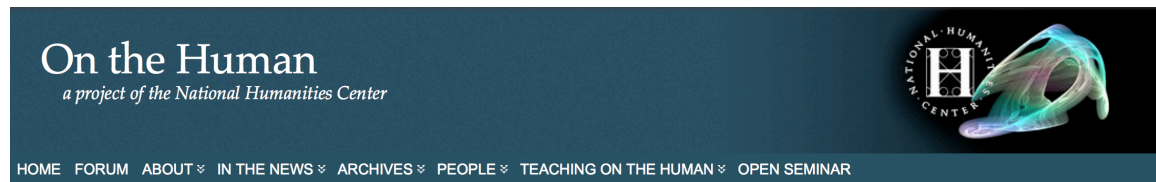


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Late Darwin and the Problem of the Human

by Dame Gillian Beer

Darwin's radical new history of the world did not give a central place to the human. It challenged human exceptionalism and emphasised what was shared, across all organisms extant and extinct. He thought of himself initially as a geologist, so was constantly alert to the ghosting presence of past life forms, visible now only as vestiges, impacted, fossilised, fired, crumbling but discernable, and capable of being re-imagined. In *The Voyage of the Beagle* encounters with human beings from other tribes and cultures became important and helped his thinking to thrive, but in the years up to and including the publication of the *Origin*, and well beyond it, his main concerns and researches were with forms of life other than the human, including barnacles and plants. As is well known, he withheld discussion of the human in the *Origin*, for what he called 'diplomatic' reasons. In fact, though, this refusal was profoundly disruptive since it had the effect of simply including us in the general class of primates without a special space or reach reserved. From the start Darwin made it clear that there is no simple opposition between organism and environment since environment is itself composed of the interpenetrating needs, desires, and claims of all the other organisms that surround and include any single being. But it is striking that in trying to describe primordial life he figures the ancestor as single almost as often as he describes it as a pair: the 'single progenitor', 'one primordial form'.

Such an imagined being is asexual or 'hors-sexe', outside sex, and much of Darwin's research life was spent studying life-forms in which the methods of reproduction are through parthenogenesis (virgin birth, as in some reptiles, fishes and plants), splitting (as with amoebas) or hermaphroditism (as with some barnacles and slugs who fertilizes themselves). Sex is a mechanism of reproduction that speeds up the possibilities of change. In sex two streams of unlike material from the parents enter the progeny, and the spectrum of outcome is much greater. Darwin did not have the language or the knowledge of genetics to work with. He saw the outcome of hyperproductivity and difference but he struggled to explain how such changes were carried between generations. It's worth emphasizing at the outset that sex difference is not a universal condition since, looking at things from our human point of view, we tend to see it as normative.

Until the 1870s Darwin did not publish extensively about human beings and their descent or liaisons. Then in quick succession he published *The Descent of Man, and Selection in Relation to Sex* (1871) and *The Expression of the Emotions in Man and Animals* (1872). That second work was originally to have formed part of the *Descent* but it grew too large. The *Descent* itself is on an enormous scale and explores the issue of sexual selection in ways that demanded quite new thinking from Darwin, though it had been touched on in the *Origin*. In the *Descent* he brings the human to the foreground of his argument and that produces new tensions in his relation to his readers and in his own mind.

Darwin's later theory of 'sexual selection' placed sex at the centre of explanation, supplementing the emphasis already established in the *Origin* through natural selection on the resilience of family ties across generations. In the *Origin* Darwin expanded the idea of family, away from the exclusiveness of what he called "pedigrees and armorial bearings" (*Origin* 486), to embrace all "the past and present inhabitants of the world" (488) – and by 'inhabitants' he did not mean merely the human.

In this brief essay I shall concentrate on a single effect of the newly emphasised presence of the human: what happens when he is writing about man and woman rather than simply male and female. The terms 'male' and 'female' are fundamental to his argument across species, and to his insistence on the kinship of all species (even those that reproduce through methods other than sexual difference). As soon as his vocabulary enlarges to include man and woman particular difficulties arise – and these difficulties are exacerbated because he does not have a vocabulary that would allow him to discriminate between sex and gender.

The sexual behaviour of different human groups is studied in the *Descent* alongside that of other kinds, as also are the physical differences between sexes in a range of creatures. And here we begin to see the problem that Darwin has not so much introduced as illuminated by setting the human among other kinds. In his descriptions of species behaviour it is often difficult to discriminate human values from structures. Where he finds physical likeness between the sexes he comments, using the observations of colleagues, on contrasted behaviour:

In one of the sand-wasps (*Ammophila*) the jaws in the two sexes are closely alike, but are used for widely different purposes: the males, as Professor Westwood observes, 'are exceedingly ardent, seizing their partners round the neck with their sickle-shaped jaws'; whilst the females use these organs for burrowing in sand-banks and making their nests. (p317)

- a striking example of separate spheres among sand-wasps. Darwin clearly felt some little scepticism himself since he adds a footnote stating that 'Mr. Walsh, who called my attention to the double use of the jaws, says that he has repeatedly observed this fact.' And fact it may be, since we cannot just wish

away such structural and performative differences between sexes within species, even as we note the gendered interpretation being offered.

