

**Letter sets and extracts for
Prof. Richardson's *Gender, Sex
and Evolution* course (Harvard
University)**

Lecture 1

Gender roles / characteristics / relations considered "natural" (i.e. set down in natural law)

Relevant extracts from published work:

"The result is not death to the unsuccessful competitor, but few or no offspring. Sexual selection is, therefore, less rigorous than natural selection. Generally, the most vigorous males, those which are best fitted for their places in nature, will leave most progeny. But in many cases, victory depends not so much on general vigour, as on having special weapons, confined to the male sex." (*Origin* - sixth edition 1876, p. 69)

"How low in the scale of nature the law of battle descends, I know not; male alligators have been described as fighting, bellowing, and whirling round, like Indians in a war-dance, for the possession of the females; male salmons have been observed fighting all day long; male stag-beetles sometimes bear wounds from the huge mandibles of other males; the males of certain hymenopterous insects have been frequently seen by that inimitable observer M. Fabre, fighting for a particular female who sits by, an apparently unconcerned beholder of the struggle, and then retires with the conqueror." (*Origin*, p. 69)

"....the sexes often differ in what Hunter has called secondary sexual characters, which are not directly connected with the act of reproduction; for instance, the male possesses certain organs of sense or locomotion, of which the female is quite destitute, or has them more highly-developed, in order that he may readily find or reach her; or again the male has special organs of prehension for holding her securely." (*Descent* - second edition, 1882, p. 207)

"Man is more courageous, pugnacious and energetic than woman, and has a more inventive genius. His brain is absolutely larger, but whether or not proportionately to his larger body, has not, I believe, been fully ascertained.... The female, however, ultimately assumes certain distinctive characters, and in the formation of her skull, is said to be intermediate between the child and the man." (*Descent*, p. 557).

"*Difference in the Mental Powers of the two Sexes.*—With respect to differences of this nature between man and woman, it is probable that sexual selection has played a highly important part. I am aware that some writers doubt whether there is any such inherent difference; but this is at least probable from the analogy of the lower animals which present other secondary sexual characters. No one disputes that the

bull differs in disposition from the cow, the wild-boar from the sow, the stallion from the mare, and, as is well known to the keepers of menageries, the males of the larger apes from the females." (*Descent*, p. 563).

"Woman seems to differ from man in mental disposition, chiefly in her greater tenderness and less selfishness; and this holds good even with savages, as shewn by a well-known passage in Mungo Park's Travels, and by statements made by many other travellers." (*Descent*, p. 563).

"Woman, owing to her maternal instincts, displays these qualities towards her infants in an eminent degree; therefore it is likely that she would often extend them towards her fellow-creatures." (*Descent*, p. 563)

"Man is the rival of other men; he delights in competition, and this leads to ambition which passes too easily into selfishness. These latter qualities seem to be his natural and unfortunate birthright. It is generally admitted that with woman the powers of intuition, of rapid perception, and perhaps of imitation, are more strongly marked than in man; but some, at least, of these faculties are characteristic of the lower races, and therefore of a past and lower state of civilisation." (*Descent*, pp. 563 – 4).

"The chief distinction in the intellectual powers of the two sexes is shewn by man's attaining to a higher eminence, in whatever he takes up, than can woman—whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands. If two lists were made of the most eminent men and women in poetry, painting, sculpture, music (inclusive both of composition and performance), history, science, and philosophy, with half-a-dozen names under each subject, the two lists would not bear comparison. We may also infer, from the law of the deviation from averages, so well illustrated by Mr. Galton, in his work on 'Hereditary Genius,' that if men are capable of a decided pre-eminence over women in many subjects, the average of mental power in man must be above that of woman." (*Descent*, p. 564)

"With social animals, the young males have to pass through many a contest before they win a female, and the older males have to retain their females by renewed battles. They have, also, in the case of mankind, to defend their females, as well as their young, from enemies of all kinds, and to hunt for their joint subsistence. But to avoid enemies or to attack them with success, to capture wild animals, and to fashion weapons, requires the aid of the higher mental faculties, namely, observation, reason, invention, or imagination." (*Descent*, p. 564).

"These various faculties will thus have been continually put to the test and selected during manhood; they will, moreover, have been strengthened by use during this same period of life. Consequently, in accordance with the principle often alluded to, we might expect that they would at least tend to be transmitted chiefly to the male offspring at the corresponding period of manhood." (*Descent*, p. 564).

[Men have] "higher powers of the imagination and reason....the characters gained will have been transmitted more fully to the male than to the female offspring.... Thus man has ultimately become superior to woman. It is, indeed, fortunate that the law of the 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." (*Descent*, p. 565).

"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. All women, however, could not be thus raised, unless during many generations those who excelled in the above robust virtues were married, and produced offspring in larger numbers than other women." (*Descent*, p. 565)

"As before remarked of bodily strength, although men do not now fight for their wives, and this form of selection has passed away, yet during manhood, 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." (*Descent*, p. 565).

Relevant letters:

1) Darwin and Kennard's exchange on men and women's "natural" strengths / the definition of breadwinner. Exchange suggest that Darwin at the very least sympathised with the idea that the differences between men and women were *social* rather than physical / innate - contrast to his published material:

- <http://www.darwinproject.ac.uk/entry-13579> (UNPUBLISHED: REPRODUCED IN APPENDIX - Caroline Kennard questions Darwin's arguments re: the inferiority of women in *Origin*)

- <http://www.darwinproject.ac.uk/entry-13607> (Darwin argues that women have greater moral qualities to me but "are inferior intellectually". Women and domesticity: Argues there is *potential* for equality but only if women were to become breadwinners which would have a negative impact on i) the early education of children and ii) "our homes")

- <http://www.darwinproject.ac.uk/entry-13650> (UNPUBLISHED: REPRODUCED IN APPENDIX - argues that women's intellectual capacity paired with moral superiority is an aid to mankind. Argues that women *are* bread-winners but aren't recognised as such. Asks Darwin to not judge women's intellect until they are equally educated.

