

Anthropomorphism in Victorian Science



(image courtesy of [Victorian Science in Context](#))

Daniel Sanford

Major Landmarks of Victorian Anthropomorphism

- The debate from evolution
- Fear of the beast
- Confronting the beast
- The new divide

Debate from Evolution

- Anthropomorphism is hardly a new phenomenon, it can be seen in Aesop's fables, shamanic cultures across the world, and even in medieval stories and church stories.
- The rise of evolution as a means to understanding nature led to drastic changes in how anthropomorphism was framed.

Anthropomorphism Evolves

- Even in the formative works of evolution, anthropomorphism was a distinct force.
- Darwin himself often ascribed human emotions or behaviors to animals
 - A caterpillar which was taken from an immature “hammock” and placed in a mature hammock is described as embarrassed, which explains why it rebuilds the hammock. (Darwin, Origin of Species)
 - In his early notebooks on Evolution Darwin draws links between the civilization of man from a savage and the gradual naturalization of birds when released from domestic care. (Darwin, Charles Darwin’s Notebooks, *Notebook B*)

Fears of the beast

- The rise of the evolutionary beginnings of man lead to an uprising worry in Victorian England about the relationship between man and beast. (Turner, Reckoning with the Beast)
 - No longer could a person view themselves as placed above nature by divine forces, instead they had to find a way to deal with the fact that that the same forces acted on man and animal.
 - Because of this new tie, a new course needed to be charted on how to view animals in science and life.

Confronting the beast

- The fear of becoming one of the beasts led to two general trends of thought by Victorian scientists and the public. (Turner, Reckoning with the Beast)
 - One was the transformation of man into an animal, and the need to control those dark urges which lurked behind a civilized face.
 - The second, a more traditional anthropomorphism tried to make animals more humane, so that the relationship was not something to be ashamed of.

Confronting the beast: Man becomes animal

- One of the major fears was that the evolutionary view would make people into mere beasts as seen below in a cartoon from *Punch*, a satirical magazine based in England, which often parodied the medical and scientific discoveries of that time.



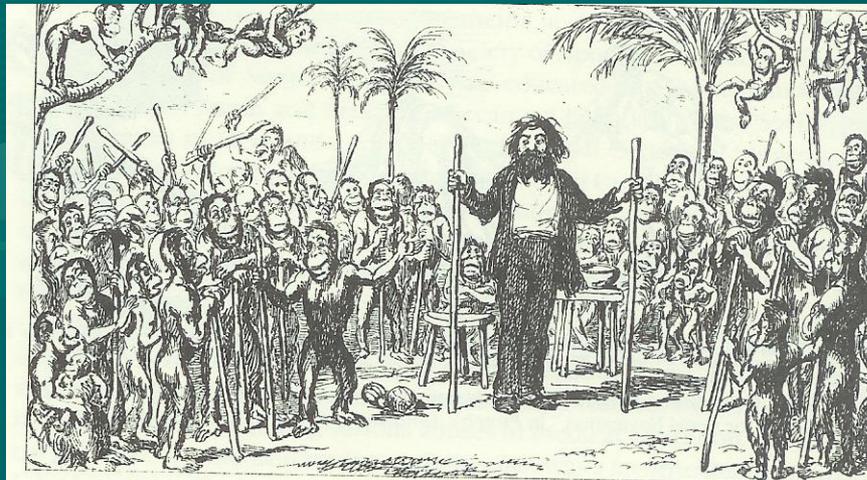
The animal in man

(An Irishman as ape, from *Punch*, October 29, 1881)

(Image courtesy of [Reckoning with the Beast](#))

Confronting the beast: Man becomes animal

- The impassioned orator, bard, or musician, when with his varied tones and cadences he excites the strongest emotions in his hearers, little suspects he uses the same means by which . . . his half human ancestors aroused each other's ardent passions, during their courtship and rivalry. (Darwin, The Descent of Man)
- A scientist K. Groos, explains the play of small animals as the perfection of later life behaviors such as hunting, and this is then used to show the need to allow children to play and perfect their behaviors. Even the German word to describe it, *Abänderungsspielraum*, calls to mind a more human motivation for play. (Thomson, The Science of Life)
- Cruikshank, a Victorian satirist who founded with *Punch*, also took the time to poke at the idea of men being above animals by presenting a naturalist being “discovered” by a tribe of orangutans and man's classification as a degenerate breed of monkey in *Comic Almanack*. (Paradis, Victorian Science in Context, *Satire and Science*)



Monster discovered by the Ourang Outangs.

image courtesy of [Victorian Science in Context](#)

Confronting the Beast: Making men of mice

- The fears of people becoming animals led to a trend which tried to emphasize the humane traits of animals, so that the animal inside oneself was not a ravening beast ready to tear down the walls of society.
- This trend fused with far older ideas about animals, those found in mythology, folklore, and popular belief for ages. Often the evolutionary reworking consisted of updating the understanding of an animal to a more modern view, while in rarer cases the entire perception of a species might be altered.

