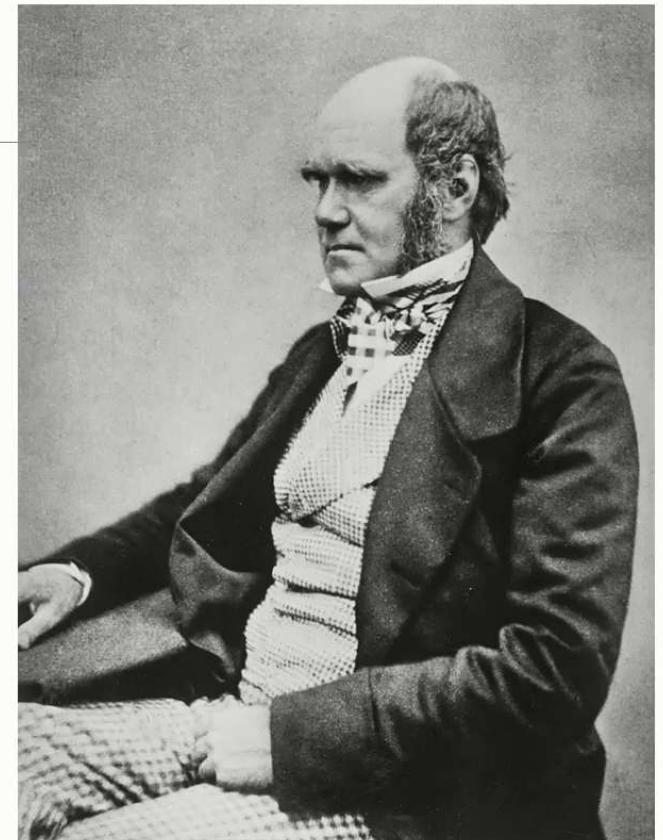


Darwin, Natural Selection, and Scientific Theories of Human Nature

Gentrain at Monterey Peninsula College

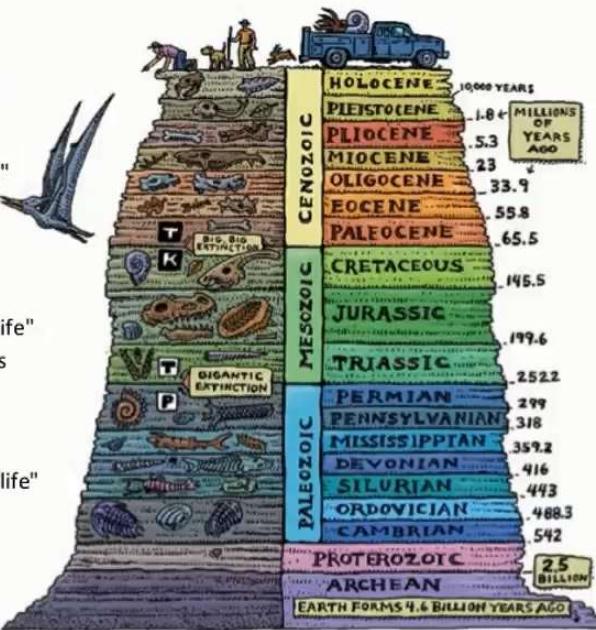
Charles Darwin (1809-1882)

- English naturalist, geologist, and biologist → best known for contributions to the theories of evolution
- Studied medicine and theology, but neglected his studies to do scientific research into biology and evolution
- His five year voyage on the *HMS Beagle* established him as a credible geologist → popularized geological theories of gradual geological change



Metaphysical Background

- Cenozoic
 - "new life"
- Mesozoic
 - "middle life"
 - dinosaurs
- Paleozoic
 - "ancient life"