2) Darwin's self-confessed weaknesses (defying 'hard masculinity'?):

- <http://www.darwinproject.ac.uk/entry-1573> (Darwin confesses to not faring well during Emma's pregnancies / childbirth)

- <http://www.darwinproject.ac.uk/entry-3101> (Darwin as "upset and prostrate" at the sight of his son under chloroform)

- <http://www.darwinproject.ac.uk/entry-8070> (Darwin as physically and mentally weak)

- BUT: See also <http://www.darwinproject.ac.uk/entry-4518> (Reference to Darwin's work as "intellectual labour" - hence his exhaustion. Were the parallels (frequently-drawn) between hard labour and scientific endeavour in the 19th century a way of "butching up" men of science?).

3) Women as more rational / better able to cope under pressure than men:

- <http://www.darwinproject.ac.uk/entry-7981> (UNPUBLISHED: REPRODUCED IN APPENDIX - Hooker "What a poor lot we men are - women would be twice as rational")

- <http://www.darwinproject.ac.uk/entry-2297> (Darwin on Emma coping well / stoically over death of Charles Waring)

- <http://www.darwinproject.ac.uk/entry-3812> (Darwin to William Erasmus between June and December 1872 in which Emma is referred to (in passing) as "the boss": Meant positively?!)

4) Darwin's views on his sons (as future breadwinners – daughters' futures are "less troublesome"):

- <http://www.darwinproject.ac.uk/entry-1476> (Darwin to Fox in which he discusses education and professions for his sons [and not his "less troublesome" daughters])
- <http://www.darwinproject.ac.uk/entry-1489> (as above)
- <http://www.darwinproject.ac.uk/entry-1352> (as above)
- <http://www.darwinproject.ac.uk/entry-1554a> (Darwin to King in which he is anxious about his sons' professions)
- <http://www.darwinproject.ac.uk/entry-2049> (Darwin to Fox on his sons' professions again)
- <http://www.darwinproject.ac.uk/entry-3160> (Darwin to his son on taking a job in business)

5a) Darwin on his daughter Henrietta's editorial abilities

(recognizing her intellectual strengths – considered more than just a "civilizing" / moral force?):

- <http://www.darwinproject.ac.uk/entry-7124> (Darwin to Henrietta, in which he asks for her help)
- <http://www.darwinproject.ac.uk/entry-5074> (Darwin to Henrietta in which he uses technical language but effectively treats her as a secretary?)
- <http://www.darwinproject.ac.uk/entry-7123> (UNPUBLISHED: REPRODUCED IN APPENDIX – Darwin responds to Henrietta's criticisms of *Descent*)

5b) Contrast with Darwin's exchanges with his son George

(encouraging but far more critical – because he valued him less highly than Henrietta, or because he felt he had to be more rigorous to train him for the professional world / to be a successful breadwinner?):

- <http://www.darwinproject.ac.uk/entry-8308> (UNPUBLISHED: REPRODUCED IN APPENDIX – Darwin to George Howard, in which he's critical of his work)
- <http://www.darwinproject.ac.uk/entry-9085> (UNPUBLISHED: REPRODUCED IN APPENDIX – Darwin to George Howard in which Darwin refuses to publish G's "hypothetical" work)
- <http://www.darwinproject.ac.uk/entry-9105> (Darwin to George Howard discussing strengths and weaknesses of his work)
- <http://www.darwinproject.ac.uk/entry-10530> (UNPUBLISHED: REPRODUCED IN APPENDIX – Darwin to George Howard in which he, again, is critical of his work)

6) Darwin's private respect for women as observers /

scientists (but are women like Treat, Gray, Dodel-Port et al any more than ancillary support for men of science like Darwin?):

- <http://www.darwinproject.ac.uk/entry-10523> (Darwin to Mary Treat in which he praises her observations)

- <http://www.darwinproject.ac.uk/entry-8146> (as above in which Darwin states that MT's observations on butterflies are the best he's seen - including his own. Encourages her to publish her work).
 - <http://www.darwinproject.ac.uk/entry-12898> (UNPUBLISHED: REPRODUCED IN APPENDIX - Part of Darwin's botanical correspondence with the Dodel-Ports who worked as a husband and wife team and whose work CD appears to have respected greatly)
 - <http://www.darwinproject.ac.uk/entry-8719> (example of Darwin giving MT very clear instructions on what to observe and how).
 - <http://www.darwinproject.ac.uk/entry-7104> (UNPUBLISHED: REPRODUCED IN APPENDIX - J. Loring Gray provides Darwin with her observations of dogs and cats)
 - <http://www.darwinproject.ac.uk/entry-6039> (Henrietta Huxley observes for Darwin but letter is sent via Emma - why?)
-

Lecture 2

Female species as more like "uncivilised" races / animals / children

Relevant extracts:

"*The Male generally more modified than the Female.*—Throughout the animal kingdom, when the sexes differ in external appearance, it is, with rare exceptions, the male which has been the more modified; for, generally, the female retains a closer resemblance to the young of her own species, and to other adult members of the same group. The cause of this seems to lie in the males of almost all animals having stronger passions than the females. Hence it is the males that fight together and sedulously display their charms before the females; and the victors transmit their superiority to their male offspring. Why both sexes do not thus acquire the characters of their fathers, will be considered hereafter. That the males of all mammals eagerly pursue the females is notorious to every one." (*Descent*, p. 221)

"The female, however, ultimately assumes certain distinctive characters, and in the formation of her skull, is said to be intermediate between the child and the man." (*Descent*, p. 557).

"As with animals of all classes, so with man, the distinctive characters of the male sex are not fully developed until he is nearly mature; and if emasculated they never appear. The beard, for instance, is a secondary sexual character, and male children are beardless, though at an early age they have abundant hair on the head. It is probably due to the rather late appearance in life of the successive variations whereby man has acquired his masculine characters, that they are transmitted to the male sex alone. Male and female children resemble each other closely, like the young of so many other animals in which the adult sexes differ widely; they likewise resemble the mature female much more closely than the mature male. The female, however, ultimately assumes certain distinctive characters, and in the formation of her skull, is said to be intermediate between the child and the man." (*Descent*, p. 557).