Darwin's later years were spent seeking a *system* implicit in the inordinate, the decorative, the ornamental, in the drive of sexual desire. Sexual selection demanded flaunting, extravagance, smells and song. The males of most species, his researches showed, were driven to display, the females were the choosers (though 'choice' might sometimes be a false word to describe the process of accepting the successful male's advances). Beauty re-emerged as a key element in his enquiry, and he argued that humans were not the sole possessors of aesthetics and of delight in art.

We have evidence of this capacity even low down in the animal scale thus Crustaceans are provided with auditory hairs of different lengths, which have been seen to vibrate when the proper musical notes are struck. (634-5)

Bird-song was prior to language; it expressed territorial and erotic claims by means of all the pleasures of skilled elaboration. The primordial skills are singing, dancing, and poetry, he argued, skills shared across many species (636). Music becomes his key example of the powers of selection. And he compared the capacities of gnats, dogs, and seals alongside humans. The key point to observe is that once again the whole ground of his argument is the uninterrupted continuum between human experience and that of other life forms, here predominantly animals and birds, but often also including plants.

This discussion of aesthetic life across species and its importance in sexual selection follows one of his most controversial arguments (at least so far as his fellow-humans are concerned), which again relies on analogy (here claimed as homology) with other animals: 'Differences in the Mental Powers of the Two Sexes'. That is, the two sexes of human beings. He approaches this topic through lengthy discussions of differences between the sexes in a variety of animals, insects, beetles, and birds: in size, in strength, in colouration, in smell, in voice. Once that difference is established he turns in Part III to 'Sexual Selection in Relation to Man, and Conclusion'. The first paragraph describes the greater muscular development of the male. The second opens boldly, and flatly:

Man is more courageous, pugnacious and energetic than woman, and has a more inventive genius. (622)

The third paragraph opens 'As with animals of all classes, so with man'.

This equalising between the human and other animals is the argumentative gesture that recurs throughout the discussion, and is in line with all that Darwin has written earlier. It comes as a surprise only because it is here focussed specifically on human beings in a transhistorical and generalising manner, whereas the other crucial aspect of his argument until now has been the emphasis on variability. He acknowledges that 'some writers doubt whether

there is any such inherent difference' between the human sexes. He has in mind John Stuart Mill, as becomes evident on the next page where he joins in open dispute with Mill. In the text Darwin writes:

Now, when two men are put into competition, or a man with a woman, both possessed of every mental quality in equal perfection, save that one has higher energy, perseverance, and courage, the latter will generally become more eminent in every pursuit, and will gain the ascendancy.

The footnote runs:

J. Stuart Mill remarks ('The subjection of Women', 1869, p.122), 'The things in which man most excels woman are those which require most plodding, and long hammering at single thoughts.' What is this but energy and perseverance? (630)

The tone of exasperation as the qualities slide downhill in Mill's description from energy and perseverance to plodding and one-track mind sounds as if Darwin has felt Mill's comments as a personal affront. He has earlier, with a certain ethical self-abnegation spoken of competition, ambition, and selfishness as the 'natural and unfortunate birthright' of men. (629) Here, 'natural' seems a cover-word for social. Darwin is struggling, and the effect is to make him much more emphatic than is his wont.

Once he substitutes the term 'Man' for 'male', his descriptor for all other species, a rush of social assumptions gathers behind his statements. One is that 'Man' (capitalized) in human generalising discourse is to cover both sexes whereas in his descriptions of all other sexed species he painstakingly discriminates between male and female. In a mordant aside he suggests that, unlike most of his argument for sexual selection in which the male displays and the female selects, women may have 'first acquired musical powers in order to attract the other sex.' 'But if so,[he asserts] this must have occurred long ago, before our ancestors had become sufficiently human to treat and value their women merely as useful slaves.' (639) He sees human behaviour as an aberration in the processes of sexual selection since men seek wealth and beauty in their women, and having social dominance can require that. They do the choosing. Even when women choose:

their choice is largely influenced by the social position and wealth of the men; and the success of the latter in life depends upon their intellectual powers and energy, or the fruits of these same powers in their forefathers.(653)

That women might bring intellectual powers and energy into the marriage does not enter his argument here.

