The Historical Origins of Scientific Racism

David Gresham
New York University
Ancestry.com advertisement: Winter Olympics February 2018
In 1942, the anthropologist Ashley Montagu published “Man’s Most Dangerous Myth: The Fallacy of Race,” an influential book that argued that **race is a social concept with no genetic basis.**

...
Lecture Overview

The concept of Race originated as a scientific idea but became a social concept.

The history of scientific racism:

- 18th century - typological classification
- 19th century - justification for European superiority
- 20th century
  - Early 20th Century - rationale for discrimination and oppression through eugenics movement
  - Mid 20th Century - scientific justification for the Holocaust
  - Late 20th Century - refutation of scientific basis of Race and Race becomes a social concept
- 21st century - continued inclusion of race and ancestry in biomedical studies
The Great Chain of Being and European Exploration
CAROLI LINNAEI

Equitis de Stellæ Polæ,
Archichæ Regii, Med. & Botan. Prorect. Usual.;

SYSTEMA
NATURÆ

Per
REGNA TRIA NATURÆ,
Secundum
CLASSES, ORDINES,
GENERA, SPECIES,
Cum
CHARACTERIBUS, DIFFERENTIIS,
SYNONTMIS, LOCIS.

Tomus I.

Editio Decima, Reformata.
Cum Privilegiis Sue & Rerum Suecic.

HOLMÆ.
Impensis Direct. Laurentii Salvi,
1758.
## Editions 1-9: Humans classified into 4 distinct varieties

<table>
<thead>
<tr>
<th>Variety</th>
<th>Skin colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americanus</td>
<td>Red</td>
</tr>
<tr>
<td>Europaeus</td>
<td>White</td>
</tr>
<tr>
<td>Asiaticus</td>
<td>Sallow</td>
</tr>
<tr>
<td>Africanus</td>
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[Link to source](https://www.linnean.org/learning/who-was-linnaeus/linnaeus-and-race)
Editions 1-9: humans classified into 4 distinct varieties

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[God] created one human, as the Holy Scripture teaches; but if the slightest trait [difference] was sufficient, there would easily stick out thousands of different species of man: they display, namely, white, red, black and grey hair; white, rosy, tawny and black faces; straight, stubby, crooked, flattened, and aquiline noses; among them we find giants and pygmies, fat and skinny people, erect, humpy, brittle, and lame people etc. etc. But who with a sane mind would be so frivolous as to call these distinct species? [3]
## 1758 10th edition Systema Naturae

<table>
<thead>
<tr>
<th>Variety</th>
<th>Skin colour</th>
<th>Physical traits</th>
<th>Behaviour</th>
<th>Manner of clothing</th>
<th>Form of government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Americanus</td>
<td>Red, choleric and straight</td>
<td>Straight, black and thick hair; gaping nostrils; [freckled] face; beardless chin</td>
<td>Unyielding, cheerful, free</td>
<td>Paints himself in a maze of red lines</td>
<td>Governed by customary right</td>
</tr>
<tr>
<td>Europaeus</td>
<td>White, sanguine, muscular</td>
<td>Plenty of yellow hair; blue eyes</td>
<td>Light, wise, inventor</td>
<td>Protected by tight clothing</td>
<td>Governed by rites</td>
</tr>
<tr>
<td>Asiaticus</td>
<td>Sallow, melancholic, stiff</td>
<td>Blackish hair, dark eyes</td>
<td>Stern, haughty, greedy</td>
<td>Protected by loose garments</td>
<td>Governed by opinions</td>
</tr>
<tr>
<td>Africanus</td>
<td>Black, phlegmatic, lazy</td>
<td>Dark hair, with many twisting braids; silky skin; flat nose; swollen lips; Women [with] elongated labia; breasts lactating profusely</td>
<td>Sly, sluggish, neglectful</td>
<td>Anoints himself with fat</td>
<td>Governed by choice [caprice]</td>
</tr>
</tbody>
</table>

[https://www.linnean.org/learning/who-was-linnaeus/linnaeus-and-race](https://www.linnean.org/learning/who-was-linnaeus/linnaeus-and-race)
**Homo monstrous** - the Patagonian giant, the dwarf of the Alps, cone-headed Chinese and flat-headed Canadians

**Homo Ferus** - the wolf-boy of Hesse (*juvenis lupinus hessensis*), Peter of Hanover (*Juvenis hannoveranus*), and the wild girl of Champagne (*Puella campanica*)

https://kenanmalik.com/2014/07/11/there-be-monsters/
I. PRIMATES.