"Man is the rival of other men; he delights in competition, and this leads to ambition which passes too easily into selfishness. These latter qualities seem to be his natural and unfortunate birthright. It is generally admitted that with woman the powers of intuition, of rapid perception, and perhaps of imitation, are more strongly marked than in man; but some, at least, of these faculties are characteristic of the lower races, and therefore of a past and lower state of civilisation." (*Descent*, pp. 563 – 4).

Relevant letters:

1) Universal language of "mankind":

- <http://www.darwinproject.ac.uk/entry-3439> (Darwin uses universal language of "mankind" to differentiate Anglo Saxons from "lower races". No differentiation according to sex. Empowering for women?)

2) Women as a civilising force:

- <http://www.darwinproject.ac.uk/entry-13607> (Darwin on women's moral superiority. If anything, women are forces for morality / civility)
 - <http://www.darwinproject.ac.uk/entry-489> (Again, Darwin on Emma as a civilising force)
 - <http://www.darwinproject.ac.uk/entry-13650> (Kennard agrees that women are morally superior to men!)
-

Lecture 3

Science / scientific culture and masculinity and the status of women in science. The beard!

Relevant extracts:

"Now, what must we conclude with respect to such sexual differences as these? No one will pretend that the beards of certain male goats, or the dewlap of the bull, or the crests of hair along the backs of certain male antelopes, are of any use to them in their ordinary habits. It is possible that the immense beard of the male *Pithecia*, and the large beard of the male orang, may protect their throats when fighting; for the keepers in the Zoological Gardens inform me that many monkeys attack each other by the throat...". (*Descent*, pp. 531 – 532).

"As with animals of all classes, so with man, the distinctive characters of the male sex are not fully developed until he is nearly mature; and if emasculated they never appear. The beard, for instance, is a secondary sexual character, and male children are beardless, though at an early age they have abundant hair on the head. It is probably due to the rather late appearance in life of the successive variations whereby man has acquired his masculine characters, that they are transmitted to the male sex alone. Male and female children resemble each other closely, like the young of so many other animals in which the adult sexes differ widely; they likewise resemble the mature female much more closely than the mature male. The female, however, ultimately assumes certain distinctive characters, and in the formation of her skull, is said to be intermediate between the child and the man." (*Descent*, p. 557).

Relevant letters:

1) The Beard:

- <http://www.darwinproject.ac.uk/entry-4511> (exchange with Asa Gray in which Darwin includes a photo' of himself with a beard which, he says, make his look "venerable')
- <http://www.darwinproject.ac.uk/entry-4558> (Gray's response: Beard makes Darwin look older and like he's "suffered")
- <http://www.darwinproject.ac.uk/entry-3641> (Darwin tells William that Emma would like him to grow a beard)

2) M/C masculinity and respectability (Darwin's use of euphemism, even with his closest friends):

- <http://www.darwinproject.ac.uk/entry-1242> (Darwin refers to Emma's "usual wretched state" – pregnancy and euphemism, even with friends)
- <http://www.darwinproject.ac.uk/entry-1908> (as above)
- <http://www.darwinproject.ac.uk/entry-1950> (as above)
- <http://www.darwinproject.ac.uk/entry-7666> (exchange with Crichton-Browne re phantom pregnancy which Darwin considers too delicate a topic on which to publish)
- <http://www.darwinproject.ac.uk/entry-1924> (Darwin and Huxley discuss the charge – made primarily by Owen – that Darwin's work was "indecent" and thus not real science. For more on how Darwin was urged to police his language and subject matter in order to become a respectable man of science see Gowan Dawson's *Darwin, Literature and Victorian Respectability* – particularly the introduction).

3) Darwin's private view of women explorers / scientists:

- <http://www.darwinproject.ac.uk/entry-8146> (Darwin states that MT's observations on butterflies are the best he's seen - including his own).
- <http://www.darwinproject.ac.uk/entry-12898> (UNPUBLISHED: REPRODUCED IN APPENDIX - Part of Darwin's botanical correspondence with the Dodel-Ports who worked as a husband and wife team and whose work CD appears to have respected greatly)
- <http://www.darwinproject.ac.uk/entry-12781> (exchange with explorer, Florence Dixie. She, like Darwin and Treat, had the time and space to travel and observe)
- <http://www.darwinproject.ac.uk/entry-12795> (UNPUBLISHED: REPRODUCED IN APPENDIX - as above)
- <http://www.darwinproject.ac.uk/entry-12875> (UNPUBLISHED: REPRODUCED IN APPENDIX - as above)
- <http://www.darwinproject.ac.uk/entry-7124> (Henrietta's role in producing his published work).

4) Science as masculine domain:

- <http://www.darwinproject.ac.uk/entry-1476> (Darwin to Fox in which he discusses education and professions for his sons [and not his "less troublesome" daughters])
- <http://www.darwinproject.ac.uk/entry-1489> (as above)
- <http://www.darwinproject.ac.uk/entry-1352> (as above)
- <http://www.darwinproject.ac.uk/entry-13607> (Darwin to Kennard arguing that a woman's role is primarily to educate children and organise the home)
- see also, however, see part **3)** of this section

5) Science as feminine pursuit:

- In many ways science was decidedly *not* masculine: sensitivity to nature, importance of feeling etc = decidedly feminine. In a letter written to his sister on November 21st 1850, T. H. Huxley commented how he had "a woman's element in me" which was key to his scientific endeavour. For more see Paul White, *Thomas Huxley: Making the Man of Science*, p. 20.
- <http://www.darwinproject.ac.uk/entry-4518> (Reference to Darwin's work as "intellectual labour" - hence his exhaustion. Were parallels with hard labour a way of "butching up" science?).
- <http://www.darwinproject.ac.uk/entry-3101> (Darwin as "upset and prostrate" at the sight of his son under chloroform - "masculine" by Victorian standards?)

