allow no form of reproduction; as woman, she metaphorically castrates him. His response is to "invade the sanctum" of her home at the first possible moment – by bringing gifts for her son and a plant for Helen (68). For Gilbert, who vacillates between an energetic, even vicious willingness to take action at the first sign something might be wrong (for example, his attack on Lawrence) and a disturbing refusal of his own agency (i.e, the moment when he assigns half the blame for his murderous attack on Lawrence to the construction of the whip), presenting Helen with a plant is both a way of asserting his own sense of belonging in her garden or her sanctum, and a way to push the blame for his failures onto her own poor skills as manager/gardener.

Whereas Helen's tactic is to isolate her son from the troublesome influence of his father, she takes the opposite approach when it comes to Arthur's hereditary tendency toward alcoholism. Rather than sheltering him from spirits entirely, she says, she "[had] been accustomed to make him swallow a little wine or weak spirits-and-water, by way of medicine when he was sick," in order that he might develop an aversion to alcohol that would protect him from succumbing to his hereditary weakness; she has "done what [she] could to make him hate them" (27). Helen defends her plan, arguing that her son "will have temptations enough to assail him, both from within and without, when I have done all I can to render vice as uninviting to him, as it is abominable in its own nature" (29). Later, Gilbert's mother gossips about Helen's unorthodox parenting method, asking Rev. Millward if he thinks Helen's prohibition on alcohol is (morally) "wrong"; the vicar replies that it is "criminal" and "despising the gifts of Providence, and teaching him to trample them under his feet" (38). His unintentional punning on the winemaking process is interrupted by Frederick Lawrence, who we later discover is Helen's brother (and therefore also the son of an alcoholic) and who again identifies the role of heredity: "when a child may be naturally prone to intemperance – by the fault of its parents or ancestors, for instance," he says, "some precautions are advisable" (38). Maternal training can reduce the likelihood of alcoholism later in life, delivering young Arthur from "secret curiosity" and "hankering desire" by the inculcation of strong habits – both mental (lack of *desire* to drink) and bodily (physiological aversion to drink). Gilbert chooses a metaphor of domestication to describe Helen's parenting tactics; rather than allowing her child to grow up unfettered by restraints, she is "a woman liable to take strong prejudices, I should fancy, and stick to them through thick and thin, twisting everything into conformity with her own preconceived opinions – too hard, too sharp, too bitter for my taste" (39). Like a farmer – like Gilbert, in fact – Helen takes control of

the conditions of growth and nurture, trespassing into the more active and masculine realm of rigid oversight, rather than her assigned role of fertile and suberabundant nurturer.

Helen's responses to these critiques of her parenting tactics reveal as much about her views of biology and gender as they do about education. If the mother's role in protecting her son from "contamination" is her response to Huntingdon's dominance over his son, her framing of education as a metaphor of plant breeding actually helps to quash Gilbert's influence over Arthur. At the start of the scene in which Helen explains her philosophy of parenting, Gilbert sits aloof from the rest of the company and pretends to read the *Farmer's Magazine*; with encouragement from Gilbert, Arthur approaches the dog and eventually sits on Gilbert's lap, "surveying with eager interest the various specimens of horses, cattle, pigs, and model farms" in the magazine. This is the first of many times when Gilbert uses Arthur to gain Helen's attention, but Arthur's exposure to the implements of farming is significant in that it foreshadows the metaphorical thrust of Gilbert's and Helen's disagreement over education and child-rearing. Indeed, Gilbert's argument against Helen's supposed spoiling of her son is that "if you were to rear an oak sapling in a hothouse, tending it carefully night and day, and shielding it from every breath of wind, you could not expect it to become a hardy tree, like that which has grown up on the mountain-side" (30). Domestication, or rather human interference in the natural cycles of growth and death, weakens not only the individual but the species as well. As a farmer, Gilbert would have been all too aware of contemporary conversations about the most effective methods of breeding cows, sheep, and crops, though his earlier hesitance to fully embrace his legacy as a farmer (and thus renounce his 'ambitions' – ultimately realized by marrying above his station) helps to undermine his logic before Helen says a word.

For her part, Helen is quick to point out that the language of “wildness” and “domestication” is highly gendered: if her son had been a daughter, she says, “you would have her to be tenderly and delicately nurtured, like a hot-house plant – taught to cling to others for direction and support” (30). The “trite simile” Gilbert uses implies that exposure to vice will instantly ruin a woman but strengthen a man: experience of vice to a boy “will be like the storm to the oak, which, though it may scatter the leaves, and snap the smaller branches, serves but to rivet the roots, and to harden and condense the fibres of the tree” (31). A mother’s role is to protect and nurture her children – in other words, to metaphorically step into the role of the farmer who carefully oversees the breeding of his crops. As she puts it later, “I exerted all my powers to eradicate the weeds that had been fostered in his infant mind, and sow again the good seed they had rendered unproductive. Thank Heaven, it is not a barren or a stony soil; if weeds spring fast there, so do better plants” (354). Brontë suggests that the physical and mental differences in gender are at least partly due to the differences in how we educate boys and girls; were our education system to change, women’s bodies might no longer be quite so delicate as the hothouse flower that dominated Victorian angelology. And though a child might inherit biological traits from its mother or its father, highly gendered cultural and social systems help to “activate” one set of traits or “seeds” over another.