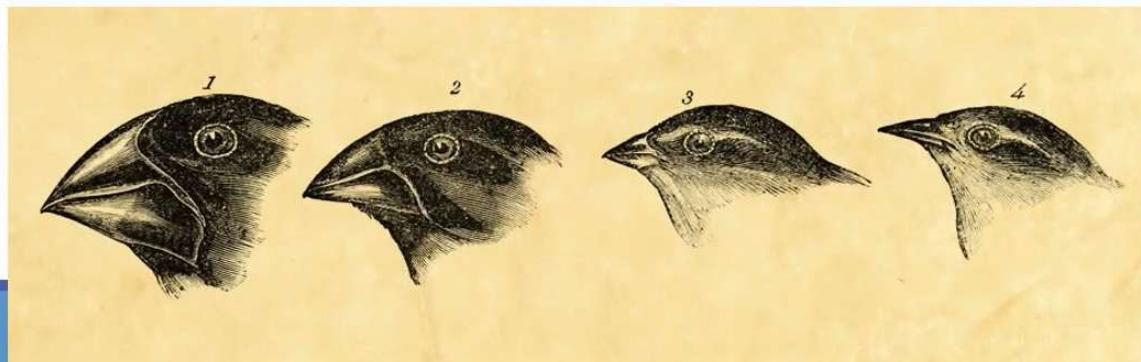
- Darwin not the first to challenge the prevailing belief about the age of the world or beliefs about change in species
 - Already scientists were beginning to understand that the world was much older than previously thought (and much older than biblical traditions posited)
 - At this point, many believed that the creation account in the Old Testament was literally true → the earth was around 6,000 years old
 - Theories began to circulate which challenged this belief → such as the theory that planets formed slowly from dust and other material, and the theory that rocks and mountains formed by a process of eruption and sedimentation over long periods of time
 - Even the idea of species evolution wasn't new with Darwin
 - "The hypothesis of long-term species change was already in the air in Darwin's time. The discovery of fossilized bones in the rocks showed that there had once been creatures very different from those that exist now."
 - The prevailing belief was that traits that parents acquired during their lifetime could be passed on to offspring → like an animal that reached their neck to access food might produce children who had longer necks.