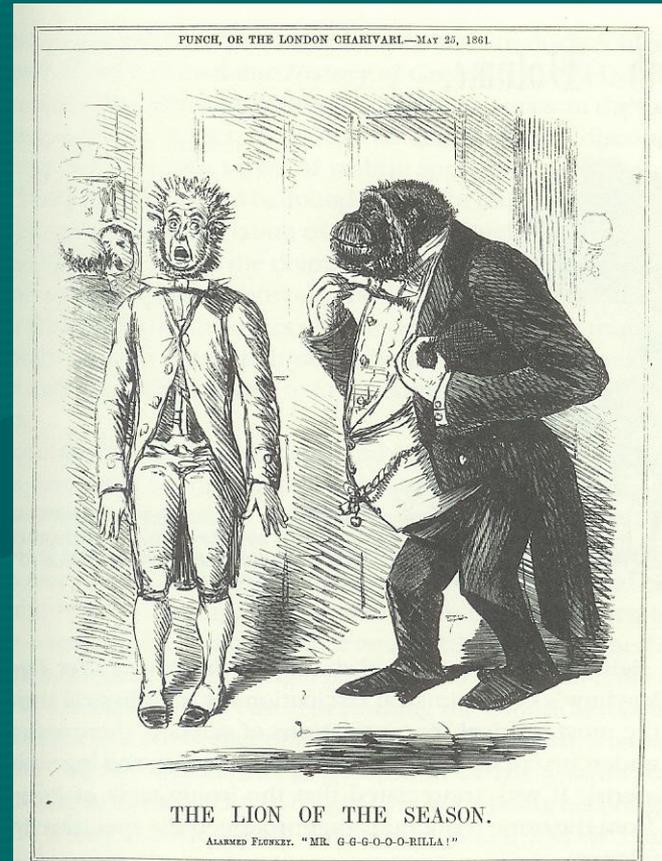
Confronting the Beast: Making men of mice

- One group of animals which was unsurprisingly among the most easily humanized were primates.
- Darwin describes an incident where he hid a nut from a orangutan, and describes its reaction as “kicked & cried like [a] naughty child” (Darwin, Charles Darwin’s Notebooks, *Notebook M*)
- In another notebook, Darwin states “Man in a savage state may be called, species. in domesticated races.-If all men were dead then monkeys make men. (Darwin, Charles Darwin’s Notebooks, *Notebook B*)
- In a third notebook, Darwin describes how a baboon learned to use a coat for comfort after a few days, among other less civilized activities. (Darwin, Charles Darwin’s Notebooks, *Notebook D*)

Confronting the Beast: Making men of mice

- Outside of scientists private studies, other people also looked at animals as more human than before. Mr. Gorilla, a mascot of *Punch*, was used to represent both the animal's increasing relation to man, but also the division of men into species, which flowered in such sciences as eugenics.

(image courtesy of [Victorian Science in Context](#))



Confronting the Beast: Making men of mice

- Primates were not the only animals which got a humane facelift, but many lesser species also received a brighter image.
 - Animals such as the dog, who had often been an image of loyalty, had their positive qualities taken even further. In popular literature dogs, and other animals, could provide an example of many traits, loyalty, intelligence, energy, honesty and more (Turner, Reckoning with the Beast)
 - More scientific works impressed on scientists the general intelligence of much of the animal kingdom, describing much of their behavior as intelligent in a scientific sense since it was able to be changed under the auspices of the animal and their interaction with the environment. (Thomson, The Science of Life)

The New Divide

- The rampant anthropomorphic ideas spawned by the fervor over evolution were eventually met by alternate arguments.
- Some people rejected the idea that animals had anything to offer man as exemplars, such as Eugene Wrayburn, who stated in Our Mutual Friend that “I object to being required to model my proceedings according to the proceedings of the bee, or the dog, or the spider, or the camel.”
- More scientific men begin to look at the difficulty of assigning mental states to other creatures as they become further removed from us. A review of George Ramos’s work specifically mentions the difficulty of understanding other minds as a consideration to be taken in animal psychology. (*Science Vol. 4. Iss. 74, 1884*)
- The most famous of these counter arguments was Morgan’s Canon, which said that:
“In no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale.” (Morgan, An Introduction to Comparative Psychology)

Modern Throwbacks

- Modern studies on animal cognition still have to contend with the social forces created during the Victorian debate over the relationship between man and animal.
 - Morgan's Canon is still one of the most influential statements regarding animal cognition

Lingering Questions

- How similar are modern challenges to Morgan's Canon to Victorian era anthropomorphism?
 - How can the mistakes of that era be avoided today?
- Was the anthropomorphic view good for early studies into animal cognition, and was it necessary?