



# Darwin's Troubled Legacy

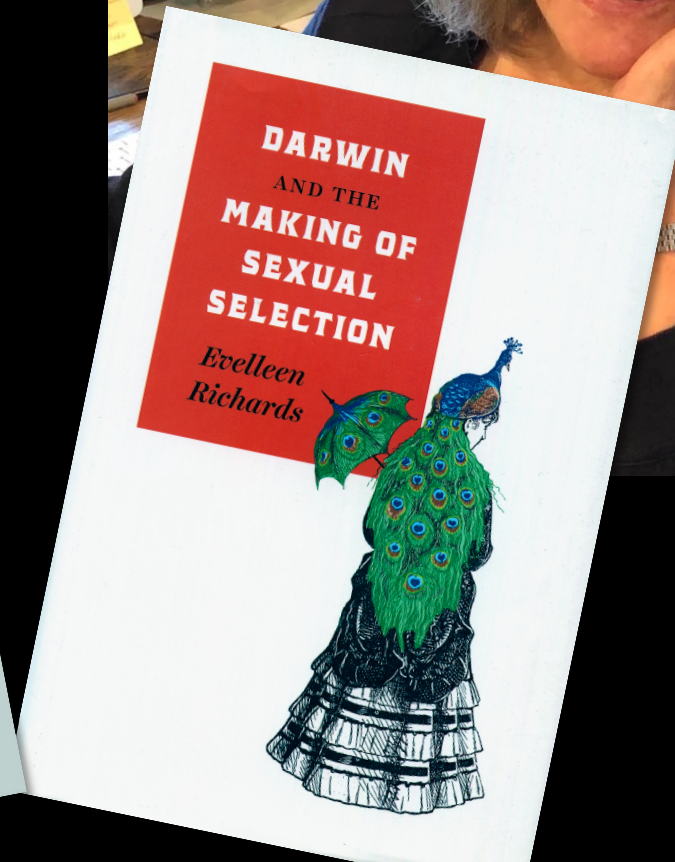
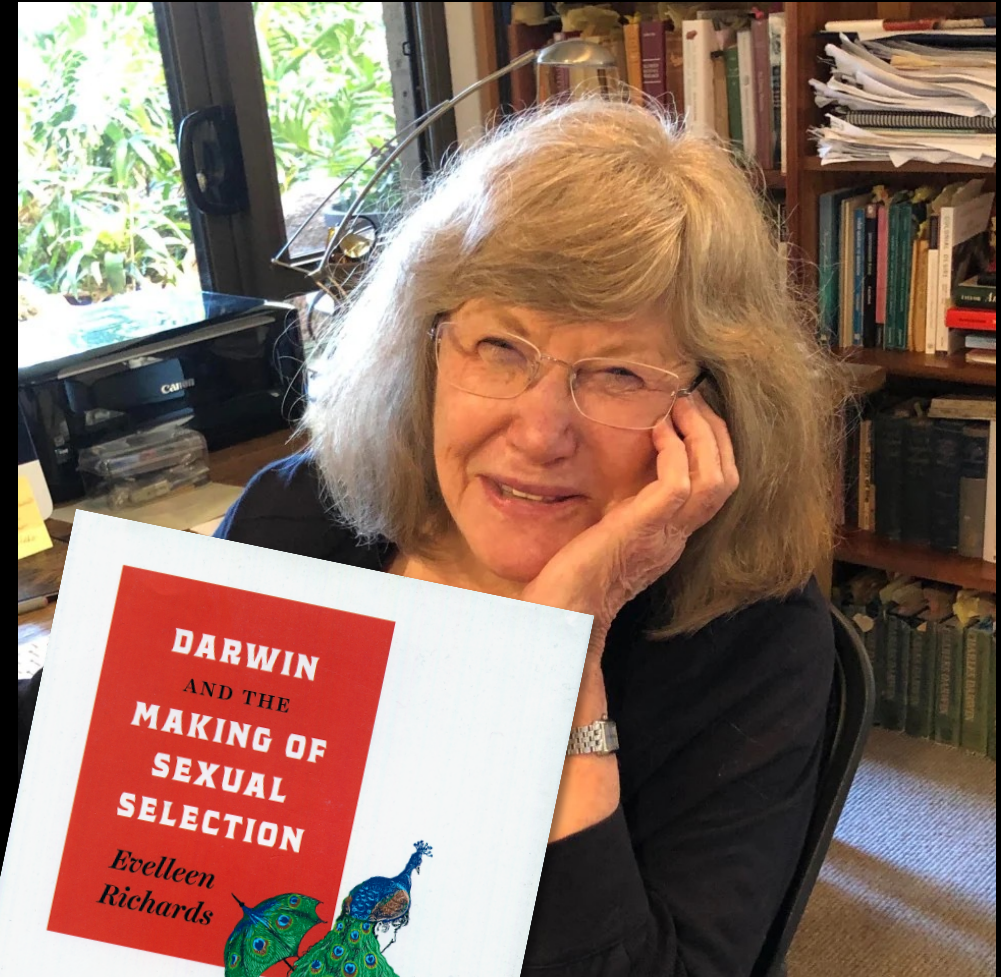
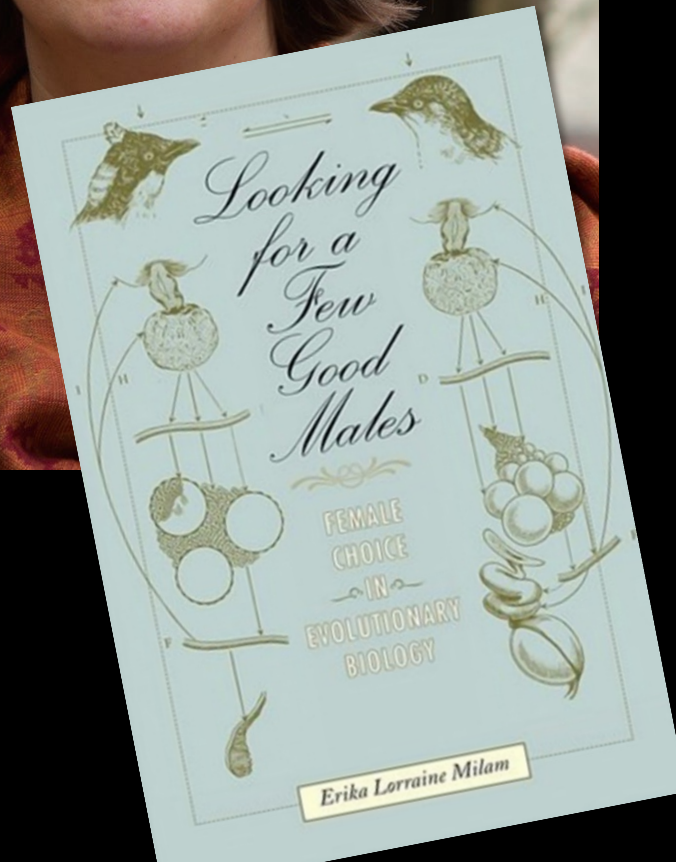
Darwin's Descent: 4

Jim Endersby





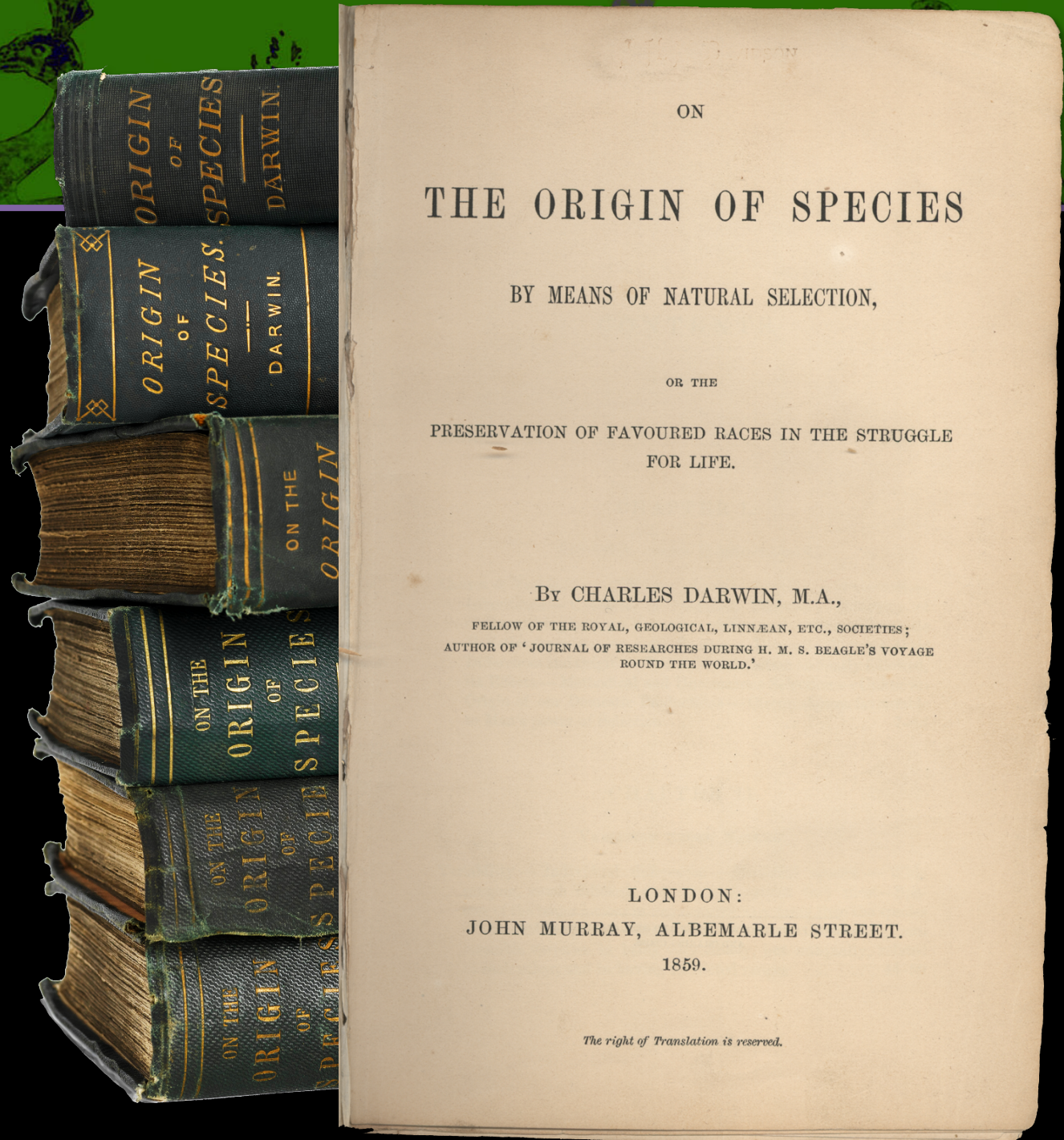
Erika Milam





## Human evolution

In the *Origin of Species*: “light will be thrown on the origin of man and his history”.





## Darwin in the 1860s

*Orchids* (1862).

“The movements and habits of climbing plants” (1865).

*The Variation of Animals and Plants under Domestication* (1868).

Fertilisation  
of  
Orchids  
—  
Darwin.

LONDON  
JOHN MURRAY.

MO  
ANIMALS  
AND  
PLANTS  
UNDER  
DOMESTICATION  
—  
DARWIN.

VOL. I.

LONDON  
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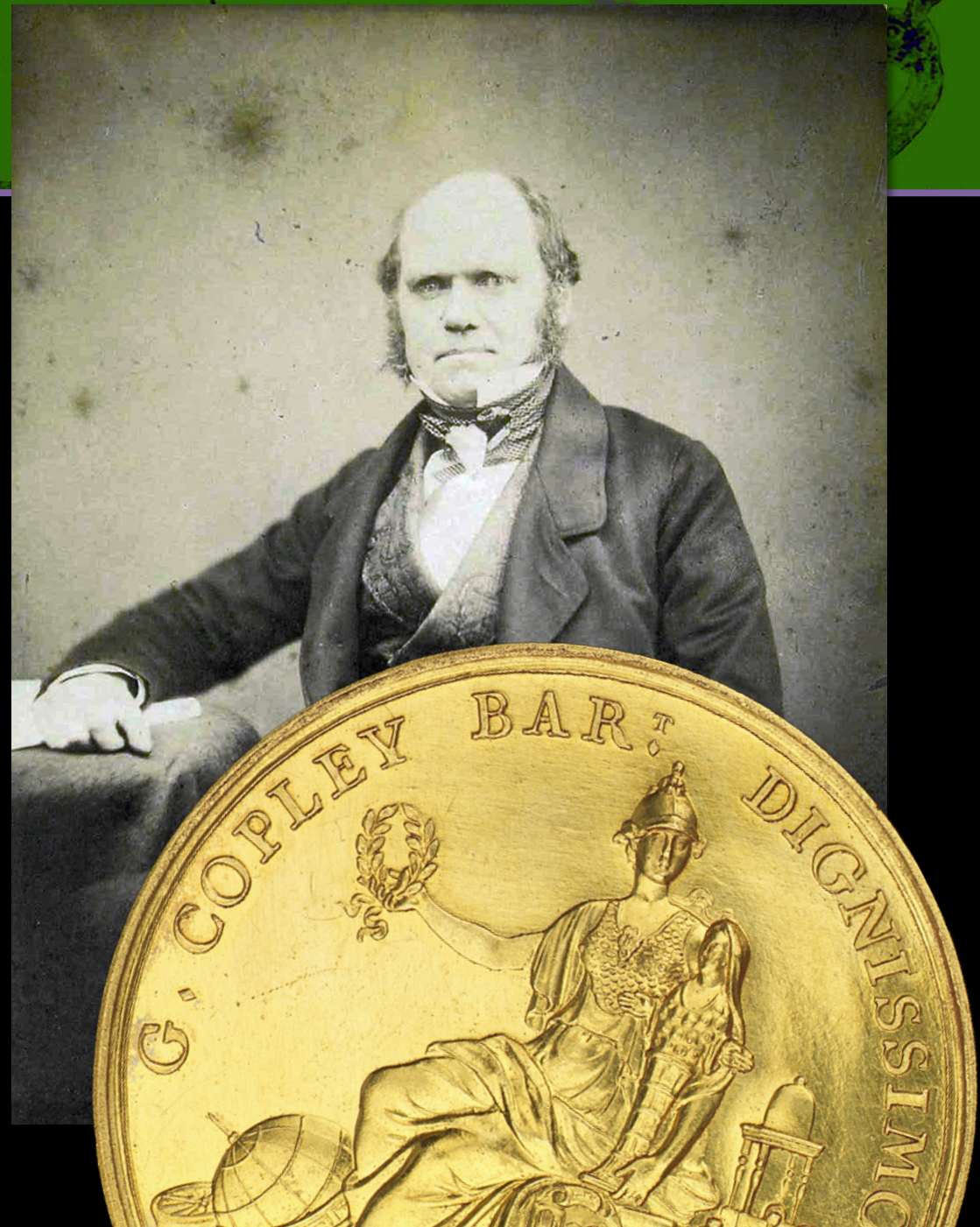
VOL. II.

LONDON  
JOHN MURRAY



## A rising scientific star

Darwin was awarded the Royal Society's prestigious Copley medal (1864), "For his important researches in geology, zoology, and botanical physiology" (*not* for his evolutionary theories).





## *British Association for the Advancement of Science*

Met in Norwich, August 1868.