Occasionally, Darwin reaches a different form of inclusivity, 'human beings' rather than 'man' become his aim:

But we should bear in mind that the activity of the mind in vividly recalling past impressions is one of the fundamental though secondary bases of conscience. This affords the strongest argument for educating and stimulating in all possible ways the intellectual faculties of every human being. (681)

And he argues earlier that :

In order that woman should reach the same standard as man, she ought, when nearly adult, to be trained to energy and perseverance, and to have her reason and imagination exercised to the highest point; and then she would probably transmit these qualities chiefly to her adult daughters. (631)

But he has little hope of equality since men are by him assumed to be destined to be the breadwinners:

they generally undergo a severe struggle in order to maintain themselves and their families: and this will tend to keep up or even increase their mental powers, and, as a consequence, the present inequality between the sexes. (631)

It turns out that it is not quite possible to transpose the physical traits and behaviour of other species to the human and use that to delimit human potential, even in the terms of his own argument. The discussion of men and women's powers is a matter of about seven pages in a text of seven hundred pages plus, but inevitably it attracts our attention, disconcertingly so. Again, the linking of the two words 'new and improved', which, conjoined, lurk at the heart of natural selection haunt this argument too.

Thus man has ultimately become superior to woman. It is, indeed, fortunate that the law of equal transmission of characters to both sexes prevails with mammals; otherwise it is probable that man would have become as superior in mental endowment to woman, as the peacock is in ornamental plumage to the peahen. (631)

But – and this is an important but – Darwin is here describing what has not happened: the law of equal transmission of characters to both sexes does prevail, he acknowledges, against this possible vast mental superiority of man over woman. And that word 'ultimately', ('man has ultimately become superior to woman') must, if it is to be in key with the rest of his evolutionary thinking even if reluctantly granted here, signify 'at the moment' rather than 'for ever'.

Were I to have the chance to ask him one question I would want to ask him how he sees the changed achievements of women and the altered relations between the sexes in some (dare one say 'many'?) societies now. Sexual selection as a process is poised between the 'natural' and the 'artificial' – that is to say, it includes 'choice' and discrimination in the drive of desire between individuals

and, as he acknowledges, social assumptions and pressures exercise their power in the selection. Darwin's founding argument that we are 'all netted together' across species and that all forms of life are kin, is a wholesome and enfranchising belief. But in the *Descent* it often seems to have congealed into the assertion that analogies between species debar social change.

The *Descent* is the work in which Darwin must face the further implications of his insistence on kinship between all organic life, and the place of 'improvement' in his argument. The foregrounding of the human forces these issues: male and female become man and woman – and these two are gathered into the title 'Man'. He is torn by the difficulty of describing what is temporary and what eternal in the evolutionary process, what social and what physical in the relations of creatures to each other and in the human sexes too. His intelligence often drives him past the position that his argument can reach.

Darwin rejected Wallace's belief that the human was a special case, distinguished from other creatures by the possession of a soul, yet he struggles with the question of how far male and female can translate directly into man and woman. Indeed, his daughter Henrietta, who acted as his much-valued commentator and critic while he was writing the *Descent*, teases him that 'you think an apology is wanting for writing abt[sic] anything so unimportant as the mind of man!' (*Correspondence*, 18, 25) She does not capitalise Man. She knows that for Darwin the human is not the measure of all things and she here pinpoints the difficulty he faced when he wrote a book that placed the human at the centre of his discussion.

References: page references in the text refer to the editions below

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**Invited Reply to
Dame Gillian Beer's "Late Darwin and the Problem of the Human"**

Stefan Helmreich

June 27, 2010 at 10:12 pm

Darwin was concerned with the question of what gave form to living things. Gillian Beer is concerned with the question of what gave form to Darwin's confusion about the materialization of differences between those living things known as men and women.

Her answer is sex/ gender — or, rather, the unavailability of this analytic to Darwin. Her analysis dovetails nicely with earlier feminist scholarship suggesting that Darwin's account replayed Victorian middle-class ideas about gender hierarchy in the key of evolutionary theory (Coward 1983, Fedigan 1986, Haraway 1989, Browne 2002). Preserved in Darwin's model, too, was what Carole Pateman (1988) has called "the sexual contract," the natural male sex-right over women assumed in theories of the social contract, from Locke to Rousseau, which take women as the conjugal property of men and as conduits for male reproduction — as vectors for the reproduction of a patriarchy that is founded on the safeguarding of paternity (see Delaney 1986). Darwin, in *Origin's* few comments on sexual selection, is explicit about the status of females as property; sexual selection depends "not on a struggle for existence, but on a struggle between the males for the possession of the females" (1859: 88). Human males live in the public sphere of natural and intrasexual selection while human females are cordoned off into a private sphere created by histories of male choice — an arrangement that leaves females as passive pawns in the game of evolution [1]. The title of Sarah Blaffer Hrdy's 1981 book, *The Woman That Never Evolved*, names the implication here [2].