Natural Selection

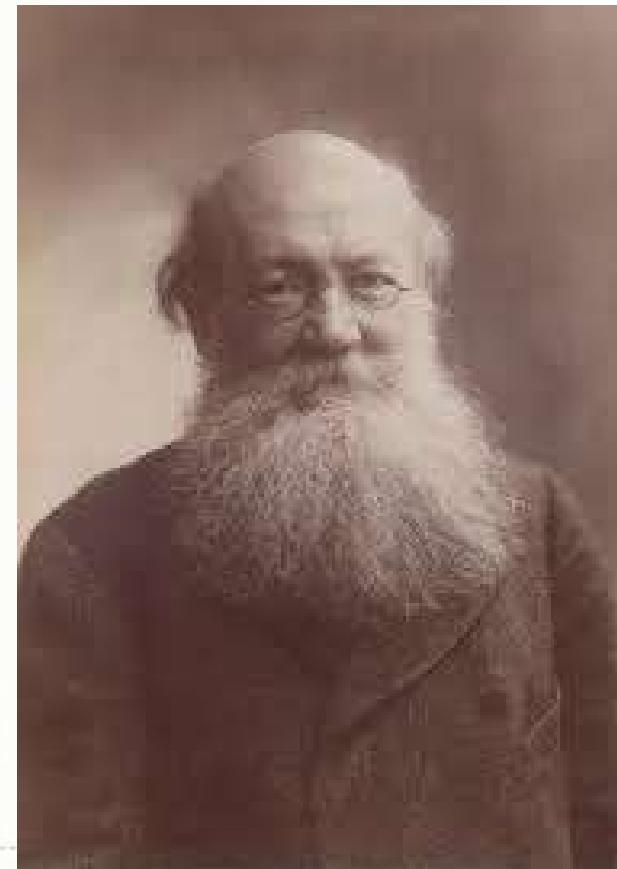
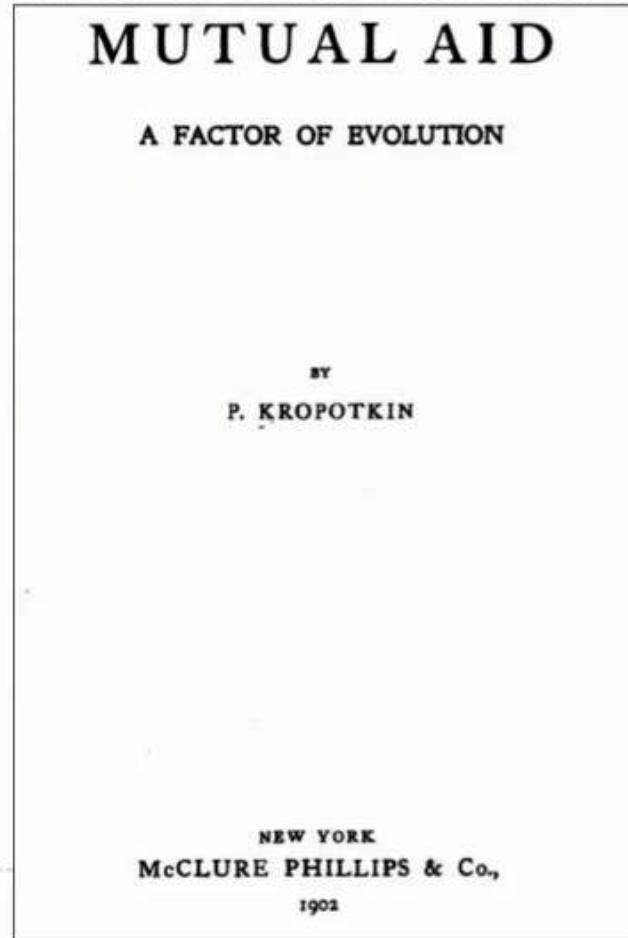
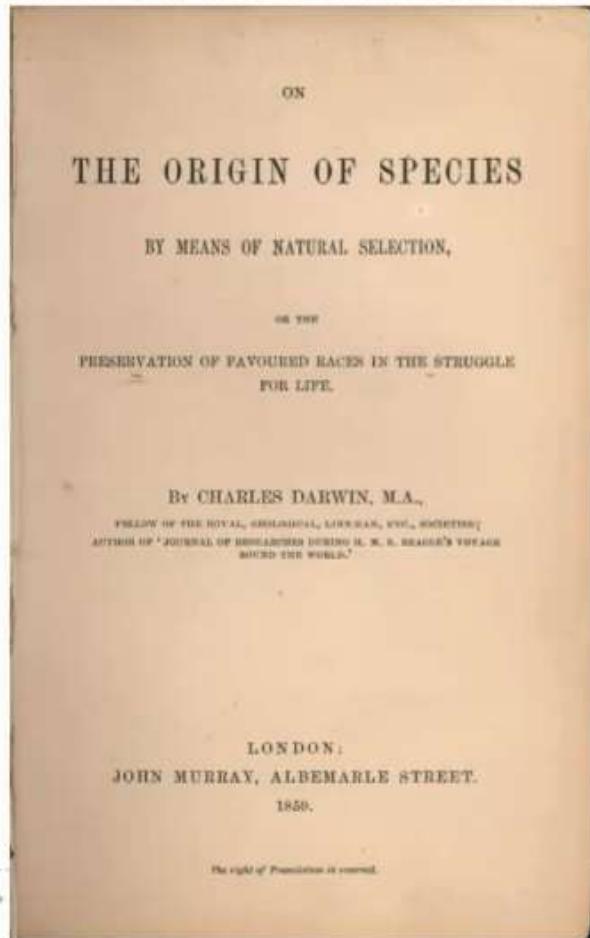
1. There is variation in the traits of individuals of a given species
2. Traits of parents tend to be passed on to their offspring
3. Species are intrinsically capable of a geometric rate of increase of population
4. The resources of the environment typically cannot support such an increase

Definition:

Natural selection is the process that results in the adaptation of an organism to its environment by means of selectively reproducing changes in its genotype, or genetic constitution. (*Encyclopaedia Britannica*)



Knowledge production is political



Competition or cooperation?

Kropotkin, the author of *Mutual Aid*, read Darwin's work before setting out on his own project:

... I failed to find... although I was eagerly looking for it ... that bitter struggle for the means of existence among animals belonging to the same species, which was considered by most Darwinists as the dominant characteristics of the struggle for life and the main factor of evolution.

... we see that, in the animal world, progressive development and mutual aid go hand in hand, while the inner struggle within the species is concomitant with retrogressive development.

Social Darwinism

- Social Darwinism is a broad term that describes the ways in which Darwin's biological theories of natural selection were applied to social and cultural phenomena, such as economics, sociology, etc.
 - The claim is that people who are successful in society are successful because they are stronger, fitter, and better – while those who are weak are poorer and less successful.
 - Focuses on the idea of competition in natural selection and how this aligns with competition under capitalism.
 - Social Darwinism has also been used to justify eugenics, colonization, genocide, fascism, Nazism, etc.