The *London Guardian* newspaper reported the “Predominance of Darwinism”, adding that:

“Its reign was triumphant  
and almost unopposed”.





## *British Association for the Advancement of Science*

President, Joseph Hooker,  
devoted almost a third of his  
presidential address to the:

“greatest Botanical discoveries  
made during the last ten years”,  
the most important of which  
“we owe to Mr. Darwin”.





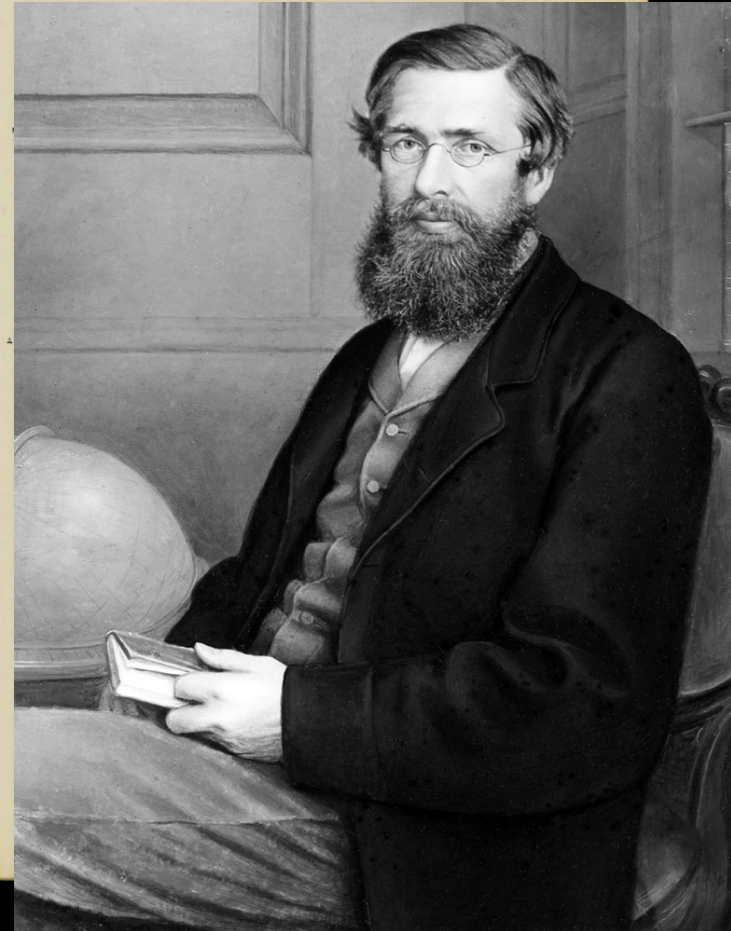
## Human evolution

Thomas Huxley *Man's Place in Nature* (1863)

Charles Lyell *The Antiquity of Man* (1863)

Alfred Russel Wallace "The Origin of the Human Races and the Antiquity of Man Deduced from the Theory of Natural Selection" (*Journal of the Anthropological Society of London*, 2, 1864).

THE GEOLOGICAL EVIDENCES  
OF  
THE ANTIQUITY OF MAN





# *The Descent of Man* (1871)

Not what people had been  
expecting.

THE  
DESCENT  
OF  
MAN  
—  
DARWIN



VOL. I.

LONDON  
JOHN MURRAY.

THE  
DESCENT OF MAN,

AND

SELECTION IN RELATION TO SEX.

By CHARLES DARWIN, M.A., F.R.S., &c.

IN TWO VOLUMES.—VOL. I.

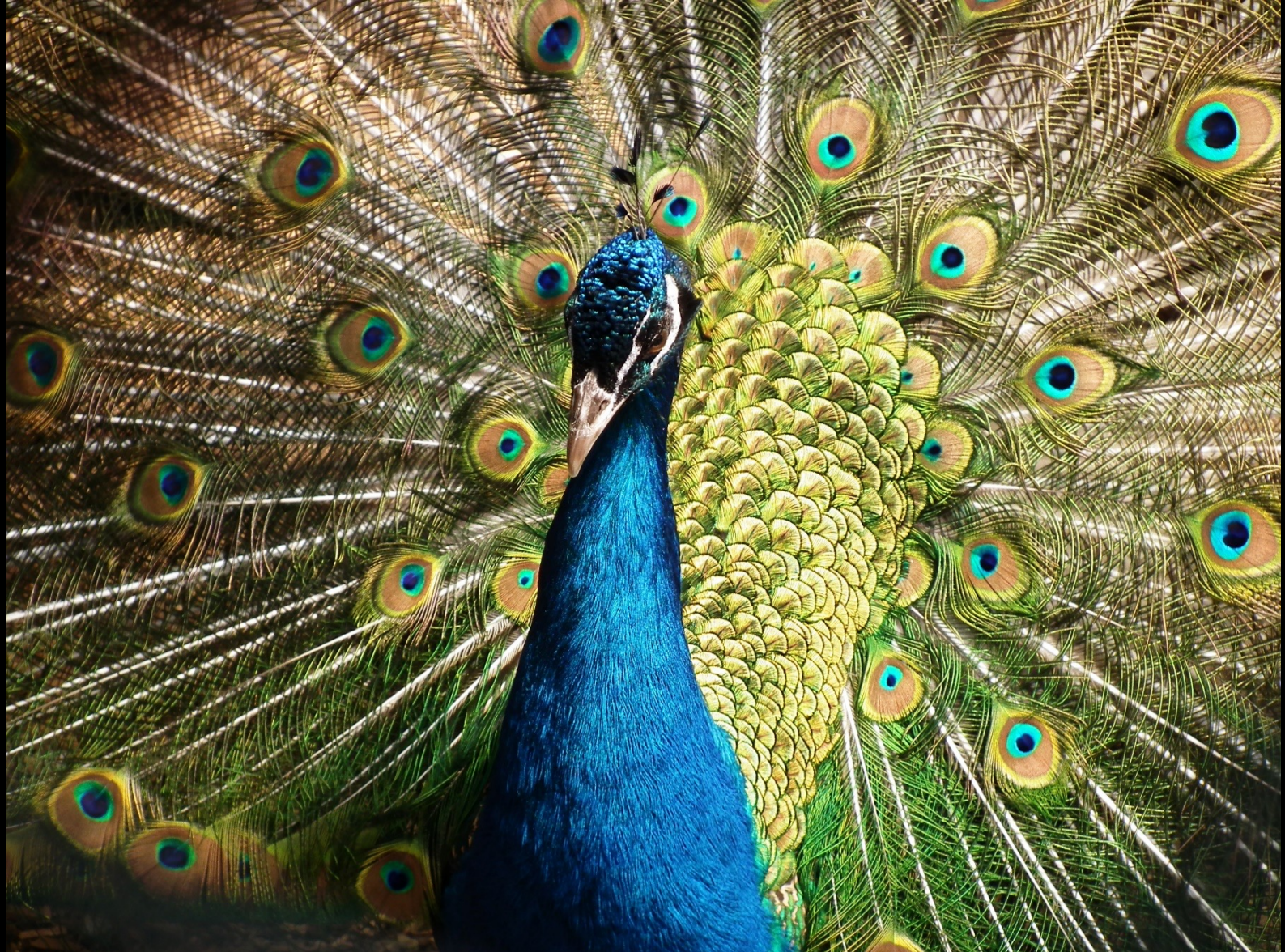
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LONDON:  
JOHN MURRAY, ALBEMARLE STREET.

1871.

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The 'sickening' peacock's tail



## The peacock's tail

### Darwin on peacocks

He once admitted that “The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick!”

DICT. UNIV. D'HIST. NAT.

oiseaux. PL. 3 bis.



4<sup>me</sup> Ordre.  
GALLINACES.

*Pavon domestique.* (Pavo cristatus, Linn.) 1/2 de gr. nat.

Folliau imp.



## The peacock's tail

### Darwin on peacocks

As he noted: “the long train of the peacock ... must render them a more easy prey to any prowling tiger-cat than would otherwise be the case”.

But peacocks, “display their attractions with elaborate care in the presence of the females,” almost always “during the season of love”, adding that “It is incredible that all this display should be purposeless”.



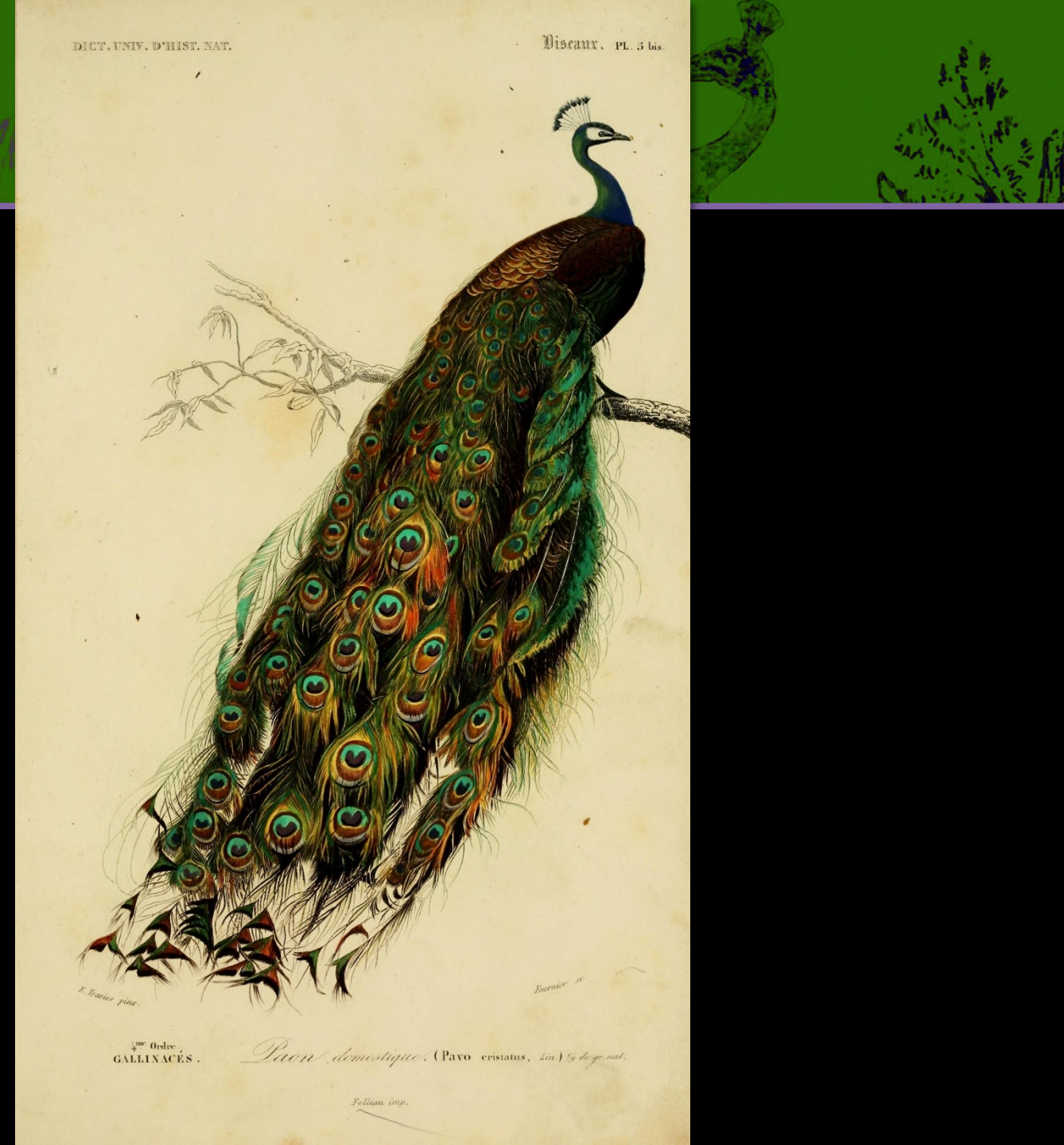


## *The peacock's tail*

### Sexual Selection

Random variations in male tails and female preferences explained the tail.

The rules of sexual selection's game were simple: life fast, die young (if you have to), but leave a good looking body of big-tailed sons, or big-tailed fancying daughters.





*The peacock's tail*

## Darwin and the Breeders

Breeder could “give beauty, according to his standard of taste” to his birds.

And “so it appears that in a state of nature female birds, by having long selected the more attractive males, have added to their beauty”.

This implied “powers of discrimination and taste on the part of the female which will at first appear extremely improbable”.

He hoped to show “that this is not the case”.



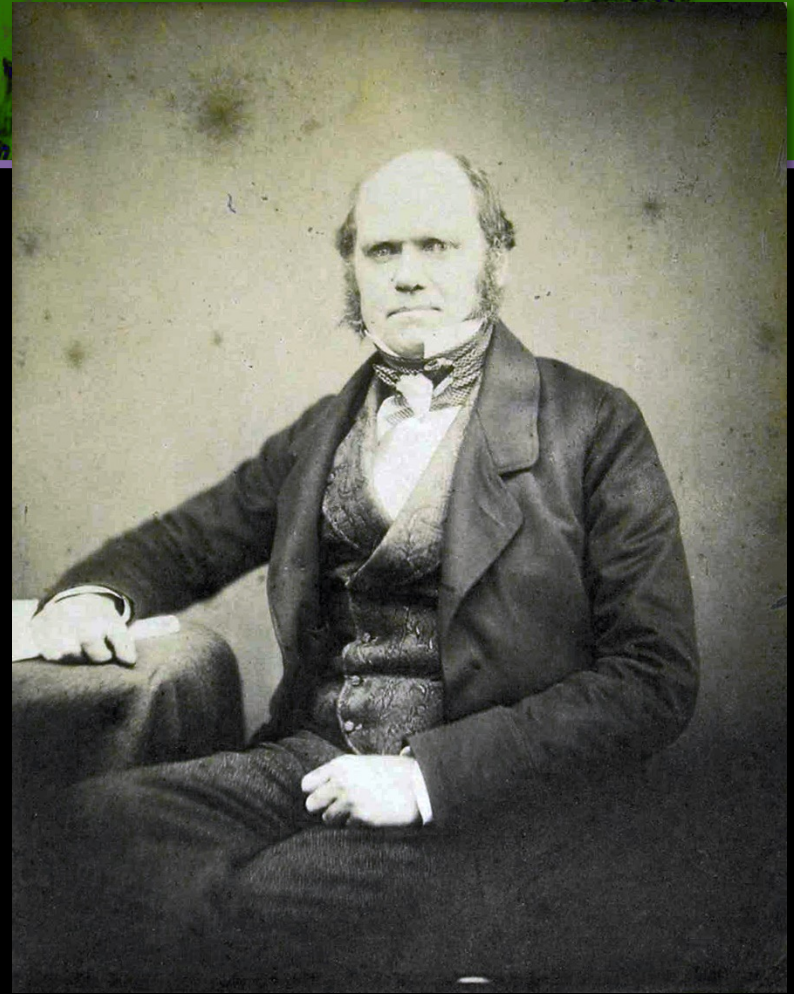


*The peacock's tail*

## Could birds choose?

If readers doubted female birds feel “a preference for particular males”, Darwin suggested they place themselves “in imagination” in the bird’s position:

If an inhabitant of another planet were to behold a number of young rustics at a fair, courting and quarrelling over a pretty girl, like birds at one of their places of assemblage, he would be able to infer that she had the power of choice only by observing the eagerness of the wooers to please her, and to display their finery.