III. Conclusions: The Meanings of Motherhood

Ultimately, for both Darwin and Brontë, successful inheritance and breeding – that is to say, a future unfettered from the restrictions of degenerative hereditary contaminations – rely on the broader connections of a healthy social network. In *The Temple of Nature*, Darwin makes this claim quite literally. Not only human society but all physical being relies on invisible chains

of connection, something akin to George Eliot's famous web at the heart of *Middlemarch*. At the microscopic level, love helps to "Press drop to drop, to atom atom bind, / Link sex to sex, or rivet mind to mind" (I.25-6). Chains also link generation to generation; marriages link contemporaries and reproduction provides a vertical connection between generations.¹⁷ Sympathy, Darwin explains, is animalistic, an innate urge that occurs within the human species as well as other kinds of animal groupings – "heaven-born Storge [love between parents and children] weaves the social chain" (Canto 2, II.92). And yet in Darwin's posthumously published vision of human families and human society, the strength of the connecting ties is mostly masculine: asexual reproduction, as described above, is the moment when "Birth after birth the line unchanging runs, / And fathers live transmitted in their sons" (Canto 2, III.107-8). The feminine influence enters the reproductive process only through the power of male desire ("The potent wish in the productive hour / Calls to its aid Imagination's power" [2.III.117-8]). The mother's role in birth and education is one of nurture and nutrient; she protects against the power of hereditary disease by ensuring the overall health of the offspring:

Where no new Sex with glands nutritious feeds,
Nurs'd in her womb, the solitary breeds;
No Mother's care their early steps directs,
Warms in her bosom, with her wings protects;
The clime unkind, or noxious food instills
To embryon nerves hereditary ills;
The feeble births acquired diseases chase,
Till Death extinguish the degenerate race. (2.IV.159-66)

Without the “golden chain” of marriage (sexual reproduction), the “curled leaves, or barren flowers, betray / A waning lineage, verging to decay,” but if “amended by connubial powers,” there might “Rise seedling progenies from sexual flowers” (2.IV.173-6). Marriage is socially and biologically healthy at the level of the individual and the species – and if not always beneficial for the individual, as in Helen’s case, at least for her progeny.

Both Darwin and Brontë anticipate the rise of a middle class freed from the degeneracy of a long pedigree, but nonetheless rooted in social sympathy and parental love. What these texts in particular reveal is not so much a wholesale rejection of the power of heredity and inheritance during the first half of the nineteenth century, but a reimagining of those concepts along new lines. Both authors recognize that environment can help combat the unpleasant powers of inherited disease and temperament. Nonetheless, the ending of Brontë’s novel is ambivalent. Helen rescues her son from the clutches of an abusive father – only to remarry another violent and jealous man (though this time, not an aristocrat) whose narrative voice subsumes her own. A mother’s love is redemptive, but ultimately insufficient outside the logic of heterosexual union. Whereas Darwin’s anthropomorphizing of plants aids him in convincing readers of the biological status of human nature, Brontë’s metaphoric reversal – imagining humans as plants – pushes Darwin’s meditations toward a much more frightening set of questions about the fragility of a society defined by tenuous pairings and the continuous struggle for healthy environments born upon the backs of women.

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¹ For readings of the twentieth-century reliance on genetics as sole or major determinant of biological and emotional personhood, and suggestions for twenty-first-century revisions of the relationship

between nature and nurture, see Evelyn Fox Keller, especially *The Century of the Gene* (2000) and *The Mirage of a Space between Nature and Nurture* (2010) and Richard Lewontin, *The Triple Helix: Gene, Organism, and Environment* (2000).

² As Darwin's recent boom in popularity continues, additional sources about his life and work become available. Aside from the extensive biographical works of Desmond King-Hele (for years, it seemed, Darwin's lone modern champion), scholars will also find value in Charles Darwin's biography of his grandfather, poet Anna Seward's *Memoirs of the Life of Dr. Darwin* (1804), and Ernst Krause's *Erasmus Darwin* (1880).

³ Jenny Uglow's *The Lunar Men: Five Friends Whose Curiosity Changed the World* (2002) and Richard Holmes' recent and lovely *The Age of Wonder* (2008) offer excellent overviews not only of Darwin and his intellectual circle but of the place of science and innovation in Romantic culture at large.