6) Women's work:

- <http://www.darwinproject.ac.uk/entry-1476> (Darwin's to Fox: women's work and charity)
- <http://www.darwinproject.ac.uk/entry-13607> (Darwin to Kennard on women as educators and home-keepers)
- <http://www.darwinproject.ac.uk/entry-542> (Darwin writes to his sister about how monotonous he fears Emma's life is - he clearly defines himself as the public breadwinner while Emma is a private domestic creature reliant on his help)

7) Scientists' wives (as influential - indirectly? - in the scientific world):

- <http://www.darwinproject.ac.uk/entry-8700> (UNPUBLISHED: REPRODUCED IN APPENDIX - E. F. Lubbock asks Emma to help persuade Charles to rename the Royal Anthropological Society)
 - <http://www.darwinproject.ac.uk/entry-12898> (UNPUBLISHED: REPRODUCED IN APPENDIX - Part of Darwin's botanical correspondence with the Dodel-Ports who worked as a husband and wife team and whose work CD appears to have respected greatly)
 - <http://www.darwinproject.ac.uk/entry-7104> (UNPUBLISHED: REPRODUCED IN APPENDIX - J. Loring Gray to Darwin re her observations of dogs and cats)
 - <http://www.darwinproject.ac.uk/entry-6039> (Henrietta Huxley observes for Darwin but observations are sent via Emma - why?)
-

Lecture 4

Darwin et al and andro-centrism: statements on evolution as being driven by men / men as more evolved than women

Relevant extracts:

"This form of [sexual] selection depends, not on a struggle for existence in relation to other organic beings or to external conditions, but on a struggle between the individuals of one sex, generally the males, for the possession of the other sex." (*Origins* p. 69)

"Amongst birds, the contest is often of a more peaceful character. All those who have attended to the subject, believe that there is the severest rivalry between the males of many species to attract, by singing, the females. The rock-thrush of Guiana, birds of paradise, and some others, congregate; and successive males display with the most elaborate care, and show off in the best manner their gorgeous plumage; they likewise perform strange antics before the females, which, standing by as spectators, at last choose the most attractive partner." (*Origin*, pp. 69 – 70)

"*The Male generally more modified than the Female.*—Throughout the animal kingdom, when the sexes differ in external appearance, it is, with rare exceptions, the male which has been the more modified; for, generally, the female retains a closer resemblance to the young of her own species, and to other adult members of the same group. The cause of this seems to lie in the males of almost all animals having stronger passions than the females. Hence it is the males that fight together and sedulously display their charms before the females; and the victors transmit their superiority to their male offspring. Why both sexes do not thus acquire the characters of their fathers, will be considered hereafter. That the males of all mammals eagerly pursue the females is notorious to every one." (*Descent*, p. 221)

"But in all cases, in order that the males should seek efficiently, it would be necessary that they should be endowed with strong passions; and the acquirement of such passions would naturally follow from the more eager leaving a larger number of offspring than the less eager." (*Descent*, p. 221)

"Woman seems to differ from man in mental disposition, chiefly in her greater tenderness and less selfishness; and this holds good even with savages, as shewn by a well-known passage in Mungo Park's Travels, and by statements made by many other travellers." (*Descent*, p. 563).

"Woman, owing to her maternal instincts, displays these qualities towards her infants in an eminent degree; therefore it is likely that she would often extend them towards her fellow-creatures." (*Descent*, p. 563)

"Amongst the half-human progenitors of man, and amongst savages, there have been struggles between the males during many generations for the possession of the females. But mere bodily strength and size would do little for victory, unless associated with courage, perseverance, and determined energy." (*Descent*, p. 546)

"The members of our aristocracy...from having chosen during many generations from all classes the more beautiful women as their wives, have become handsomer, according to the European standard of beauty, than the middle classes". (*Descent*, p. 356).

Relevant letters:

1) Female species and sexual selection:

- <http://www.darwinproject.ac.uk/entry-2581> (Darwin to Galton - suspects in some cases that female species play more active part in sexual selection than males)
- <http://www.darwinproject.ac.uk/entry-5004> (Darwin hints at same scenario in butterflies)
- <http://www.darwinproject.ac.uk/entry-5992> (Darwin believes sexual selection can be applied to man but doubts anyone will believe him!).
- <http://www.darwinproject.ac.uk/entry-5475> (same true of pigeons?)

2) Potential for sexual equality:

- <http://www.darwinproject.ac.uk/entry-13607> (Darwin to Kennard. Argues that there is *potential* for equality through education. Shift to social (from physical) determinism (as per extract 17).

3) Women as more highly evolved than men (morally, at least):

- <http://www.darwinproject.ac.uk/entry-7981> (UNPUBLISHED: REPRODUCED IN APPENDIX - Hooker "What a poor lot we men are women would be twice as rational")
 - <http://www.darwinproject.ac.uk/entry-13607> (Darwin on women's moral superiority)
 - <http://www.darwinproject.ac.uk/entry-489> (Darwin on Emma as a civilising force)
-

Lecture 5

Botanical bodies: sexual imagery, botany and plants

Relevant extracts:

Perhaps tellingly, Darwin appears to draw very few parallels in his published work between botany and sex (see lecture 3, M/C respectability). While even here references were few and far between, was his private correspondence perhaps less policed?