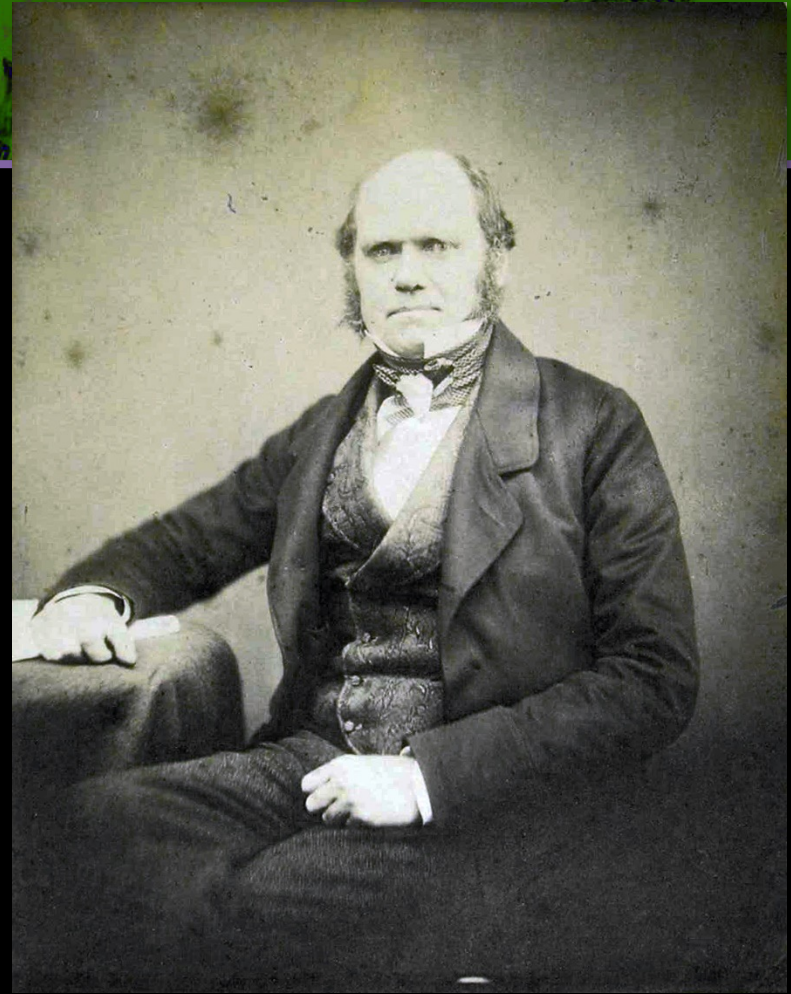


*The peacock's tail*

## Man of his time

In every species: “it is the males that fight together and sedulously display their charms before the females; and those which are victorious transmit their superiority to their male offspring”.

Females can only choose, because they were “coy, and may often be seen endeavouring for a long time to escape from the male. Every one who has attended to the habits of animals will be able to call to mind instances of this kind”.

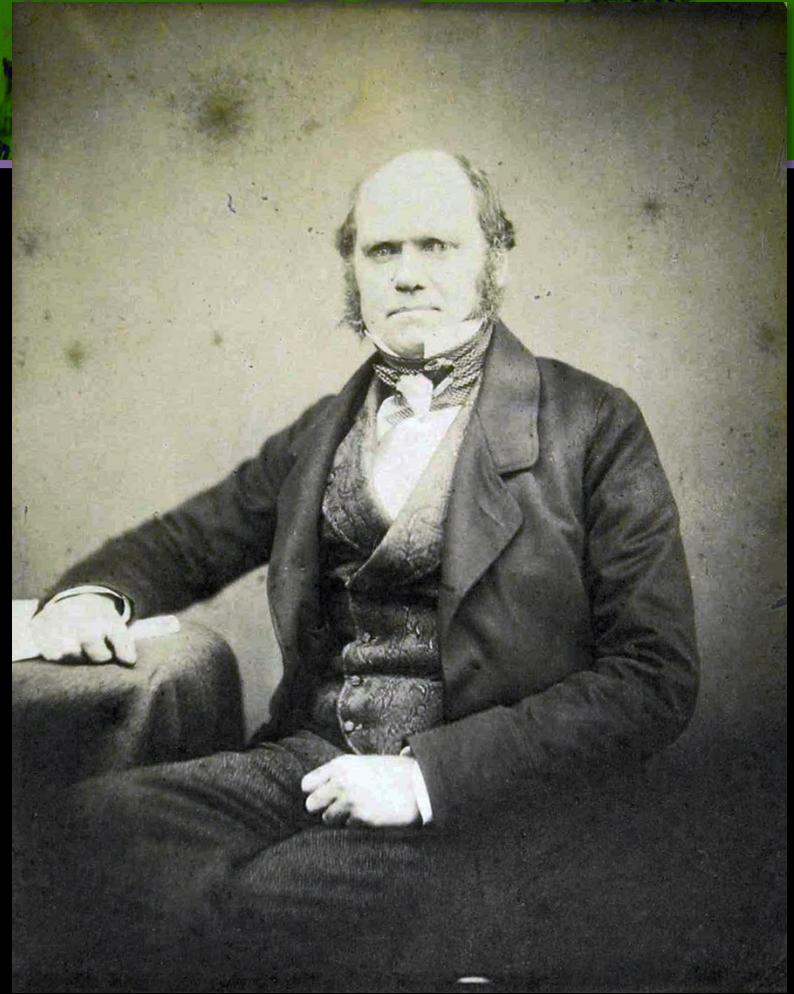




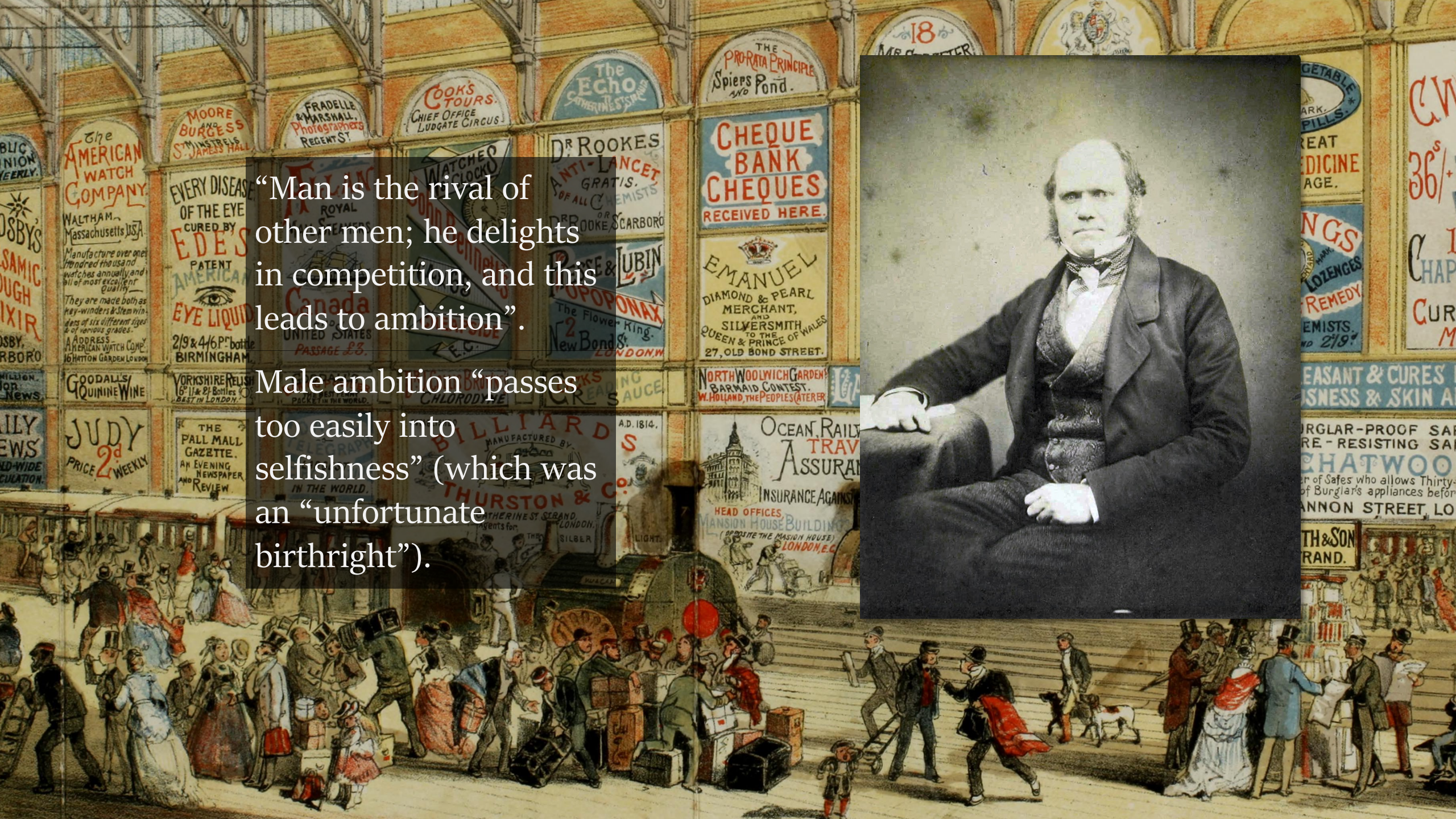
*The peacock's tail*

## Man of his time

“The chief distinction in the intellectual powers of the two sexes is shewn by man attaining to a higher eminence, in whatever he takes up, than woman can attain—whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands. If two lists were made of the most eminent men and women in poetry, painting, sculpture, music,—comprising composition and performance, history, science, and philosophy, with half-a-dozen names under each subject, the two lists would not bear comparison”.

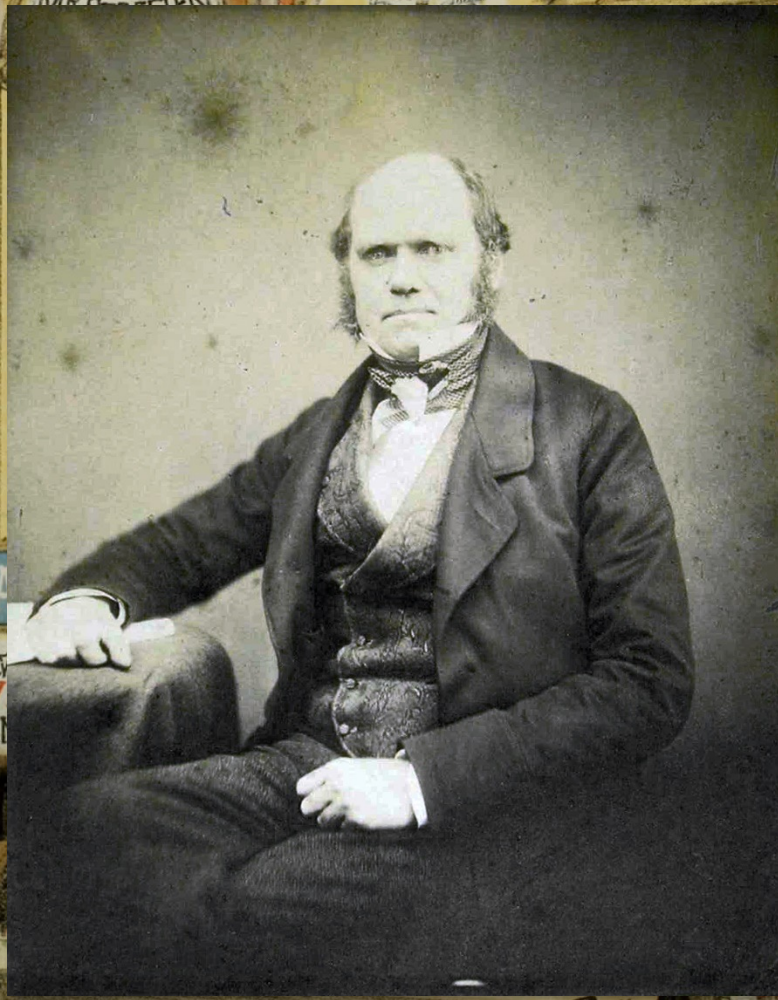






“Man is the rival of other men; he delights in competition, and this leads to ambition”.

Male ambition “passes too easily into selfishness” (which was an “unfortunate birthright”).

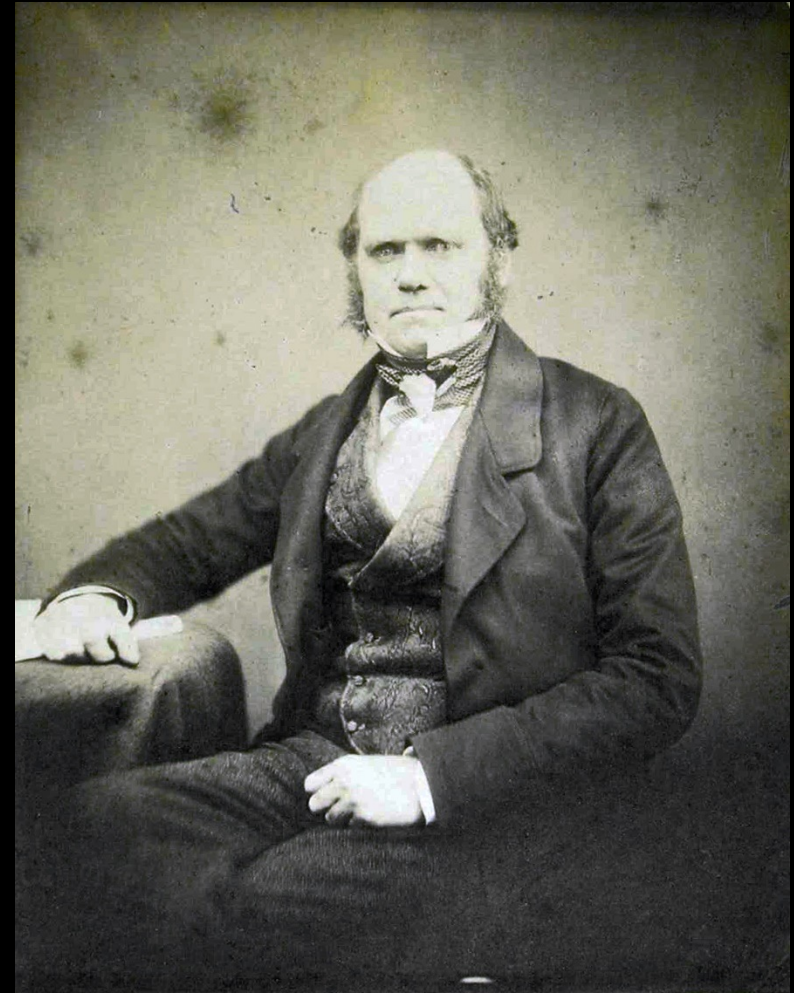






MR. PUNCH'S DESIGNS AFTER NATURE.  
GRAND BACK-HAIR SENSATION FOR THE COMING SEASON.

Among women, it was “the powers of intuition, of rapid perception, and perhaps of imitation, are more strongly marked than in man”. These feminine “faculties are characteristic of the lower races, and therefore of a past and lower state of civilisation”.





*The peacock's tail*

## *The Descent of Man (1871)*

Book had three purposes:

1. To consider whether humans were “descended from some pre-existing form”.
2. How had they evolved (natural *and* sexual selection).
3. “the value of the differences between the so-called races of man”.