This was an implication about which Darwin worried, as Beer points out, and he suggested in *The Descent of Man* that, "It is, indeed, fortunate that the law of the equal transmission of characters to both sexes has commonly prevailed throughout the whole class of mammals; otherwise it is probable that man would have become as superior in mental endowment to woman, as the peacock is in ornamental plumage to the peahen" (1871, Vol. II: 328-329). Linda Marie Fedigan summarizes the logic at work: "traits are selected for in males and women evolve by clinging to the men's 'coat-tails' (1986: 28). Women evolve, but only as a side effect of sex.

What is revelatory about Gillian Beer's analysis of Darwin's model of sexual selection is her attention to the form of his confusion. It is not only that the content of his thinking about women and men is inflected by Victorian common sense — and that he, like many of his contemporaries has an ambivalence about female choice (in, say, marriage [cf. Shanley 1989]) — but that the particular

linguistic slippage between “male,” “men,” and “Man” in his writing actually does a huge share of the work of bewildering him. In mixing up what we would now call the “biological” and the “social,” the slippage deforms what Beer calls “the uninterrupted continuum between human experience and that of other life forms,” inviting in “a rush of social assumptions.”

Beer also points out that Darwin was in fact ambivalent about the once-and-for-allness of male-female difference in humans. If Darwin’s argument about sexual selection is famously circular — assuming precisely those differences it purports to explain — Darwin, argues Beer, seems at some level to have known this. As Beer puts it, “He is torn by the difficulty of describing what is temporary and what eternal in the evolutionary process.” This is a difficulty, I submit, in how “form” operates for Darwin in his attempt to track how life forms change over time. He knows that form is mutable, but he must freeze it analytically to make claims about its modification.

A lovely phrase of Beer’s — “the ghosting presence of past life forms” — gives me my intuition here. The question for Darwin is one of how to think about the presence — and present — of form in evolution. The forms of secondary sex characteristics for him always work on the horizon of legibility. Richard Doyle has suggested that we might read Darwin not so much as vexed by sexual selection, but as in some sense captivated by the evanescence of form it suggests. Taking a close look at Darwin’s examination of ocelli, iridescent eye-like spots on the feathers of peacocks, Doyle writes that “Darwin’s intense and exquisite study of the mechanisms of sexual selection ... continually focused on tactics for inducing the dissolution of boundaries, a sudden fluctuation of figure and ground” (2007: 79). That dissolution, of course, carries not only across “sexes,” but also across species, even, kingdoms, as witness bees and flowers. The unsteady relations between form and fluctuation haunt Darwin’s accounts of biological transformation.

The elegant form of Beer’s argument, guiding us to see the form of Darwin’s double vision about sex and gender, itself opens up questions of how we in the early twenty-first century should read the form of Darwin’s plots (Beer 2009: xxiv), how we should read the Wittgensteinian “forms of life” — systems of speaking about and acting the world — that animate Darwin’s writing. What does it mean for us to discern “the ghosting presence” of past forms of life, past forms of sex and gender, through the lens of our own concepts? Beyond demonstrating that a dash of judiciously applied presentism can be empirically and analytically enlightening, I think Gillian Beer’s arresting analysis shows us that it means that we share with Darwin the puzzle of reading forms of life over and across time.

Notes

[1] Insofar as there is any female choice in this model, choices are constrained; not only will females select a male, demonstrating that the sexual contract is really the heterosexual contract (see Wittig 1991), but they will also, as in Locke’s

account of the subjection of women, enter into a relation of subordination. Social reformer Charlotte Perkins Gilman (1860-1935) gave this dynamic a social, rather than natural, reading. According to Rosalind Coward, Gilman “argues that the two elements of Darwin’s theory are distinct; natural selection develops race characteristics, sexual selection develops sexual characteristics. Sexual selection is the means by which reproduction, and therefore variation, occurs. But women, she argues, have been cut off from the real environment, the economic world of work, and have been forced to develop sexual characteristics alone. Because of the enforced dependency of women on men, man becomes the economic environment of women” (1983: 86).

[2] Darwin had human females as looking more like juveniles than their male mates: “Throughout the animal kingdom, when the sexes differ from each other in external appearance, it is the male which, with rare exceptions, has been chiefly modified; for the female still remains more like the young of her own species” (1871, Vol. I: 271-272).

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