⁴ See "Books Owned by the Brontës," "Books Read by the Brontës," and "Natural History and the Brontës" in *The Oxford Companion to the Brontës* (2003). See also Clifford Whone's classic "Where the Brontës Borrowed Books" (1950) and Bob Duckett's informative response, "Where Did the Brontës Get Their Books?" (2007) in which he traces the public, private, circulating and subscription libraries likely available to the Brontës – not including the Keighley Mechanics' Institute usually accepted by Brontë critics as main library source. Beth Torgerson's Introduction and first chapter of *Reading the Brontë Body* (2005) is also useful on the Brontës' access to medical texts and experiences with alcoholism.

⁵ Alexander and Sellers' *The Art of the Brontës* (1995) provides invaluable facsimiles of drawings, paintings and marginalia by Emily, Charlotte, Anne and Branwell Brontë. Though I have not found direct evidence that the Brontës owned a copy of E. Darwin's works, they did possess and have access to a wide range of writings on natural history, including the works of Bewick, Audubon, White of Selborne, Buffon, Cuvier, Lyell, and Paley, plus a number of periodical reviews (*The Oxford Companion to the Brontës* 52-3, 338-9). With such abundant evidence that the sisters were active readers of scientific texts,

it is certainly within the realm of possibility that they could have been familiar with Darwin's works either through the texts themselves or through references and reviews.

⁶ On the relationship between plant, animal and human during the Romantic era, see Janet Browne (1989) and Eric Lindstrom (2009).

⁷ Amy King's excellent *Bloom: The Botanical Vernacular in the English Novel* (2003) traces the ways in which British fiction and scientific discourse both translated women's sexuality into the language of flowers and fertility, allowing for a socially permissible venue in which to discuss taboo or improper subjects.

⁸ See "Dr. Darwin's Temple of Nature: A Poem," *Edinburgh Review*, July 1803.

⁹ See *Zoonomia*, Section XIII. In the work's Preface, Darwin states, "The great CREATOR of all things has infinitely diversified the works of his hands, but has at the same time stamped a certain similitude on the features of nature, that demonstrates to us, that *the whole family is of one parent*" (vii). Alan Bewell reads these connections as part of the larger eighteenth-century British attempt to colonize both nature and foreign lands, to reduce the cultural other to the level of a species to be collected and placed in the royal gardens of the empire.

¹⁰ "Such is the condition of organic nature! whose first law might be expressed in the words, "Eat or be Eaten!" and which would seem to be one great slaughter-house, one universal scene of rapacity and injustice!" (*Phytologia* 509).

¹¹ Allison Dushane notes that Darwin's *Zoonomia* threatened the dominant materialism of the age by "envison[ing] an organic system of nature, in which the individual and the environment are not only interdependent, but also reciprocally determining" (1).

¹² For reference purposes, I follow the 1978 facsimile reprint of *The Temple of Nature* by Garland Publishing. Where appropriate, line numbers for poetry are included; for footnotes, I follow the editors' pagination.

¹³ For example, Darwin claims in a footnote to this passage that women have a biological need to breastfeed: “The females of lactiferous animals have thus a passion or inlet of pleasure in their systems more than the males, from their power of giving suck to their offspring; the want of the object of this passion, either owing to the death of the progeny, or to the unnatural fashion of their situation in life, not only deprives them of this innocent and virtuous source of pleasure; but has occasioned diseases, which have been fatal to many of them” (41).

¹⁴ See Waller, “‘The Illusion of an Explanation’: The Concept of Hereditary Disease, 1770-1870,” *Journal of the History of Medicine and Allied Sciences* (2002).

¹⁵ On narrative techniques and feminism in the novel, see N.M. Jacobs (1986), Lidan Lin(2002), Julie Nash and Barbara A. Suess (2001), Tess O’Toole (1999), Carol A. Senf (1990), Maggie Berg (2010), Laura C. Berry (1996), Jan B. Gordon (1984), Garrett Stewart (2009), Elizabeth Langland (1989), and Rachel K. Carnell (1998). On motherhood and the legality of divorce and the Infant Custody Act, see Joan Bellamy (2005), Ruth Bienstock Anolik (2003), Elisabeth Rose Gruner (1997), and Nicole A. Diederich (2003). Drew Lamonica’s work on education in *Wildfell Hall* is useful (2003), as is Tamara Wagner’s 2007 article on the separation between inheritance and paternity in the novel, though I think the novel’s anxiety about hereditary transmission serves more to underscore its inseparability from inheritance rather than to remove the novel entirely to the realm of financial speculation as Wagner argues.

¹⁶ See, for example, Matthew Lewis’ *Journal of a West India Proprietor*, in which Lewis describes the twin frustrations of overly fertile non-native species running amok over his inherited property, and slaves who refuse to reproduce fast enough for his economic desires.

¹⁷ The poem is obsessive in its references to the language of chains: binding, linking, riveting, bands, spokes, clinging, reins, fibers, weaving, looms, tubes, ducts, glands, veins, and “the living web,” among others. Though my focus here is on gender and maternity, Darwin is also illustrating the great scientific

and philosophical doctrine of the eighteenth century, the Great Chain of Being, which he sees as entirely compatible with a Nature that is cruel, and a world that is constantly changing.

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