THE  
DESCENT  
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—  
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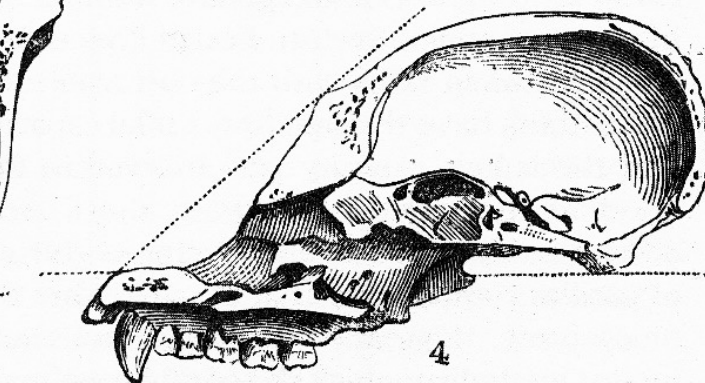
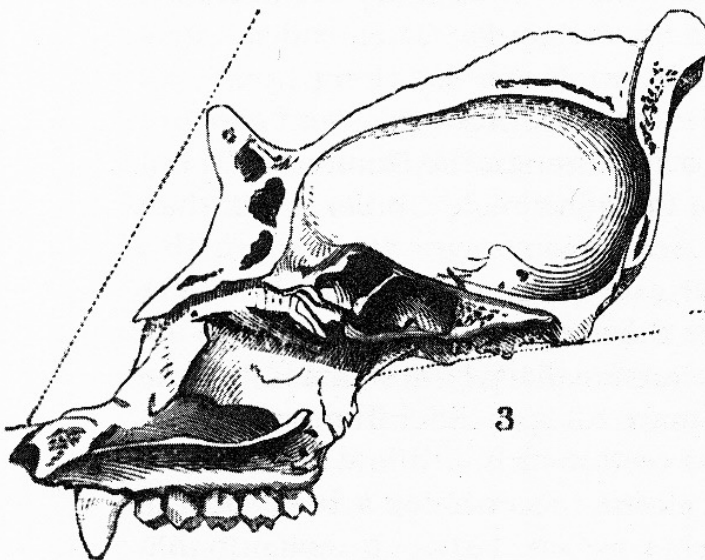
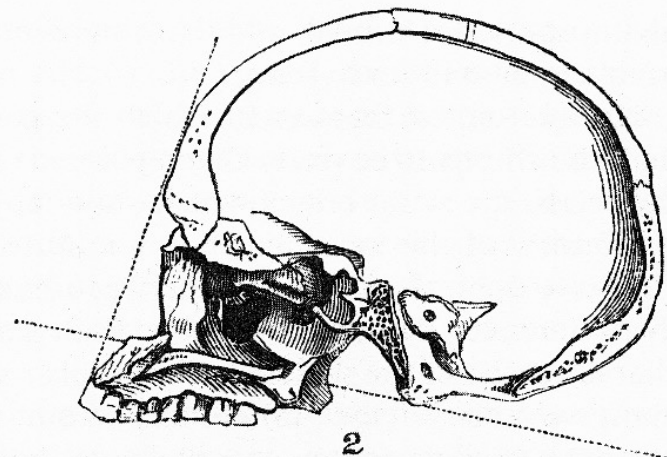
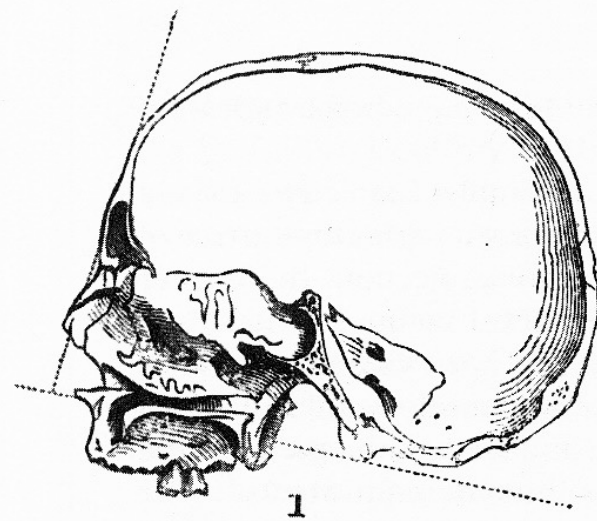
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The brains of “savages”



*The brains of “savages”*

## **Darwin's big book**

*On the Origin of Species:  
or, the preservation of  
favoured races in the  
struggle for existence.*



1859

ON

# THE ORIGIN OF SPECIES

BY MEANS OF NATURAL SELECTION,

OR THE

PRESERVATION OF FAVOURED RACES IN THE STRUGGLE  
FOR LIFE.

By CHARLES DARWIN, M.A.,  
FELLOW OF THE ROYAL, GEOLOGICAL, LINNEAN, ETC., SOCIETIES;  
AUTHOR OF 'JOURNAL OF RESEARCHES DURING H. M. S. BEAGLE'S VOYAGE  
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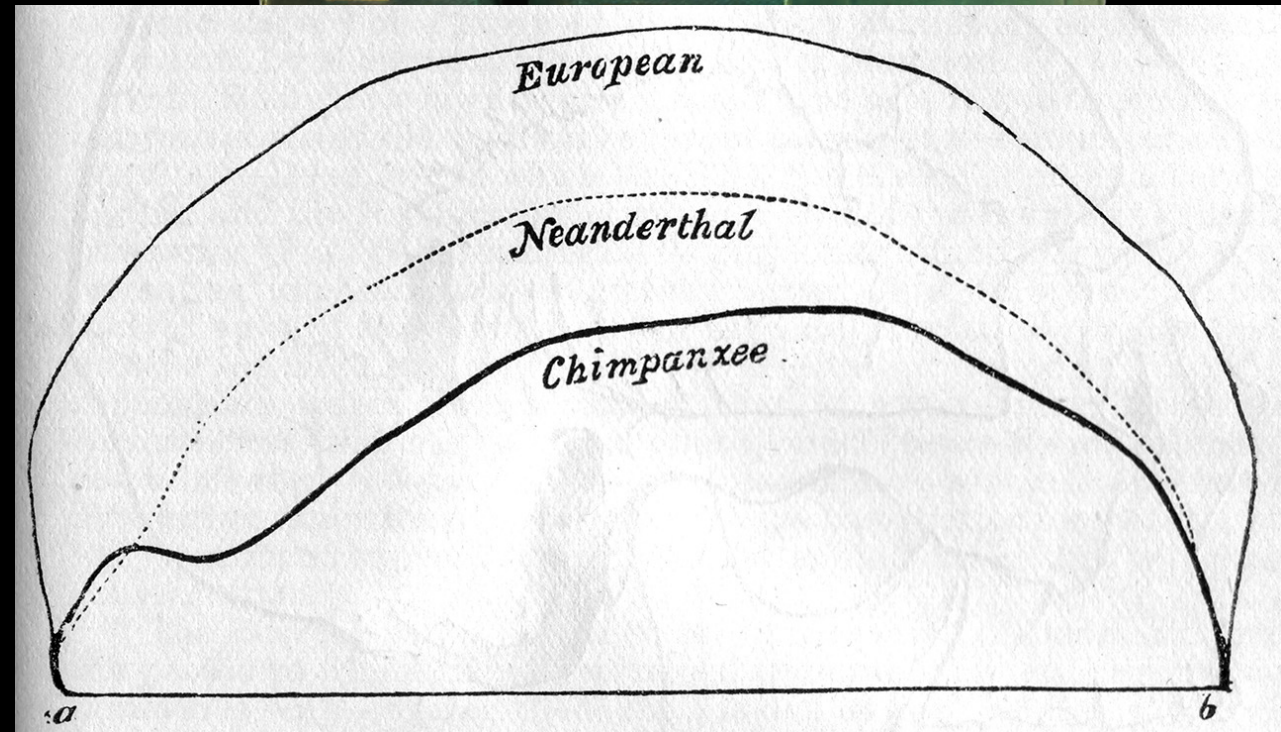


*The brains of “savages”*

## Closing the gap

“No one, I presume, doubts that the large size of the brain in man, relatively to his body, in comparison with that of the gorilla or orang, is closely connected with his higher mental powers”.

The big human brain explained what Darwin called our “god-like intellect”.



From: Lyell *Antiquity of Man* (1863)



## *The brains of “savages”*

### **Richard Owen**

One early paper (1853) concluded that even the “Hottentots [i.e. the Khoikhoi, or Khoisan, people of Southern Africa] and Papuans of Australia” who he argued “have the smallest cranial capacity among the human races” still had double the brain of a gorilla.

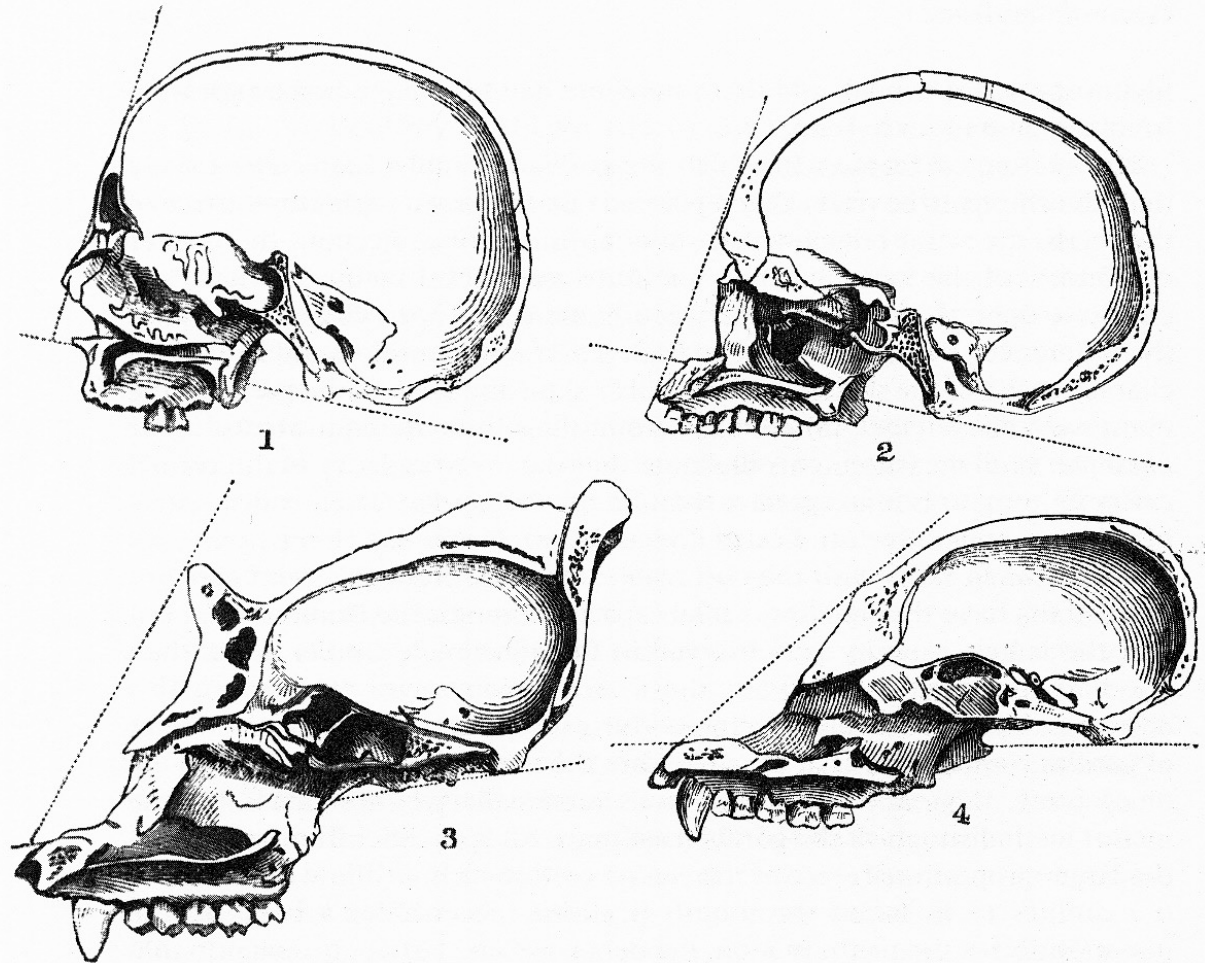


Fig. 1. Caucasian.

Fig. 2. Papuan.

Fig. 3. Gorilla.

Fig. 4. Orang.



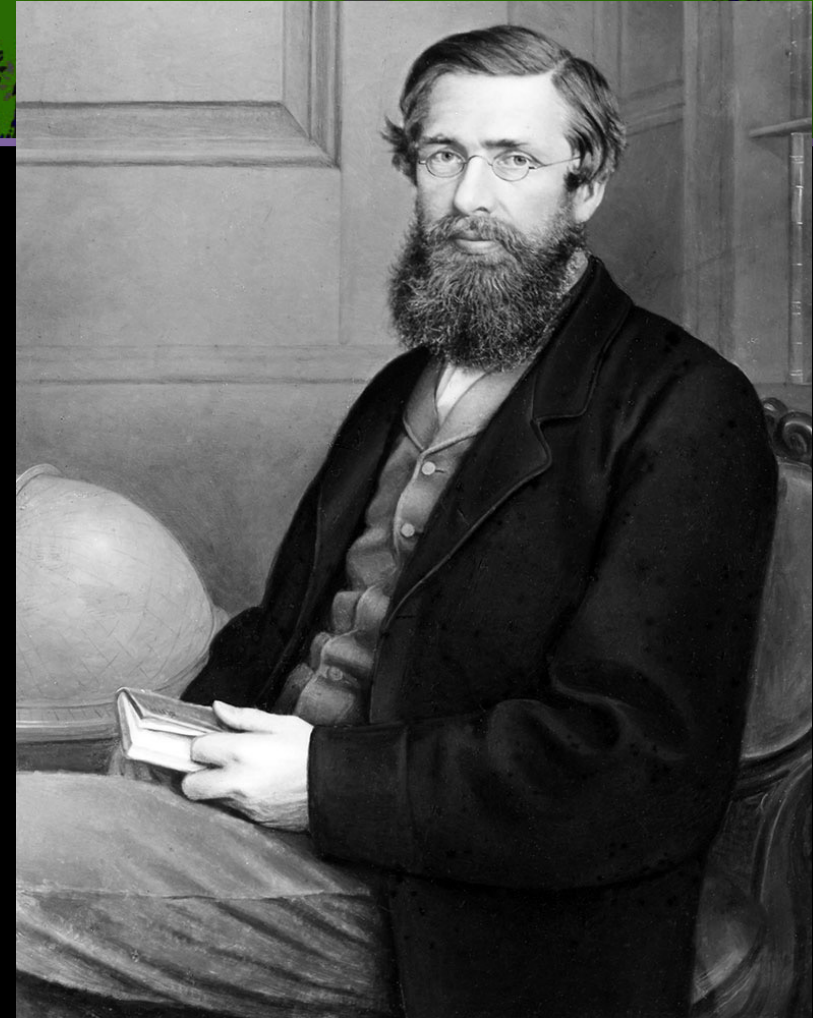
## *The brains of “savages”*

### **Wallace's bombshell**

*Quarterly Review* (1869), asked how natural selection could explain why so-called savages possessed brains only slightly “inferior to that of the average members of our learned societies”.

What use were the “higher moral faculties” or “refined emotion” to such supposedly primitive people?

Wallace believed that natural selection should “only have endowed the savage with a brain a little superior to that of an ape”.