Relevant letters:

- <http://www.darwinproject.ac.uk/entry-4262> (Darwin discusses with Asa Gray a "triple marriage" between three hermaphrodite flower forms)
 - <http://www.darwinproject.ac.uk/entry-4441> (Reference to *Botany for Ladies* by Lydia Becker: Botany as an appropriate pursuit for "ladies"?)
-

Lecture 6

Discussion of sexual selection

Relevant extracts:

"Amongst birds, the contest is often of a more peaceful character. All those who have attended to the subject, believe that there is the severest rivalry between the males of many species to attract, by singing, the females. The rock-thrush of Guiana, birds of paradise, and some others, congregate; and successive males display with the most elaborate care, and show off in the best manner their gorgeous plumage; they likewise perform strange antics before the females, which, standing by as spectators, at last choose the most attractive partner." (*Origin*, pp. 69 – 70)

"A few exceptional cases occur in various classes of animals, in which the females instead of the males have acquired well pronounced secondary sexual characters, such as brighter colours, greater size, strength, or pugnacity. With birds there has sometimes been a complete transposition of the ordinary characters proper to each sex; the females having become the more eager in courtship, the males remaining comparatively passive, but apparently selecting the more attractive females, as we may infer from the results. Certain hen birds have thus been rendered more highly coloured or otherwise ornamented, as well as more powerful and pugnacious than the cocks; these characters being transmitted to the female offspring alone. In such cases it may be suggested with more plausibility, that there has been a double or mutual process of sexual selection; the more vigorous and precocious females selecting the more attractive and vigorous males, the latter rejecting all except the more attractive females. But from what we know of the habits of animals, this view is hardly probable, for the male is generally eager to pair with any female." (*Descent*, p. 225)

"*Difference in the Mental Powers of the two Sexes.*—With respect to differences of this nature between man and woman, it is probable that sexual selection has played a highly important part. I am aware that some writers doubt whether there is any such inherent difference; but this is at least probable from the analogy of the lower animals which present other secondary sexual characters. No one disputes that the bull differs in disposition from the cow, the wild-boar from the sow, the stallion from the mare, and, as is well known to the keepers of menageries, the males of the larger apes from the females." (*Descent*, p. 563).

[Men have] "higher powers of the imagination and reason....the characters gained will have been transmitted more fully to the male than to the female offspring.... Thus man has ultimately become superior to woman. It is, indeed, fortunate that the law of the 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." (*Descent*, p. 565).

"The members of our aristocracy...from having chosen during many generations from all classes the more beautiful women as their wives, have become handsomer, according to the European standard of beauty, than the middle classes". (*Descent*, p. 356).

Relevant letters:

1) Darwin and female sexual agency:

- <http://www.darwinproject.ac.uk/entry-2581> (Darwin to Galton - suspects female species play active part in sexual selection)
- <http://www.darwinproject.ac.uk/entry-5004> (Darwin hints at female agency in butterflies)
- <http://www.darwinproject.ac.uk/entry-5992> (Darwin believes sexual selection can be applied to man but doubts anyone will believe him!).
- <http://www.darwinproject.ac.uk/entry-5475> (same true of pigeons?)

2) Women's contribution to the debate (sexual selection and feminism):

- <http://www.darwinproject.ac.uk/entry-7411> (Emily Pfeiffer questions Darwin's version of sexual selection)
-

Lecture 7

Darwin et al on feminism / women's rights

Relevant extracts:

"Amongst birds, the contest is often of a more peaceful character. All those who have attended to the subject, believe that there is the severest rivalry between the males of many species to attract, by singing, the females. The rock-thrush of Guiana, birds of paradise, and some others, congregate; and successive males display with the most elaborate care, and show off in the best manner their gorgeous plumage; they likewise perform strange antics before the females, which, standing by as spectators, at last choose the most attractive partner." (*Origin*, pp. 69 – 70)

"A few exceptional cases occur in various classes of animals, in which the females instead of the males have acquired well pronounced secondary sexual characters, such as brighter colours, greater size, strength, or pugnacity. With birds there has sometimes been a complete transposition of the ordinary characters proper to each sex; the females having become the more eager in courtship, the males remaining comparatively passive, but apparently selecting the more attractive females, as we may infer from the results. Certain hen birds have thus been rendered more highly coloured or otherwise ornamented, as well as more powerful and pugnacious than the cocks; these characters being transmitted to the female offspring alone. In such cases it may be suggested with more plausibility, that there has been a double or mutual process of sexual selection; the more vigorous and precocious females selecting the more attractive and vigorous males, the latter rejecting all except the more attractive females. But from what we know of the habits of animals, this view is hardly probable, for the male is generally eager to pair with any female." (*Descent*, p. 225)

"The members of our aristocracy...from having chosen during many generations from all classes the more beautiful women as their wives, have become handsomer, according to the European standard of beauty, than the middle classes". (*Descent*, p. 356).

"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. All women, however, could not be thus raised, unless during many generations those who excelled in the above

robust virtues were married, and produced offspring in larger numbers than other women.” (*Descent*, p. 565)

Relevant letters:

1) Darwin’s theory and feminism:

- <http://www.darwinproject.ac.uk/entry-2581> (Darwin to Galton - suspects female species play active part in sexual selection. Element of Darwin’s argument put to radical use by feminists such as Emily Pfeiffer and Eliza Burt Gamble.)
- <http://www.darwinproject.ac.uk/entry-13579> (UNPUBLISHED: REPRODUCED IN APPENDIX - Caroline Kennard questions Darwin's arguments re: the inferiority of women in *Origin*)
- <http://www.darwinproject.ac.uk/entry-13650> (UNPUBLISHED: REPRODUCED IN APPENDIX - Kennard argues that women's intellectual capacity paired with moral superiority is an aid to mankind).

3) Darwin, feminist politics and science:

- <http://www.darwinproject.ac.uk/entry-5316> (Lydia Becker asks Darwin to provide papers for the Manchester Ladies’ Literary Society. Generally, however, her correspondence is strictly non-political, which is typical of Darwin’s correspondence more generally. See 19th-century discussions of “pure science” - i.e. free from the influence of politics.)
- For more non-political correspondence with well known Victorian feminists see Darwin’s exchanges with:

i) Browne-Blackwell: <http://www.darwinproject.ac.uk/entry-6976>
(UNPUBLISHED: REPRODUCED IN APPENDIX)

ii) Pfeiffer: <http://www.darwinproject.ac.uk/entry-7411>

iii) Cobbe: <http://www.darwinproject.ac.uk/entry-8649>
(UNPUBLISHED: REPRODUCED IN APPENDIX)

iv) Lady Dixie: <http://www.darwinproject.ac.uk/entry-12875>
(UNPUBLISHED: REPRODUCED IN APPENDIX)

**Appendix of unpublished letters
(chronological by letter number):**

Letter 6976

To A. B. Blackwell [8 November 1869]