Social Spencerism

- *Twelve Theories of Human Nature*: 'survival of the fittest' applied to human individuals, populations, and societies should be called 'Social Spencerism' instead of 'Social Darwinism'
- Named after Herbert Spencer (1820-1903): influential Victorian social philosopher
- Influenced by Thomas Malthus's *Essay on the Principle of Population* (1798) → population has tendency to outstrip resources → those unable to compete for resources get weeded out
 - "The questionable implication was drawn that charitable aid to the starving is pointless (a principle notoriously followed by the British government during the Irish potato famine in the 1830s)
- Herbert Spencer saw European capitalism as the *best* society → the inevitable outcome of human history
- Why? Colonization and imperialism were gaining European corporations, aristocracy, and successful merchants vast increases in wealth and power. "Survival of the Fittest" approaches to human societies gave justification to colonial exploitation abroad and capitalist exploitation at home. --- Sometimes also called *scientific racism*

Herbert Spencer

“Consumptive patients, with lungs incompetent to perform the duties of lungs, people with defective hearts that break down under excitement of the circulation, people with any constitutional flaw preventing the due fulfillment of the conditions of life are continually dying out and leaving behind those fit for the climate, food, and habits to which they are born....And thus is the race kept free from vitiation.”

(Herbert Spencer, *Social Statics: or, the Conditions Essential to Human Happiness*. London: John Chapman, 1851, p. 379).

Vitiation, definition: “A change in a process that impairs utility or reduces efficiency.”

According to this, what are the values or ethical drives of Darwinism? How does this translate to Social Darwinism?





IRISH IBERIAN

ANGLO-TEUTONIC

NEGRO

The Iberians are believed to have been originally an African race, who thousands of years ago spread themselves through Spain over Western Europe. Their remains are found in the barrows, or burying places, in sundry parts of these countries. The skulls are of low prognathous type. They came to Ireland, and mixed with the natives of the South and West, who themselves are supposed to have been of low type and descendants of savages of the Stone Age, who, in consequence of isolation from the rest of the world, had never been outcompeted in the healthy struggle of life, and thus made way, according to the laws of nature, for superior races.

Scientific racism → trying to demonstrate that “Irish Iberian” are similar in evolution to the “Negro” in order to demonstrate each of their inferiority



IRISH IBERIAN ANGLO-TEUTONIC NEGRO

The Iberians are believed to have been originally an African race, who thousands of years ago spread themselves through Spain over Western Europe. Their remains are found in the barrows, or burying places, in sundry parts of these countries. The skulls are of low prognathous type. They came to Ireland, and mixed with the natives of the South and West, who themselves are supposed to have been of low type and descendants of savages of the Stone Age, who, in consequence of isolation from the rest of the world, had never been out-competed in the healthy struggle of life, and thus made way, according to the laws of nature, for superior races.

“The Iberians are believed to have been originally an African race, who thousands of years ago spread themselves through Spain over Western Europe. Their remains are found in the barrows, or burying places, in sundry parts of these countries. The skulls are of low prognathous type. They came to Ireland, and mixed with the natives of the South and West, who themselves are supposed to have been of low type and descendants of savages of the Stone Age, who, in consequence of isolation from the rest of the world, had never been out-competed in the healthy struggle of life, and thus made way, according to the laws of nature, for superior races”

(H. Strickland Constable. 1899, *Ireland from One or Two Neglected Points of View*).

- ▶ According to this illustration, why did Irish people fail to evolve as well as Europeans?
- ▶ How does this relate to Darwin’s theory of evolution?



Herbert Spencer vs. Karl Marx

- Karl Marx was a contemporary of Herbert Spencer → they were at extreme opposite ends of the political spectrum
- Spencer: glorified the winners in capitalist society
- Marx: capitalists “succeed” by exploiting others → exploiters would be dispossessed after the revolution
- Both Marx and Spencer turned to Darwin’s theories to justify their political ends → “The fact that such opposing social thinkers could both try to hitch their bandwagons to evolutionary theory should alert us to the large logical gulf between scientific theories and political ideologies”