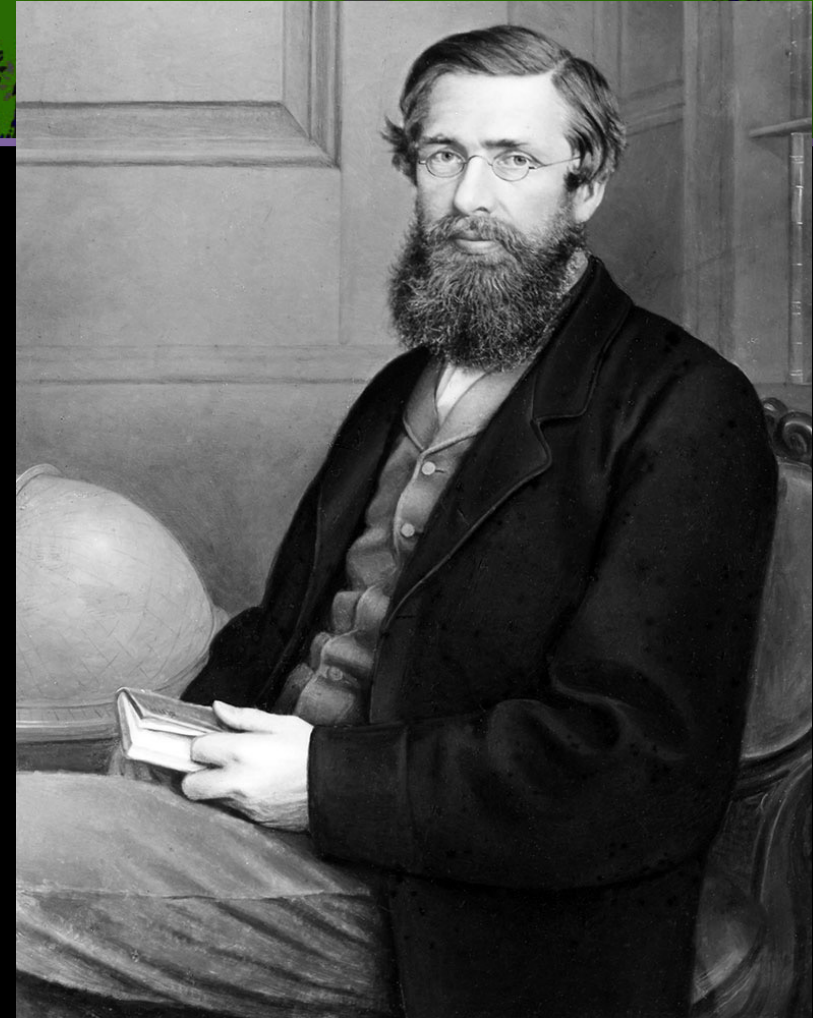
*The brains of “savages”*

## **Wallace's bombshell**

These anomalies were “evidence of a Power which has guided the action of [evolution's] laws in definite directions and for special ends”. Assumed “an Overruling Intelligence has watched over the action of those laws”, which he and Darwin had discovered.

Forewarned Darwin about the forthcoming article.

Darwin responded: “I hope you have not murdered too completely your own & my child”.





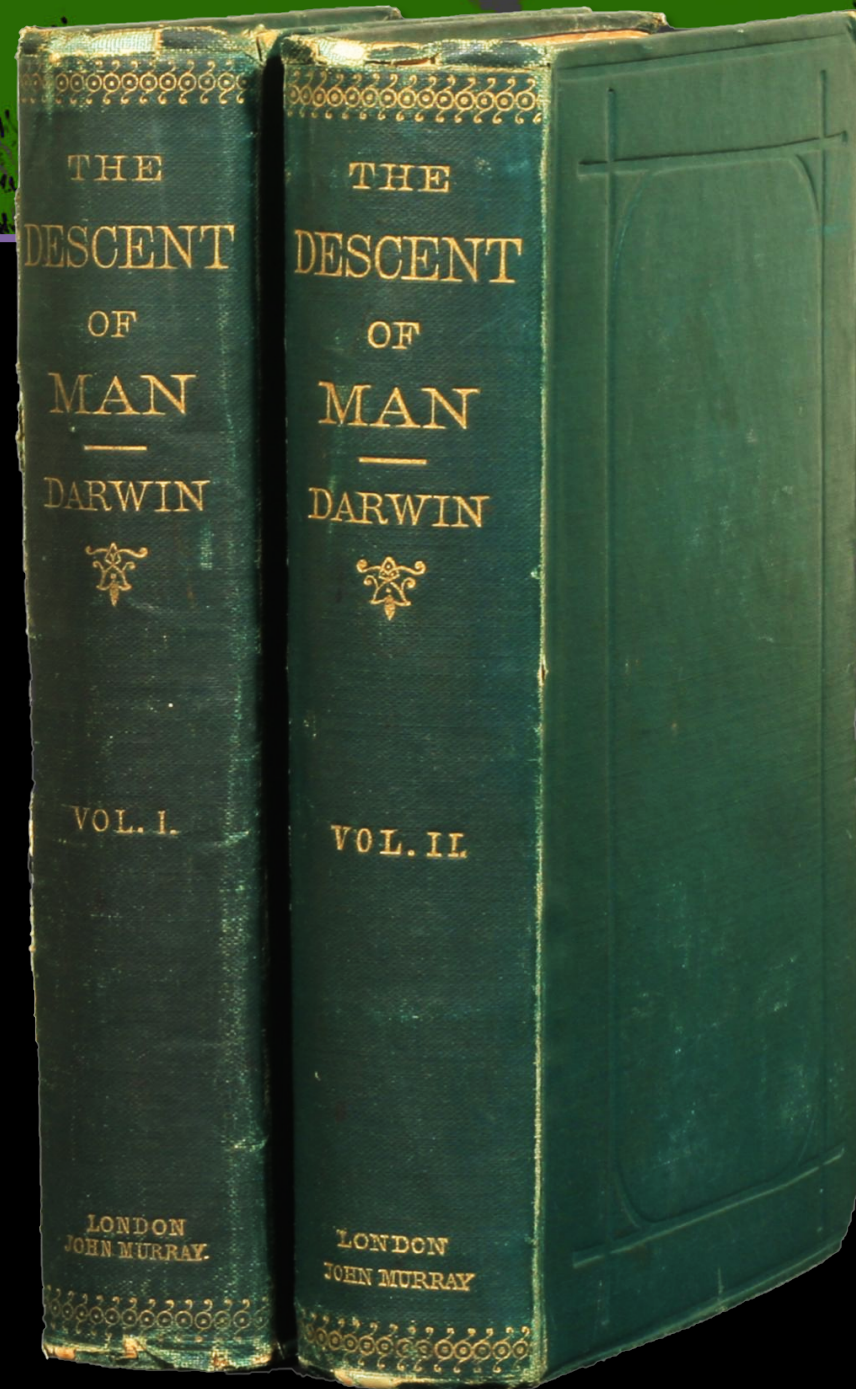
*The brains of “savages”*

## Closing the gap

One of the *Descent*'s (unstated) goals was to refute Wallace's claims.

Natural Selection: brains helped survival (e.g. discovery of fire).

So Darwin commented that “I cannot, therefore, understand how it is that Mr. Wallace maintains, that ‘natural selection could only have endowed the savage with a brain a little superior to that of an ape’”.





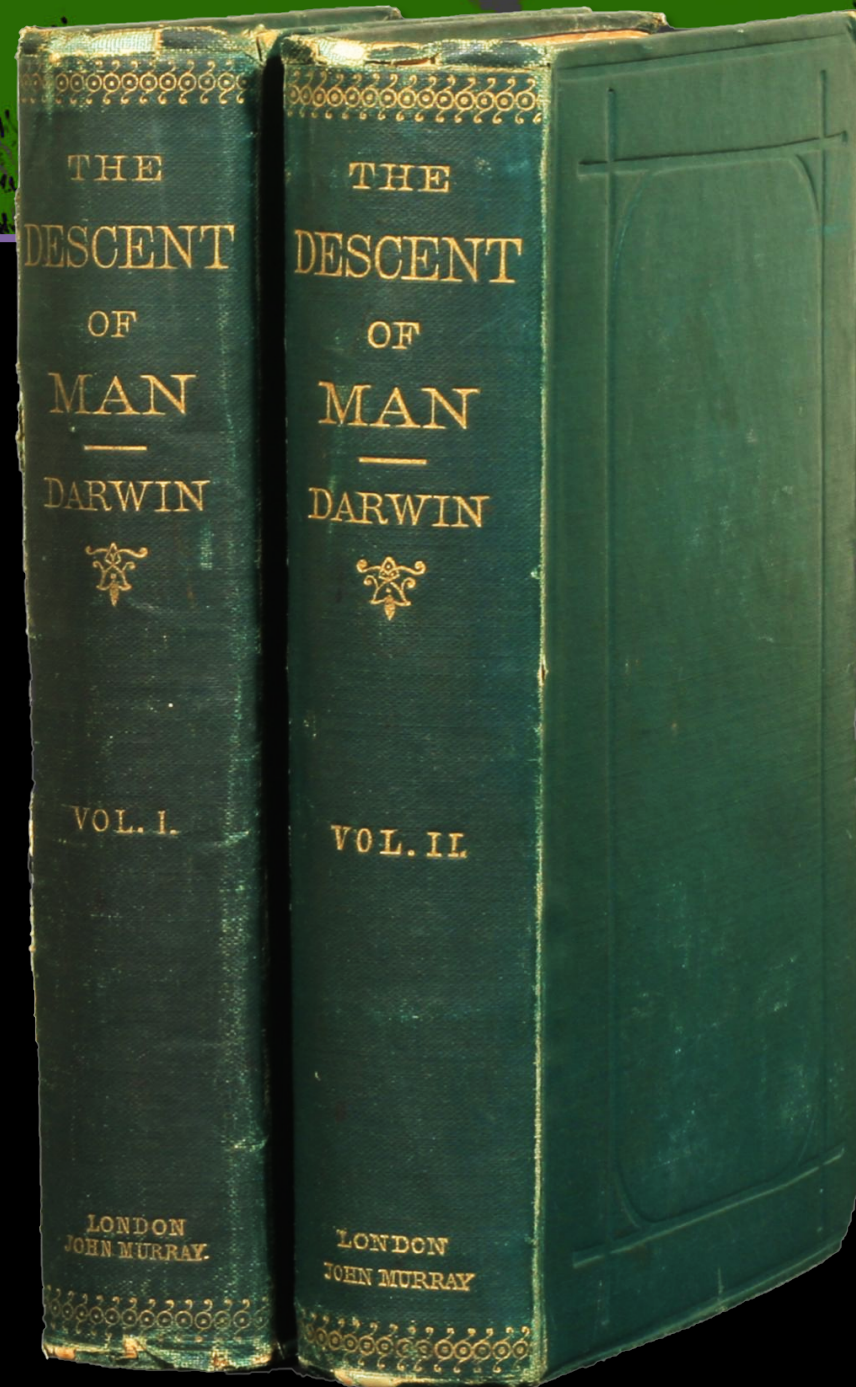
*The brains of “savages”*

## Closing the gap

Sexual Selection: explained how human brains had become so extravagantly large.

Used music as an example, from bird- to human-song.

“All these facts with respect to music become to a certain extent intelligible if we may assume that musical tones and rhythm were used by the half-human progenitors of man, during the season of courtship, when animals of all kinds are excited by the strongest passions”.



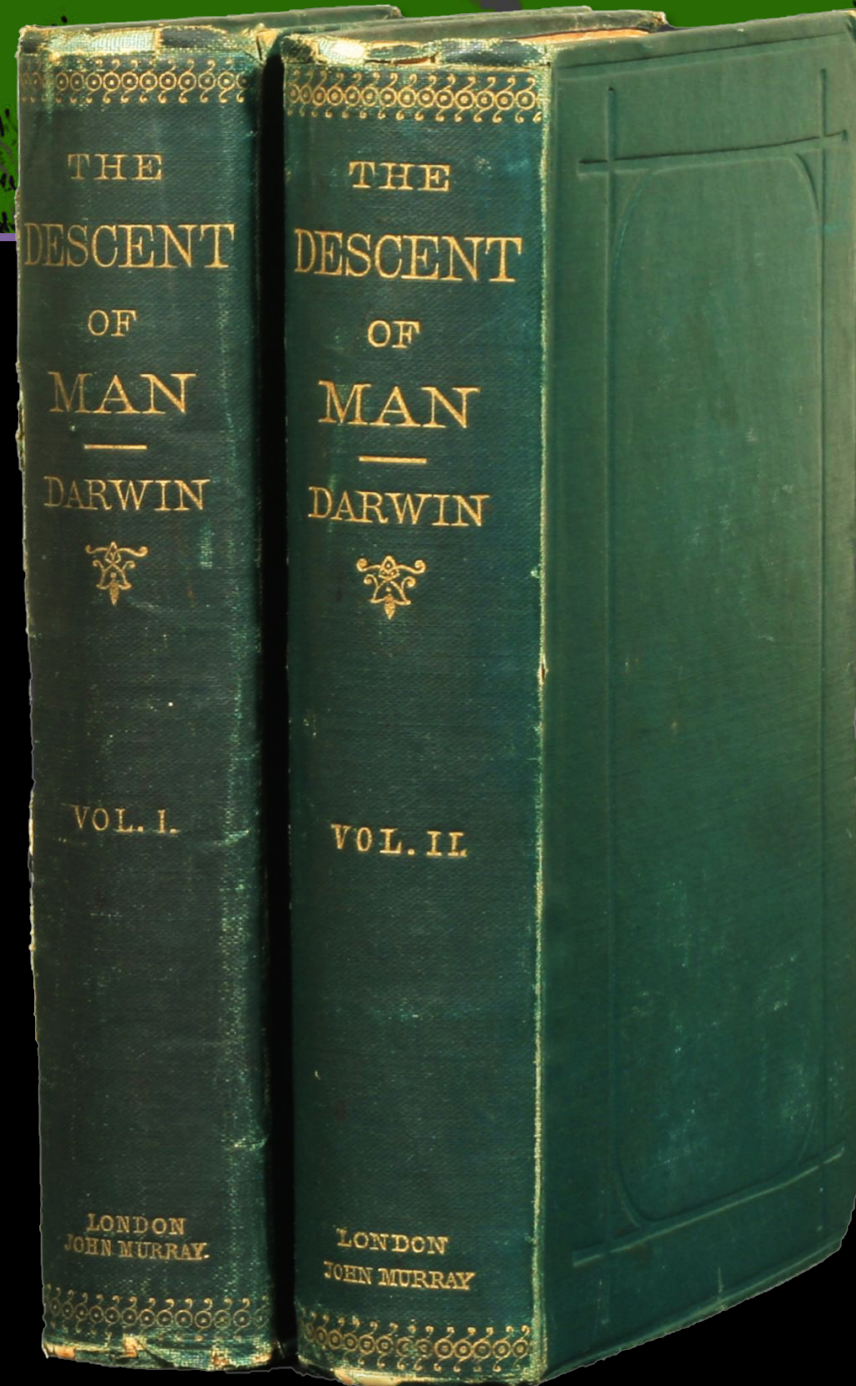


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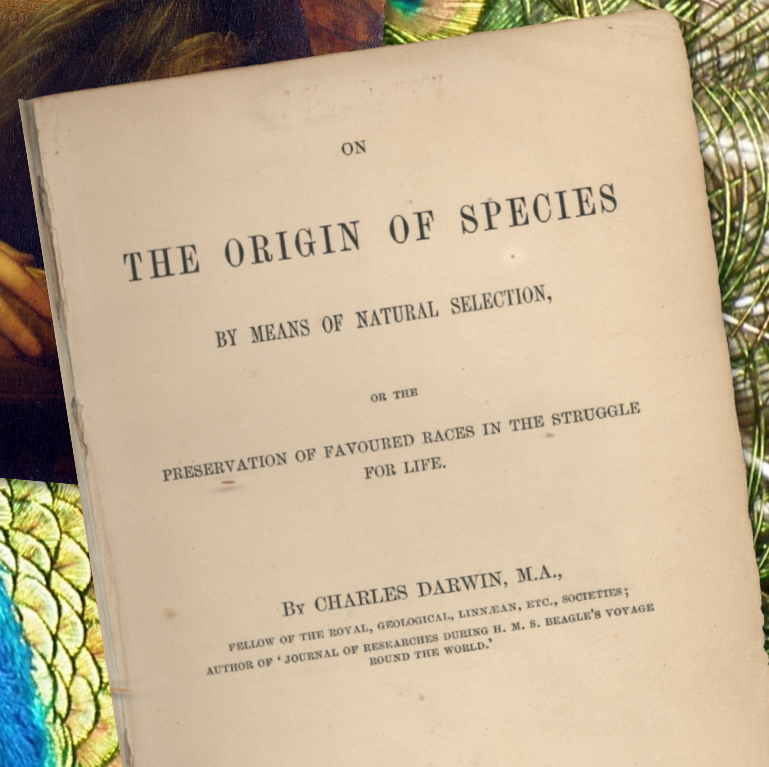
## Closing the gap

Poetry “may be considered as the offspring of song” (root of human literature).