Down Beckenham Kent

Nov. 8th

Dear Sir

I am much obliged to you for your kindness in sending me your
""Studies in General Science"", over which, as I observe in the
Preface, you have spent so much time.---- In turning over the pages
I notice that you quote some statements made by me & very little
known to public. I received your work only yesterday

With my best thanks Dear Sir Yours faithfully

Letter 7104

From J. L. Gray [14 February 1870]

Botanic Garden, Cambridge

Feb. 14 '70

My dear Mr. Darwin,

Dr. Gray says, ""You write & tell about the dog!""---- And indeed
it was only a supposition of mine that he was suckled by a cat, from
his queer tricks when he came to us, a young dog of about 7 months
old---- He then would chase his own tail for sport; but I have heard
of other dogs doing that---- But he still keeps up the trick of washing
his face with his paws, & will sit as demurely as any old tabby,
licking one paw & rubbing his face, & then changing to the other----
I am glad if he has any tricks worth noticing, for he is a stupid
little doggie at learning anything new, & has nothing but an
affectionate heart & some beauty to recommend him---- He came to
us through one or two transfers, so I cannot know much about his
puppyhood; but the lady who gave him to us is coming here this
week,

& I will ask her if she can find out anything about it----

I wish you had told us something how you were, but I hope you
are as well at least as when we last saw you---- And finding winter
not too severe upon you---- As for us I can't say that having no
winter one year, makes coming back to it any more delightful----
Snow & ice & slush & mud, for we are enough on the shore to have
our cold turns soon followed
by a thaw, are delightful to young people, who can skate & coast &
walk & ride, but I have got to an age when I prefer dry roads & green
trees & fresh turf!----

Dr. Gray is busy as ever; & astonishing his old friends & puzzling them very much as an ""Arab Sheykh,"" as our Greek Professor, Mr. Sophocles calls him---- He seems very well----

I wish I could tell you & Mrs. Darwin what delightful recollections we keep of you all & your charming home---- I assure you I am a woman of consideration that I have seen Mr. Darwin!-----

Pray remember us most cordially to all your circle----

Very faithfully Yours, Jane L. Gray

Letter 7123

To Henrietta Darwin [Mar--June 1870]

Spring 1870

My dear H.

Please read the Ch. first *right through* without a pencil in your hand, that you may judge of general scheme; as, also, I particularly wish to know whether parts are extra tedious; but remember that M.S

is always much more tedious than print.---- The object of Ch. is simply comparison of mind in men & animals: in the next chapt. I discuss progress of morals &c.---- Some sentences are at back of Page marked thus .----

I do not send foot-notes, as I have no copy & they are almost wholly mere authorities.---- After reading once right through, the more time you can

give up for deep criticism or corrections of style, the more grateful I shall be.---- Please make any long corrections on separate slips of paper, leaving narrow blank edge, & pin them to margin of each sheet, so that I can turn each back, & read whilst still attached to its proper page.---- This will save me a world of troubles

Heaven only knows what you will think of the whole, for I cannot conjecture.---- You are a very good girl indeed to undertake the job.-

Your affect Father C. Darwin

Letter 7981

From J. D. Hooker [2 October 1871]

Kew

Monday 2 Oct 1871

Dear Darwin

I return Huxley's article which I have read with all the admiration

I can express. What a wonderful Essayist he is & incomparable critic &

defender of the faithful. Well, I think you are avenged by your Enemy.----

but are not happier for that---- though you must for the spirit & body which the avenger has given to the subject, & above all for the grand use he has made of your own argument for converting your enemy.

What

you must feel, & always feel, is, that peculiar & quite unreasonable bitter sorrowing which a man excites who praises you to your face & abuses

you behind your back.---- Why should this excite anything but contempt

at worst, or pity at best? & yet there is no man with generous emotions

but feels more sad & sorry over such treatment than either angry or vindictive.

The Psychological passages seem to me to be wonderfully clear & good

how tight he clothes a difficult idea or language. I was particularly struck with the paragraphs on Neurosis & Psychosis,----

consciousness

& its physical basis---- but really it is difficult to single out either passages or subjects, all is so good & there is so much power & acumen in the treatment of every branch of his subject---- you may call it an essay, a critique---- an exposition or discussion----

an enquiry---- in what else you will---- you may read for one and all these aims.

The exposition of Mivart's presumptuous ignorance in citing the Catholic fathers is delicious----that's the last pitfall the poor devil expected to be snared into.

The tumbling over Wallace is however if not an equal feat, a far far greater service to Science.

The appeal to conscience in the matter of the clergy & the 6 days is very powerful, & must make many a poor Devil wince in the pulpit. And the quiet contempt with which he treats the Squires & Parsons is extraordinarily humorous in it's manner.

Well, the article has been a God-send to me, for I am very very low & cannot get my spirits up---- about my poor Mother's state. I have just returned from Torquay. I am also in the most detestable position that a scientific man, or an officer, or a gentleman, can be with my Lord & Master Ayrton, who I have officially denounced to the 1st Lord of the Treasury for misconduct to me & to Kew: & I need not say that

our lives are not the happiest after such an Explosion! How it will all end God knows, I began the battle with heart & spirit= & gloried in it---- but my Mother's condition has pointed the whole & I also

left my sister very ill, even for her---- so I am in the state of utter disquiet, not caring a farthing what the Treasury or Ayrton do. What a poor lot we men are---- a woman would be twice as rational as I am, under twice the hard lines.