When an “impassioned orator, bard, or musician” used their skills to excite “the strongest emotions in his hearers”, he “little suspects that he uses the same means by which, at an extremely remote period, his half-human ancestors aroused each other's ardent passions, during their mutual courtship and rivalry”.







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FIG. 339. — Apollo Belvidere.<sup>653</sup>



FIG. 340.<sup>652</sup>



Greek.

FIG. 341. — Negro.<sup>654</sup>



FIG. 342.<sup>657</sup>



Crook's Negro.

FIG. 343. — Young Chimpanzee.<sup>656</sup>

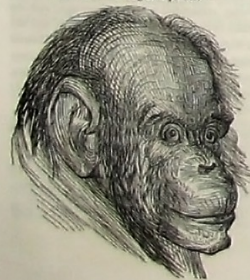


FIG. 344.<sup>658</sup>



Young Chimpanzee.

(458)

FIG. 345.<sup>661</sup>



Hottentot Wagner — Caffre War.

FIG. 348.<sup>662</sup>



Hottentot from Somerset.

FIG. 347.<sup>660</sup>



Chimpanzee.

FIG. 349.



Negro, 1853.

FIG. 351.



Negro, 1850 years old [negro, pp. 250-261].

FIG. 350.



Negro, 1853.

FIG. 352.



Negro, 3300 years old.

(459)

Favoured Races



## The origins of races

Darwin's theories explained diversity (of plant, animals and people).

He suggested that a study of “the habits of existing semi-civilised and savage nations” was a form of time-travel. Like most anthropologists, he assumed such people's lives provided a glimpse of our ancestors' lives.



A REPRESENTATION OF UNCIVILIZED ISLANDERS AND INDIANS.

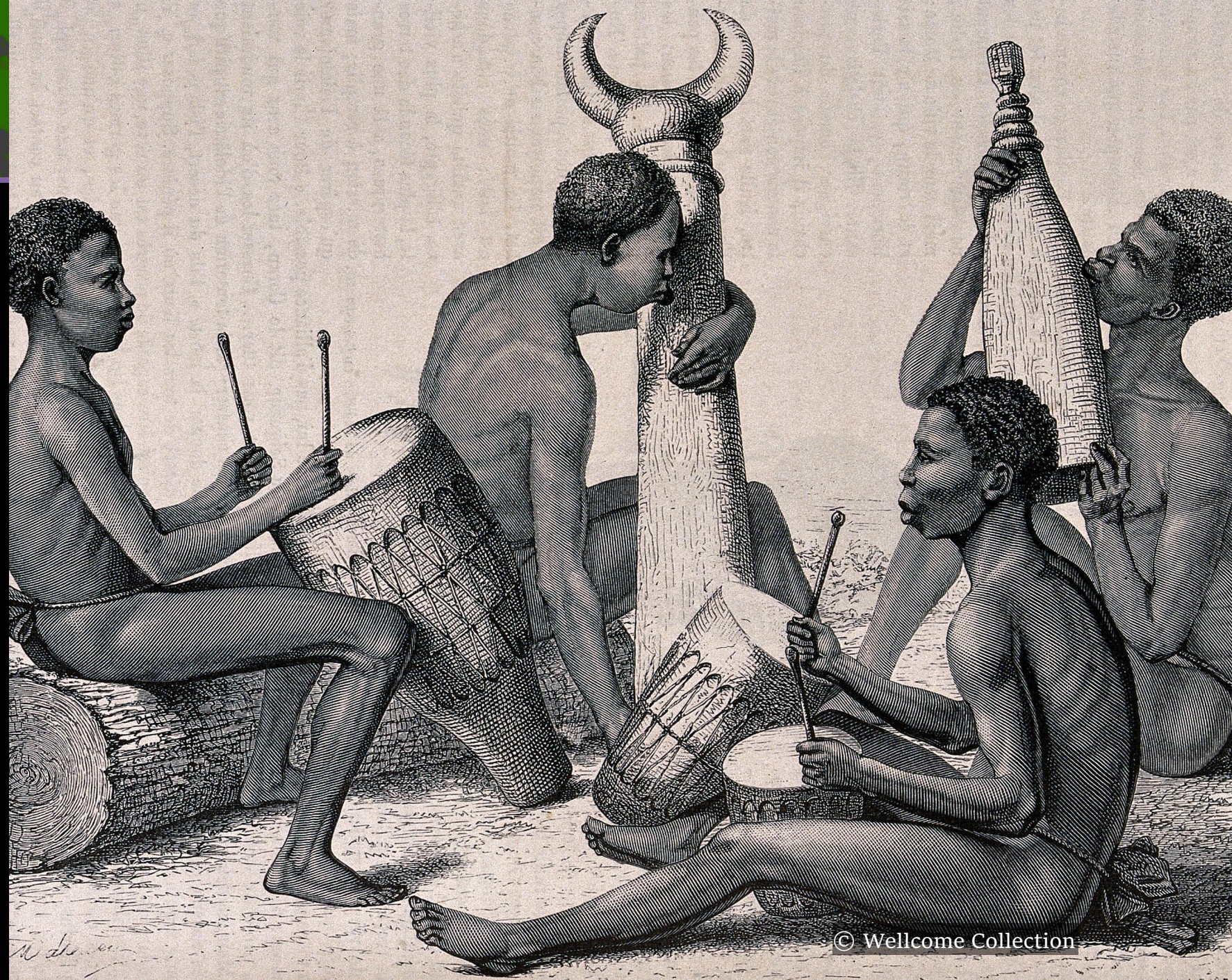


*Favoured races*

## Varying tastes

Darwin noted that Europeans were often repelled by the “hideous ornaments and the equally hideous music admired by most savages”.

But they proved that the aesthetic sense varied.



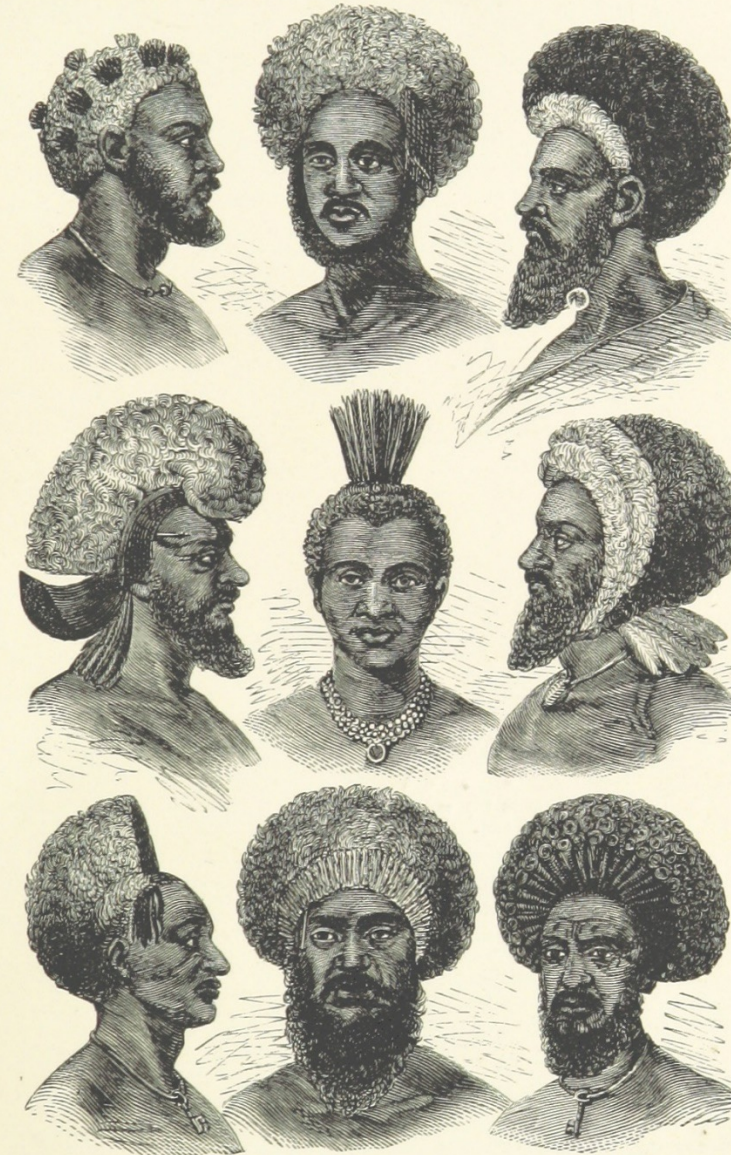
© Wellcome Collection



## Varying tastes

Darwin argued that sexual selection explained why people's appearances and behaviours varied so much.

Natural selection played a very minor role.



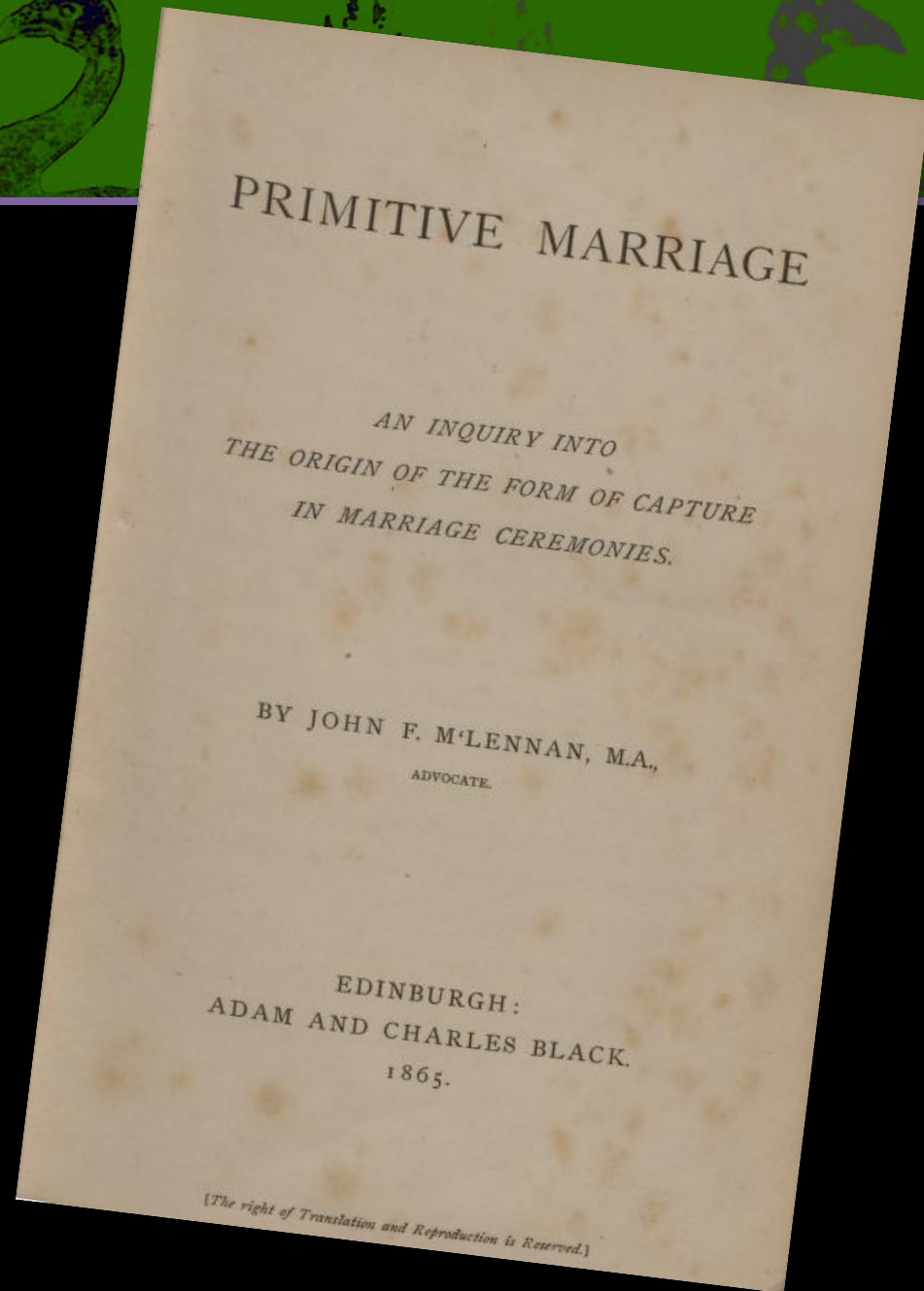
FIJIAN MODES OF DRESSING THE HAIR.



*Favoured races*

## Varying tastes

John McLennan (1827–81) traced the evolution of marriage, from primitive promiscuity, through polyandry to monogamy.

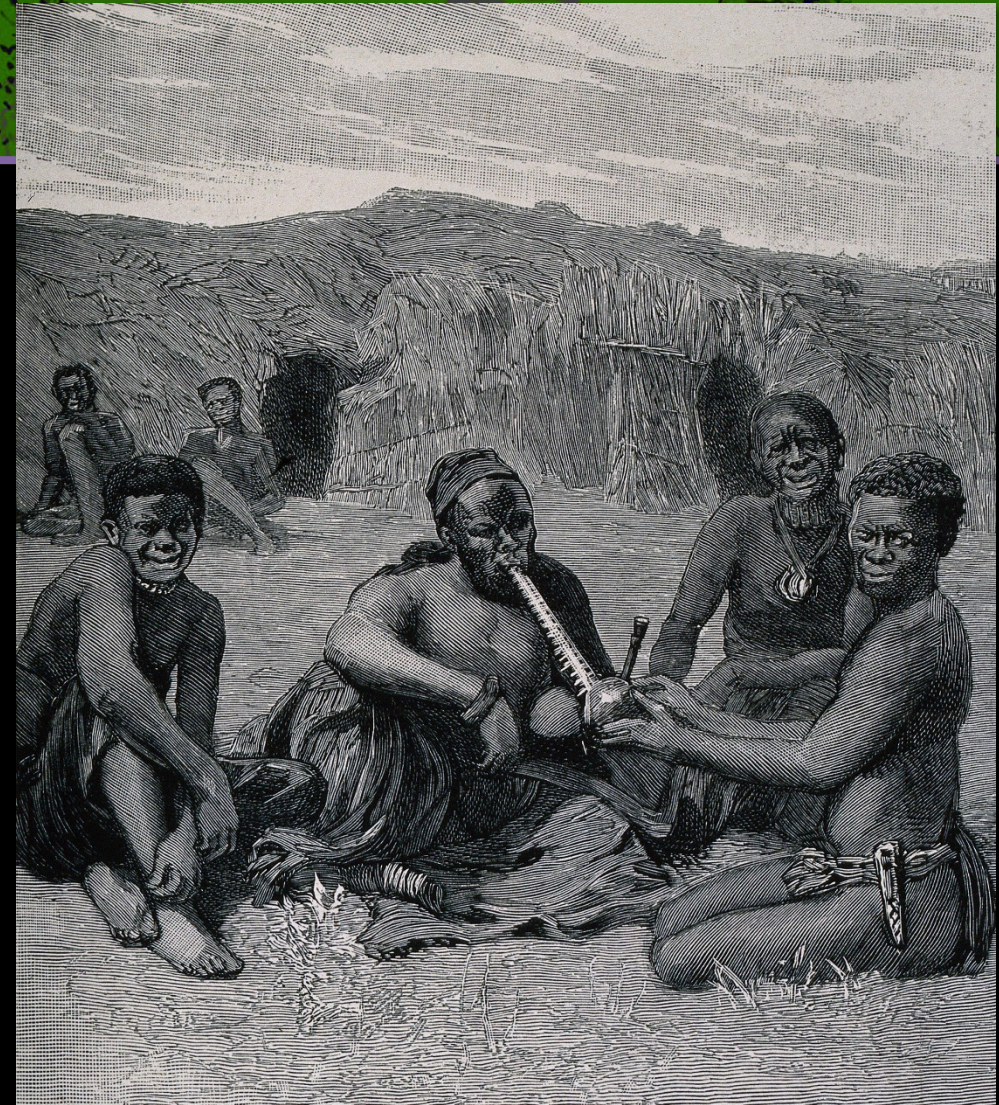




## Varying tastes

Darwin assumed that tribal chiefs would have many wives, whose appearance appealed to each chief's ideal of idea of beauty.

Chiefs would have many more children than lower status men, who would inherit their parents' mental and physical characters. Darwin concluded, "after the lapse of many generations" the chief's taste in women would "modify to a certain extent the character of the tribe".





## Varying tastes

“If it can be shewn that the men of different races prefer women having certain characteristics, or conversely that the women prefer certain men, we have then to enquire whether such choice, continued during many generations, would produce any sensible effect on the race”.





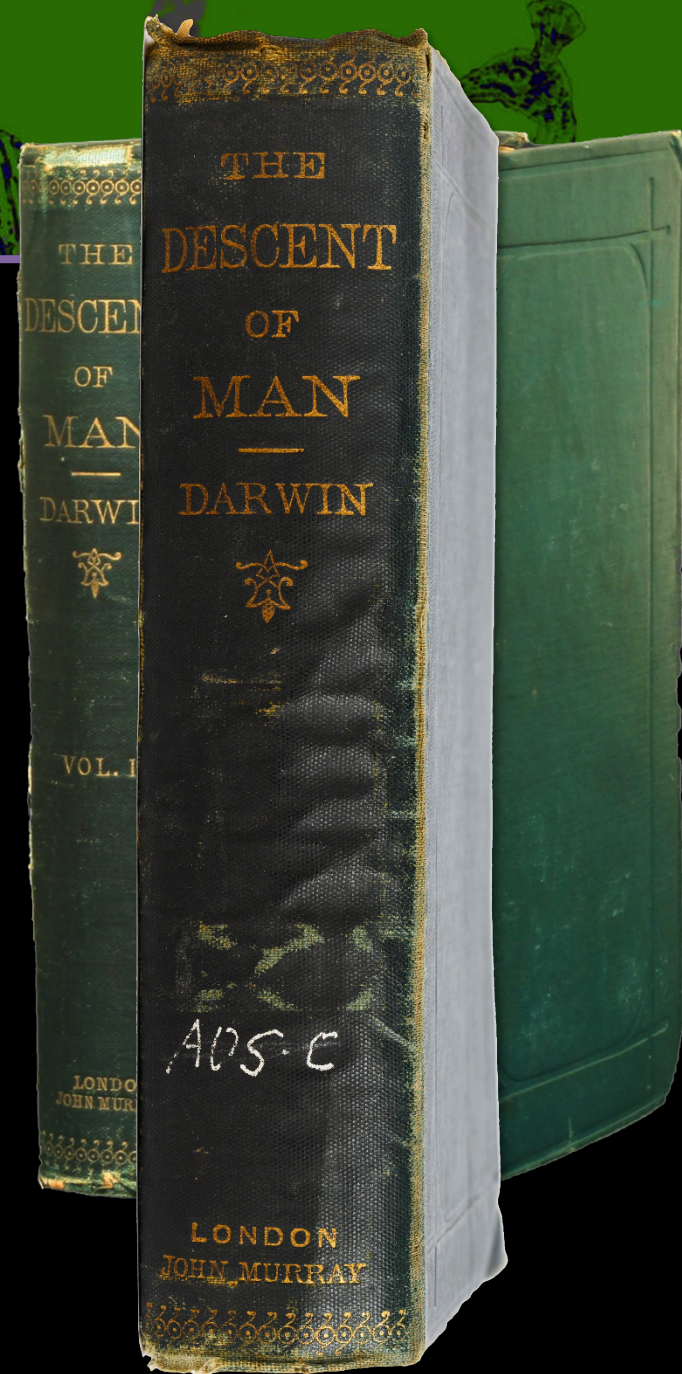
*Favoured races*

## ***Descent of Man* (second edition 1874)**

Some had struggled to understand the connection between human evolution and sexual selection. Wallace suggested that Darwin split the *Descent* into two different books.

Darwin combined the two volumes into a single, massive 500-page tome.

New edition's introduction explained that he had “endeavoured to profit by the fiery ordeal through which the book has passed”, by responding to “all the criticisms which seem to me sound”, making corrections and adding new evidence.

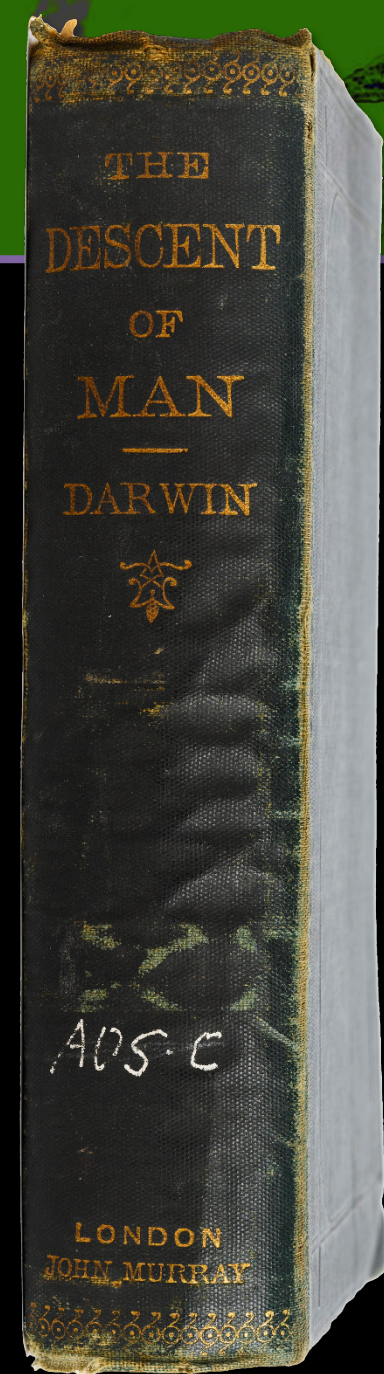




## ***Descent of Man* (second edition 1874)**

First edition acknowledged that readers might doubt that females possessed the “powers of discrimination and taste” which sexual selection relied upon.

“When, however, it is said that the lower animals have a sense of beauty, it must not be supposed that such sense is comparable with that of a cultivated man, with his multiform and complex associated ideas. A more just comparison would be between the taste for the beautiful in animals, and that in the lowest savages, who admire and deck themselves with any brilliant, glittering, or curious object”.





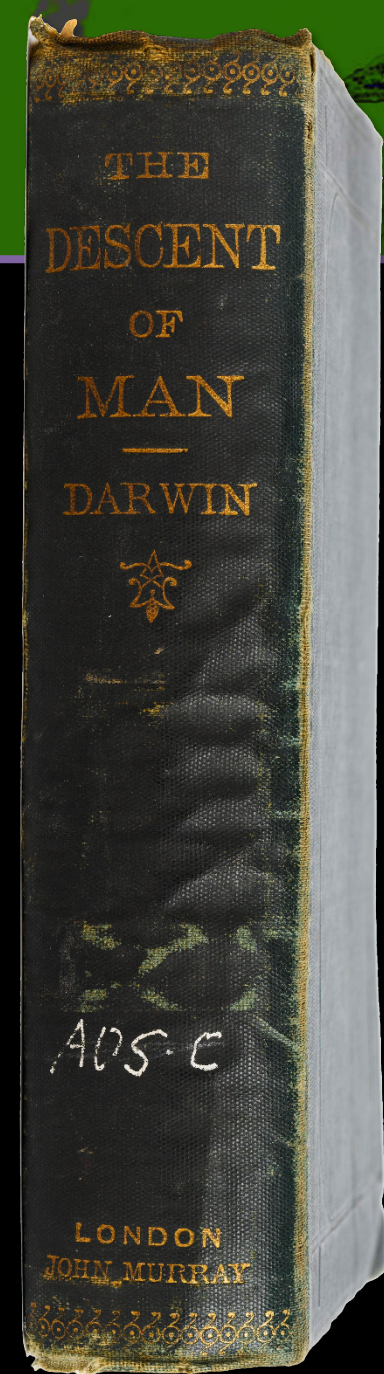
## Closing the gap

Darwin tried to bridge the gap between humans and the other animals by showing that some varieties of people were scarcely human at all.

Those he called the “lowest savages” were even less moral, intelligent, compassionate or discriminating than many animals.

Strategy aimed at undermining Wallace’s argument that the human mind required a supernatural explanation.

The smaller the gap between human and animal, the less need for Wallace’s “Overruling Intelligence”.





## Darwin's racism

Darwin had first encountered people he considered savages when the *Beagle* visited Tierra del Fuego. In the conclusion to the *Descent*, he wrote that the “astonishment which I felt on first seeing a party of Fuegians on a wild and broken shore will never be forgotten by me, for the reflection at once rushed into my mind—such were our ancestors”.



FUEGIAN.  
(YAFOO TEKENICA)

AT PORTLAND, ENGL.



## **Darwin's racism**

“These men were absolutely naked and bedaubed with paint, their long hair was tangled, their mouths frothed with excitement, and their expression was wild, startled, and distrustful.



Image: Fuegians. From JG Wood *The uncivilized races of men in all countries of the world* (1871)



## **Darwin's racism**

“They possessed hardly any arts, and like wild animals lived on what they could catch; they had no government, and were merciless to every one not of their own small tribe.





## **Darwin's racism**

“He who has seen a savage in his native land will not feel much shame, if forced to acknowledge that the blood of some more humble creature flows in his veins”.

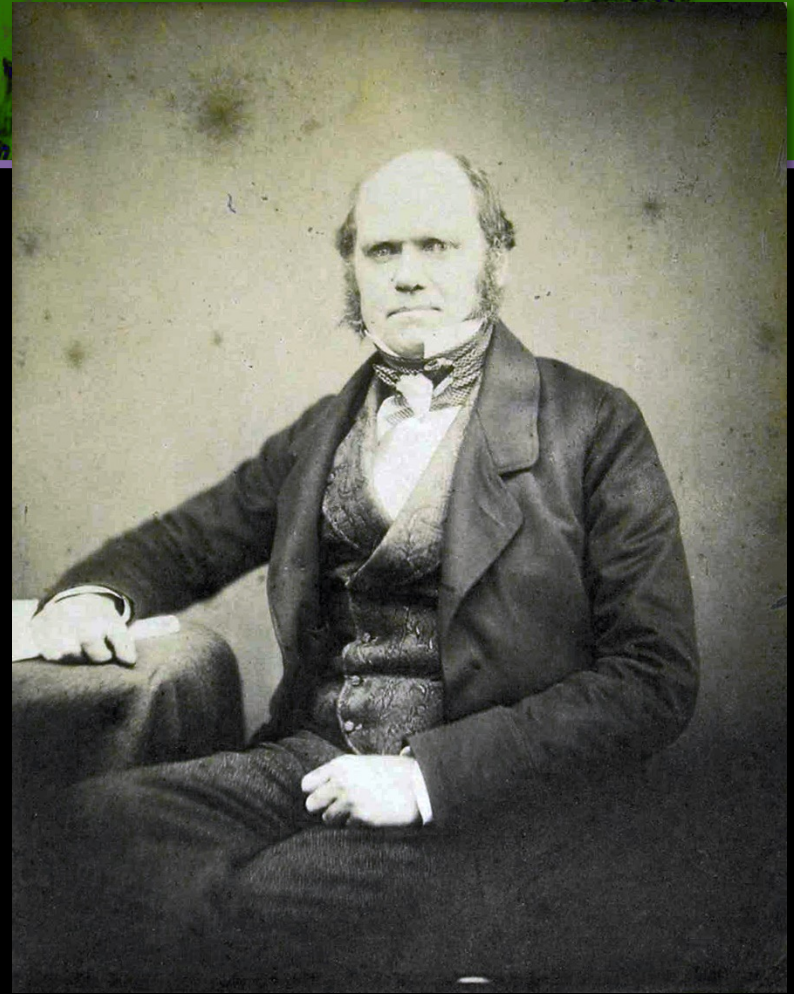




## **Darwin's racism**

Darwin added that he would prefer to admit that he was descended from some brave baboon than from:

“a savage who delights to torture his enemies, offers up bloody sacrifices, practises infanticide without remorse, treats his wives like slaves, knows no decency, and is haunted by the grossest superstitions”.