God Bless you dear old friend Yrs affect J D Hooker

Letter 8303

To G. Darwin [3 May 1872]

Down Beckenham Kent
May 3d

My dear George

Many thanks for the extracts which I will keep, but the subject of music is beyond me.----

I was thinking the other day of suggesting to you to deliberate over 1 or 2 sentences at the end of your paper on dress, where you speak of the subject being very interesting. I remember once putting in some such sentence, & it was objected to me that the Reader was the proper judge of this. This may be Hypercriticism.----

I am heartily glad that you were not too late for being called to the Bar.---- Good Heavens what two days work you had----

The Lovers seem supremely happy, & Amy's eyes are as bright as they can be, & her cheeks rosy.---- We had a perfectly charming & most cordial letter from Mrs. Ruck today. She approves of my suggestion that the marriage shd. not be immediately. Mr. \$Ruck's name is never ever mentioned!----

Yours affectionately C. Darwin

Letter 8649

From Frances Power Cobbe [26 November 1872]

26. Hereford Sq SW

Dear Mr Darwin

I cannot say how much I am gratified by your kind gift of your book. I had been trying in vain to purchase it---- no copy being in the market---- I need not say how very much more valuable it is as coming from you---- Miss Lloyd & I are deep in it already---- She is meanly rejoicing.

I am going out to dinner thus she may read it all the evening"----

Hoping that your health is pretty good & that we may have the pleasure of catching a glimpse of you in Queen Anne St ere very long, Believe me dear

Mr Darwin heartily vr. obliged Frances Power Cobbe

Letter 8700

From E. F. Lubbock to Emma Darwin [1873]

Dear Mrs. Darwin

Why do the heathen so violently rage together? he will have all the parish against him. I don't know whether Beaumont is still on the School board----or if he was only on the Farnboro' one----but I have written to him on the chance. We shall get our way, I don't doubt, & I will break out into a chessboard or some more books if we do.

I hate begging----so now you will perceive I am going to beg. Yesterday I was at the Burks', & Mr. Burk was groaning & lamenting over his Presidency of the Anthro----(I never can spell the horrid word)-----Society----the name irritates him, as it does John, & it isn't the right one. We never wanted to be merged & swallowed whole in and by this mushroom society, with no good men in it----So I said well, why not alter it back to the Ethnological, which was the first & real root of the thing? To which he said despondently that they were in debt 700. I said we would collect it: on which he brightened up & said if we could screw together half that, he should be in a position to say ""take this if you become the Ethnological again: otherwise it will be returned to those who gave it.""

Now I want Mr. Darwin if he will to head the subscription: his name will go so far---- I don't ask for the actual money, because we may never come to realize the sum wanted: but I ask for his name & a promise of something, if we see our way. John would help I know, but I don't like to speak for him. Poor old Mr. Crawford would have given every penny he had, in fact I should think he turned in his grave when his pet Society was named after his bitterest enemies. Will you ask Mr. Darwin to suggest a few people we might apply to.----

I am afraid I beg badly I never did it but once before----but I am rather heart & soul in this matter. You see John was President for some years & the amalgamation or rather swamping of his society vexed him very much.

I hope you won't think me very meddlesome I felt so sorry for Mr. Burk----I don't think he's well, either.

With love to you all I am yours affectionately EFL

Letter 9085

To G Darwin [Oct 3 1973]

My Dear George

Your letter seems to me excellent & it was very good of you to take so much trouble. I doubt much whether a second letter is worth publishing on so hypothetical an assumption. In fact I ought not to have written the latter part {01/of the article,} but I did not

then see how I could first test it. But as it is published, you may

say it ought to be made clear. Do as you Diliberately think best.

But I shd not like to publish it" even a son's letter as my own.

You could by altering a few words in the beginning, make the whole your

own.----- You cd say that ""my Father finds & he has asked

me to give a fuller explanation"" ,-----or some such words.-----

I have altered a few words & added a few. But I again say think before you send it. I am sure, however, that the letter is very good & clear. You cd. ask for proof to be sent to Trin. Coll..

Yours affectionately Ch. Darwin

Letter 10530

To G Darwin [June 4 1876]

My dear George.-----

I am determined not to believe in your grand astronomical work, until Adams accepts it & you have reached your final results, for I shall be so dreadfully disappointed, if it all breaks down. As for yourself all I can say {01/is} do not commit suicide.

Poor Jemmy has just come here & I have heard the sad news that the planetary movement will not act.-----

W. is beginning to recover from the unfortunate 2 days in London.--

--

yours affect C.D

Sunday

Letter 12795

From F. Dixie [Nov 4 1880]

Dear Mr. Darwin.-----

I must write a line to thank you for your kind letter in reply to mine.-----

The books you recommend I shall certainly procure & read with interest;-----

I have myself written a short description of my wanderings in Patagonia which appears this month in print and if you will do me the honour of accepting a copy I shall feel very proud to send you one. The work does not comprise the extent of my whole expedition which on leaving Patagonia I carried on up the Rivers Plate Uruguay & Parana. From Patagonia I brought home some ostriches a gunaco, & from the Rivers Plate, Uruguay, & Panama, a great many animals, comprising some ostriches, a Capybara & a little jaguar. The mother attacked me & followed me up a tree, in self defence I was obliged to shoot her but saved one of the cubs from the gauchos.----- Since then he has been my almost constant companion following me abt. like a dog altho' of an enormous size being now 2. years old. I only yesterday took him to the Zoological Gardens, much to my regret, but he was growing so big that it was not safe keeping him longer at large. I have mentioned this fact to prove how these animals can be tamed by kindness as completely as a dog.-----

With many apologies for thus troubling you I beg to remain very faithfully yrs. Dixie

Letter 12875

From F. Dixie [29 November 1880]

Bosworth Park. Hinchley. Leicestershire.
Novber. 29th..

Dear Mr. Darwin.

I have great pleasure in forwarding to you the Acct.
of my travels in Patagonia and trusting the book will meet with your
approval.-----

I fear you will find it devoid of much interest. While begging you
to look on this my first literary production with leniency written as
it was during the never ending interruptions of a London Season I
hope that the hurried acct. of a few of our adventures & occupations
in that far off land will be of sufficient interest to carry you thro' its
pages.-----

I venture at the same time to send you a little tragedy which I wrote
some years ago as a child of 14.----- It was printed for private
circulation at the request & after the death of the late Ld. Lytton but
having given some offence I have since suppressd its circulation. With
many apologies for what may appear presumptions on my part allow
me to remain yrs. very
sincerely
Florence Dixie.