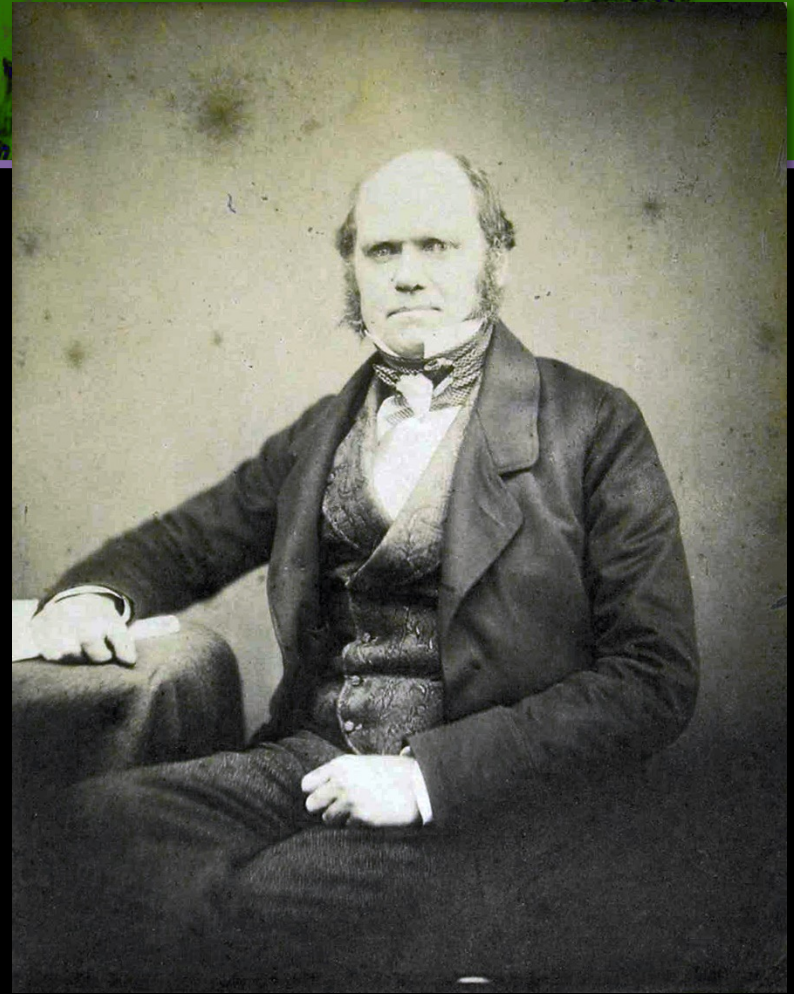


## Darwin's racism

It is unsurprising – however shocking – to read passages like this in the *Descent*:

“At some future period, not very distant as measured by centuries, the civilised races of man will almost certainly exterminate and replace throughout the world the savage races”.

Darwin made it clear that the supposed progress of humanity resulted from the fact that “civilised nations are everywhere supplanting barbarous nations”.







Pulling down Darwin's statues?



## *Darwin's statues*

### **Should we still be celebrating Darwin?**

The endless celebration of dead, white men (at the expense of all other kinds of people) is problematic in itself, but when the dead white man has been expressing the kinds of opinions Darwin did, surely we shouldn't be celebrating him?



Photograph: Rodger Bosch/AFP/Getty Images



## Just a man of his time?

Most Victorians thought they were superior to those of other races, making it acceptable to colonise their countries.

For Darwin (and most of his contemporaries), inequality between races (and the sexes) was one of the indisputable facts that science had to explain.

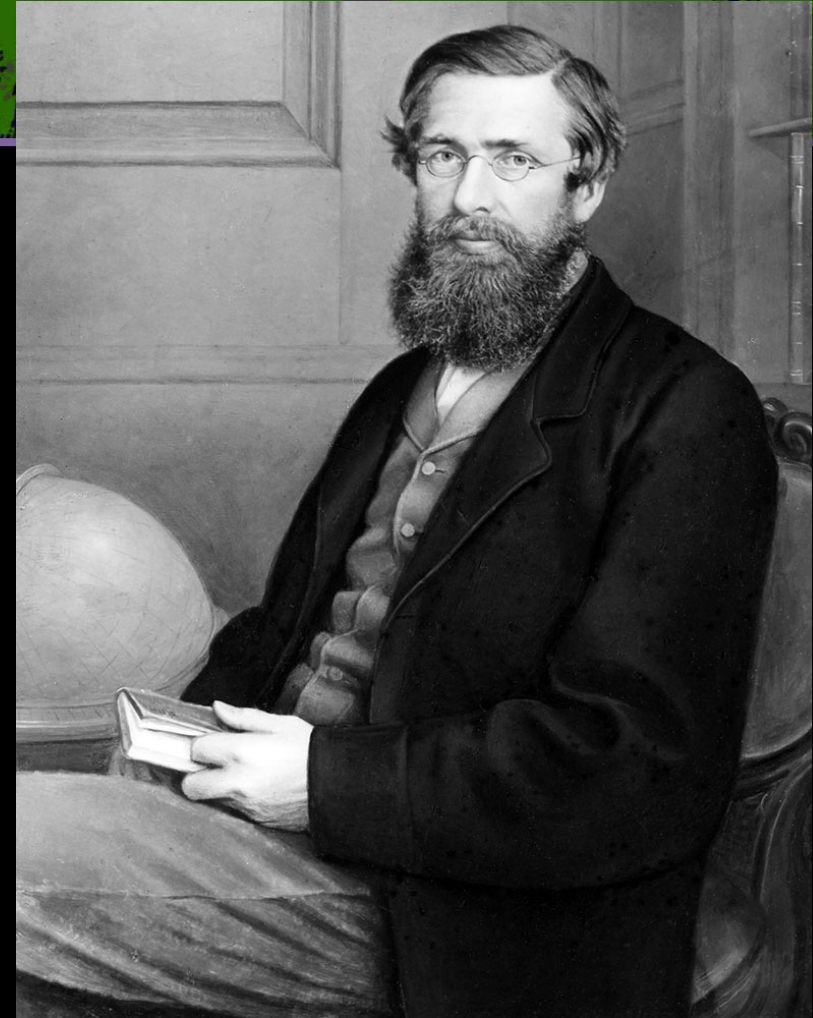




## Alfred Russel Wallace

Despite sharing many of the common prejudices of his time – expressed far more admiration for indigenous peoples than Darwin did.

Wallace wrote that the “more I see of uncivilized people, the better I think of human nature on the whole, and the essential differences between so-called civilized and savage man seem to disappear”.





## James Hunt

Gave a paper “On the Negro’s Place in Nature” (Anthropological Society, 1864).

Among his conclusions were, there were good reasons “for classifying the Negro as a distinct species” because “there is far greater difference between the Negro and Anglo-Saxon than between the gorilla and chimpanzee”.

More similarities between “the Negro and apes than between the European and apes” and the “Negro is inferior, intellectually, to the European” but becomes “more humanised when in his natural subordination to the European, than under any other circumstances”. As a result “the Negro can only be humanised and civilised by Europeans”.

When his support for slavery was challenged, Hunt replied that it was “natural that [the African] should be in subjection to those who are born wiser”.



*Darwin's statues*

## Darwin and slavery

In sharp contrast to Hunt, he was a life-long (and passionate) opponent of slavery.





## **The Morant Bay massacre**

in 1865, the British Governor of Jamaica, Edward John Eyre, brutally suppressed an uprising of the island's former slaves, killing over 400 of them in the process.

Hunt expressed his “intense admiration” for Eyre and joined those who called him a hero, who had prevented a massacre of white people.

Darwin joined those who campaigned publicly for Eyre to be prosecuted for his vicious excesses.

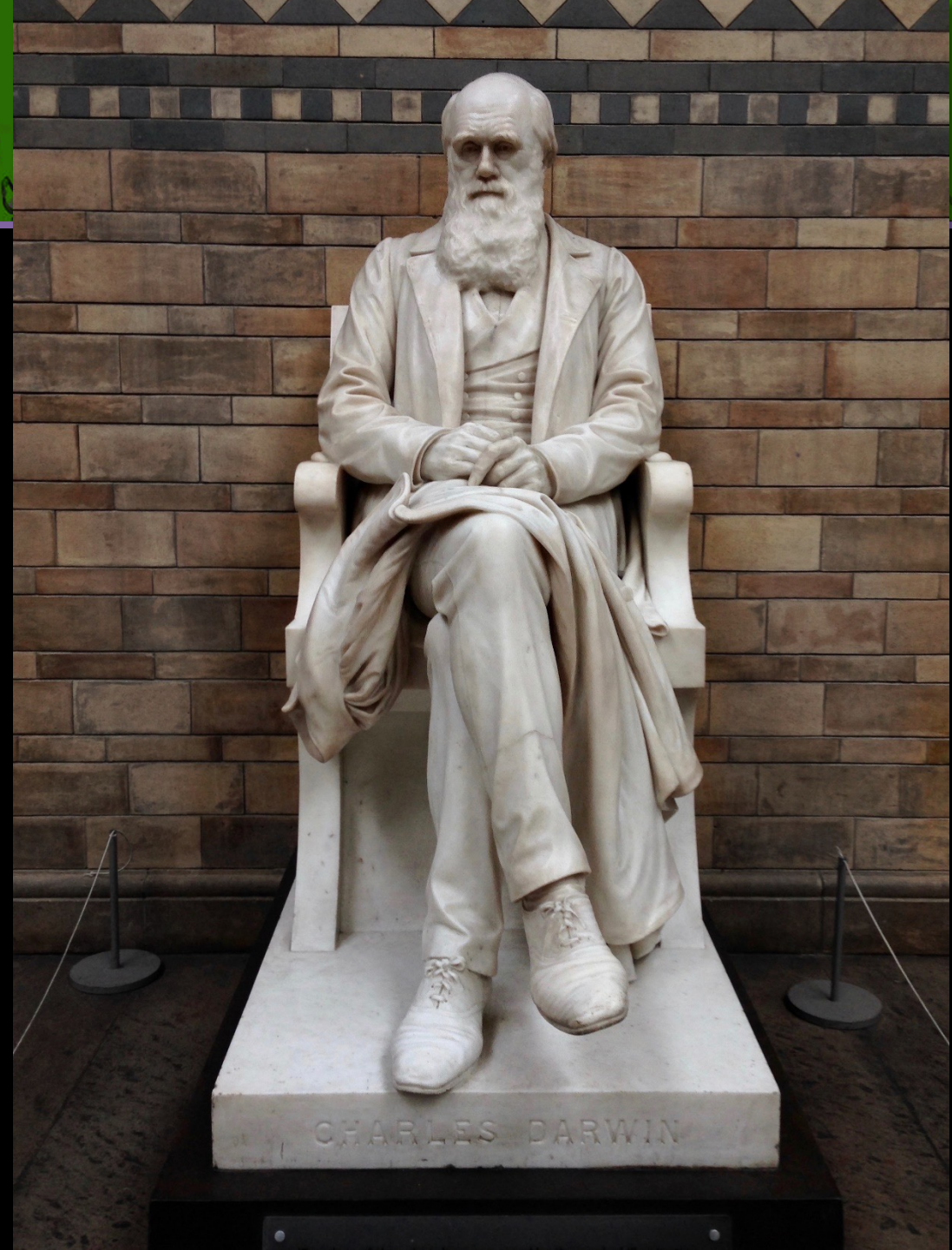




## *Darwin's statues*

### **Reading Darwin (critically)**

Don't pull the statues down, but let's look at the whole range of his work and its impacts.









## **On the origin of collections**

Miranda Lowe, one of the NHM's scientific curators, recently wrote a paper about the imperial origins of many of the objects in the museum's collections, examining who collected them and how.

Those who work in museums must not “close our eyes and ears to the difficult origins of the specimens in our collections”.









*Darwin's statues*

## Imperial Kew

Joseph Hooker was knighted (Knight Commander of the Star of India) in recognition of the service he and Kew provided the British Empire.



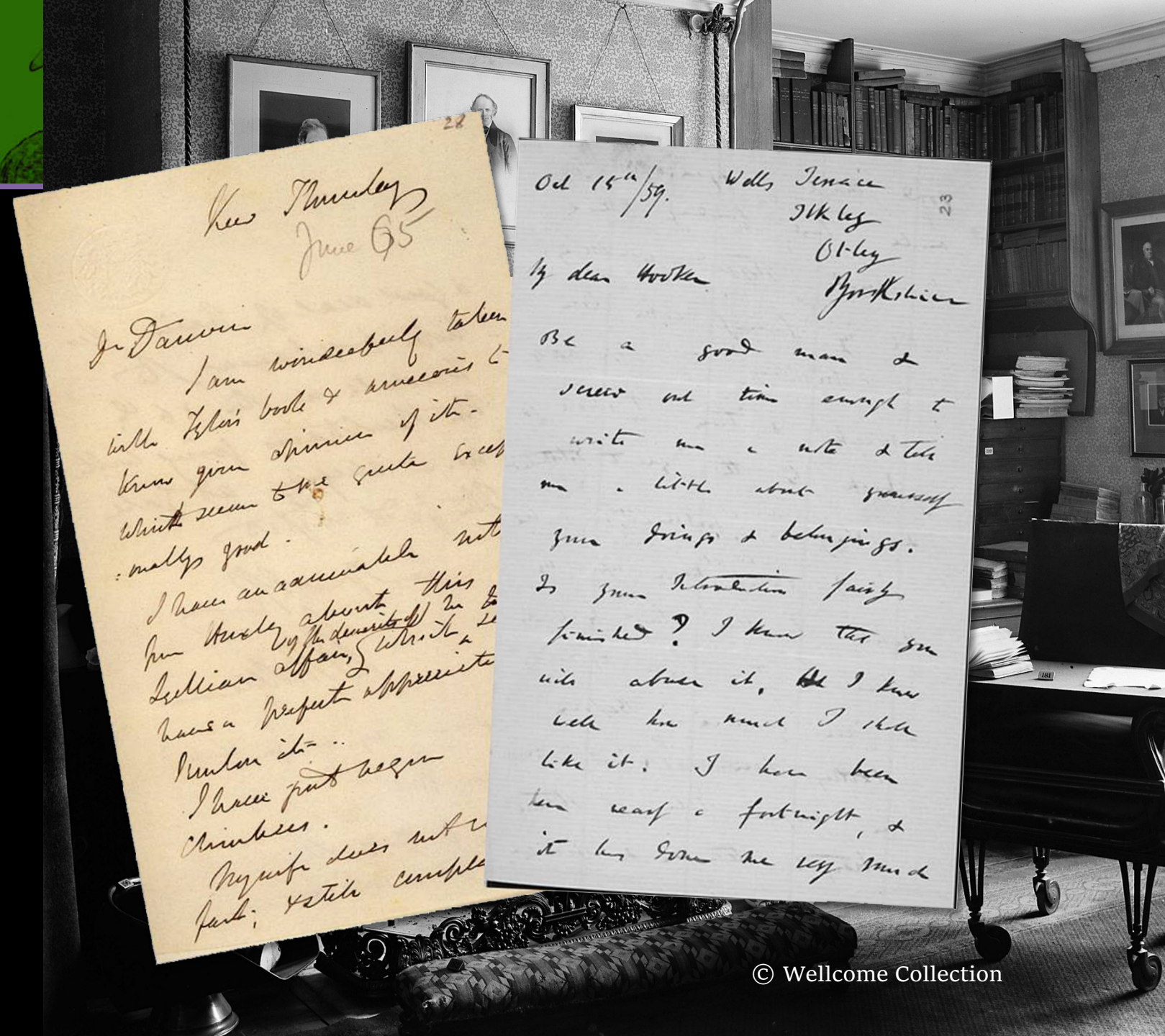


## Darwin's statues

### Imperial networks

Thanks to the global postal service, Darwin was never out of touch with the world.

Missionaries, colonial officials, and army and navy officers were all important correspondents.







tomentosa  
Veitchii  
See also Pleione.

Lowiano-eburneum . 42 0  
Lowianum (see fig. p. 6) 7 6  
concolor . 105 0

Cro  
(Warne  
majus  
nigrum  
bellatulum  
album  
Boissierianum.  
Boxalli. See villos  
x Bruno  
x Brysa  
callosum.  
x calurum.  
x Calypso  
x cardinale (Veitch's  
var.)  
x carcinum (Pearcei)  
x Carnusianum  
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