Letter 12898

From Arnold & Carolina Dodel-Port [8 December 1880]

Zurich,
8 December 1880

Mr Charles Darwin in Down. (England.)

Most esteemed Sir!

Two days ago I received by book-post the book you addressed to me
via J. Murray: "The power of movement in plants", which copy you
were so kind as to dedicate to me. It will probably not be necessary to
assure you that you gave very great pleasure to me with this
magnificent gift. The topic dealt with there is of such great interest
that it is sure to captivate not only the botanical experts but also
zoologists & biologists in the wider sense. With great enjoyment we
read from time to time in the newspapers & journals, that despite
your great age you are still sprightly and it is our most heartfelt wish
that this will continue for quite some time yet.

Almost 10 years have passed since I ventured for the first time to broach the subject of Darwinism in public at the university of Zurich. Until then the qualified representatives of the biological disciplines in our university either dismissed it wholesale or they were indifferent. As you know, my lectures on the new doctrine met with vehement and with secret, malicious resistance. At that time, opponents of all hues ganged up to make my life and work occasionally rather difficult. For almost 10 years they

oppressed me because I dared advocate a living idea. Indeed, the authorities at the

eidgenössische Polytechnicum of Zurich even banned me from holding a course of lectures on Darwinism, though the Hochschule took a slightly more liberal line.

Last June I was finally appointed professor extraordinarius of botany at the university. On this occasion it emerged also that over the past 10 years Darwinism had gained ground at the Hochschule. With the exception of old Oswald Heer all teachers of botany & zoology at the university and at the polytechnic here now declared themselves Darwinians. As you can see, the power of ideas is greater than that of time-honoured prejudice.

Thus, we now can be satisfied with the state of affairs.

10 days ago I sent you the IV. instalment of our "Anatomisch-physiolog: Atlas der Botanik", which you

have probably received by now. The completion of the work is---- provided we remain well----secured. By summer 1882 the Atlas should be finished.

With our best wishes for your health & and regards to you & to your son, Francis Darwin, from your loyal collaborators: | most gratefully devoted |

Dr. A. & C. Dodel-Port

Letter 13579

From C. Kennard [26 December 1881]

Mr. Darwin

Dear Sir.

In paper recently read before a company of women in Boston, ground was taken of the inferiority of women; past, present and future; based upon scientific principles: as concisely reported in the newspaper extract----enclosed.

In reply to opposing arguments in the discussion following the paper, the Author stated her scientific Authority to be Mr. Darwin, in his ""Origin of Species"".

As a believer in continued scientific discoveries and revelations answering and modifying, ultimately, all material questions; and as an admirer of your cautious and candid methods of conveying great

results of learning and investigations to the world, I take the liberty to inquire whether the Author of the paper rightly inferred her arguments from your book: or if so, whether you are of the same mind now, as to possibilities for women, judging from her organization &c

If a mistake has been made the great weight of your opinion and authority should be righted, to which, I take it for granted, you would not object.

Excuse the liberty I take of addressing you and the hope of a reply in enclosed envelope.

I am yours with expressions of great esteem | Caroline A. Kennard.

Brookline | Dec. 26. 1881.

Letter 13650

From C. Kennard [28 Jan 1882]

Brookline Mass. U. S. A.
Jan. 28--1882

Mr. Darwin

Dear Sir

I thank you for your very kind reply to my letter of inquiry as to your opinion of the comparative intellectual abilities of the sexes.

I believe you are supported in your ideas of the greater moral quality of woman. Before quite deciding as to her condition intellectually will you excuse me if I remind you that recent results from efforts for her higher education, in your own country and in this, are very flattering and encouraging: and are opening for women avenues for individual improvement and for the general enlightenment of her sex---- and therefore, of necessity (according to the laws of heredity) for the advancement of the human race intellectually. Her enlightened intellect, united with her wholesome moral nature, can then with the aid of man (for in nature the male & female must work in sympathy together, you have taught us) ordain, in a manner hitherto unthought of or practised upon, for the propagation of the best and the survival of the fittest in the human species.

The laws of heredity have been closely watched in the lower animals, and tendencies toward improvement encouraged and toward deterioration guarded against; while in marriages and the begetting of offspring, the perpetuation of the best physical, intellectual and moral tendencies in the human race have been mostly unheeded and neglected----

In reply to your argument that "women must become as regular "bread-winners" as are men"; have they not been and are they not largely, bread-winners; though unrecognized generally as such?

Partners in business--share money profits and why should not partners in marriage--where the wife, by her labor and economy does her full part toward husbanding for the future? In the unceasing demand upon the head of a household, for executive ability, fixedness of purpose, and courage of execution, are not women possessed of the same kind of qualities which would grow with using into as apparent & grand results as are accorded to men of business, government officials, & army officers and statesmen who all expect compensation for services rendered?

And why be anxious for the "education of our children" and "the happiness of our homes", if women become bread winners? Beside when in this country five sixth of the educators are women and acknowledged breadwinners', beside improving the condition of their homes and adding happiness thereto.

Which of the partners in a family is the breadwinner where the husband works a certain number of hours in the week and brings home a pittance of his earnings (the rest going for drinks & supply of pipe) to his wife; who, early & late, with no end of self sacrifice in scrimping for her loved ones, toils to make each penny tell for the best economy and besides, to these pennies she may add by labor outside or taken in?

Dr. Walker, once president of Harvard College said that, of the young men who had been by personal effort, assisted through that College, three fourths had been, by efforts of women. And we know it has been the custom for Mothers & sisters to help their sons & brothers, by every possible effort, to an education (Whoever heard of a brother assisting a sister through college while he drugged & toiled)?

One young woman I know who receives pay for nursing the sick and gives the half of it to a brother who is learning to engrave. Is she less a bread winner than he or less than the other brother who, though younger than herself, by aid

of the Father & herself received an education which she longed for and that enabled him to rank with our most prominent clergymen?

The family must be righteously maintained. Let the `environment' of women be similar to that of men and with his opportunities, before she is fairly judged, intellectually his inferior, please.----

Excuse this great liberty and I am your obliged

Caroline A Kennard