Their fore teeth are wedge-like, intended for cutting; those in the upper jaw are parallel, and four in number.

They have two paps situated on the breast.

1. MAN—H. OMO.

Know thy self †.

Sapient Man.—1. H. Sapient.

Man forms a native of the countries within the Tropics, and dates were probably his original food. He has, however, become accustomed to eat the gentle climate without the Torrid Zone, and now supports his existence by means of agriculture, adding animal food to that intended by nature.

This is the only species, he is endowed with wisdom far superior to any other animal. He lives from climate, education, and habits. Lutus enumerates the following varieties.

Wild Men.—2. H. Pari.

Walk on all fours, are dumb, and covered with hair †.

1. A youth found in Lithuania, in 1761, resembling a bear.
2. A youth found in Heil, in 1748, resembling a wolf.

* The name of this order may be translated Oligop, as being the principal animals, hence it contains Men, and those animals which resemble him, especially the circumstances on the teeth, and man.”

† This noted dying of Fren is the first step towards the domestication of true wild men, and was formerly written in verses of Gothic, on the walls of Digna.

‡ Their inroads of wild men, and their ancestors, are partly to be attributed to impatience, and in part to exaggeration. Most probably those who had strayed from their friends, and who resembled the other animals only in retaining their voice.”

MAMMALIA. PRIMATES. 

5. A wild youth, in 1724, in Hanover.
6. Wild boys found, in 1734, in the Pyrenees.
7. A wild girl found, in 1718, in Overlord.
8. A wild girl found, in 1726, in Champagne.

American.—5. H. Americani.

Of copper colored complexion, choleric constitution, and remarkably erect.

Their hair is black, long, and coarse; their mules are wide; their features bony, and the chin is firmly supplied with beard. Are oblique in their temper, fierce, and finish with their condition; and are regulated in all their proceedings by traditional customs. Paint their skin with red feasts.

European.—7. H. Eurapi.

Of fair complexion, temperance, and brawny form.

The hair is flowing, and of various shades of brown; the eyes are nearly blue.—Of gentle manners, acute in judgment, and quiet in manners, governed by fixed laws.—Dreis in close suits.

Afriatic.—1. H. Afriatici.

Of fiery complexion, melancholy temperance, and rigid fibre.

The hair is strong, black, and lank; the eyes dark brown.—Of grace, beauty, and costume manes. Governed by opinions. Dreis in loose garments.


Of black complexion, phlegmatic temperance, and relaxed fibre.

The hair is black and filthy; the skin is red, the nose is flat; the mouth is large, and the lungs have a natural strain, and long for breath.—Of craft, idolatry, and carefree disposition, and are governed in their actions by caprice.—Assists the skin with grace.

Monters.—1. H. Monfridi.

Of those there are several varieties; the first and second of which, in the following list, are occasioned by peculiarity of climate, while the rest are produced by artificial management.
Johann Blumenbach (1795): “On the Natural Variety of Mankind”

Typology of human races

- the Caucasian or white race
- the Mongolian or yellow race
- the Malayan or brown race
- the Ethiopian or black race
- the American or red race
Blumenbach’s classification was hierarchical

Typology of human races

- the **Caucasian** or white race
- the **Mongolian** or yellow race
- the **Malayan** or brown race
- the **Ethiopian** or black race
- the **American** or red race

“I have allotted the first place to the Caucasian...[as I]...esteem it the primeval one. This diverges in both directions ...into the Ethiopian, and...Mongolian. The remaining two occupy intermediate positions between the primeval one and these two extreme varieties.”
Blumenbach introduced the term “Caucasian”

“Caucasian variety: I have taken the name of this variety from Mount Caucasus...[because]...it produces the most beautiful race of men, I mean the Georgians...the greatest probability to place the autochthones of mankind.”

“That stock displays...the most beautiful form of the skull...it is white in color...the primitive color of mankind...easy for that to degenerate into brown, but much more difficult for brown to become white, when the secretion and precipitation of this carbonaceous pigment...has once deeply struck root.”

Blumenbach, “On the Natural Variety of Mankind”
On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life - 1859
"But the most weighty of all the arguments against treating the races of man as distinct species, is that they graduate into each other, independently in many cases, as far as we can judge, of their having intercrossed"

At some future period, not very distant as measured by centuries, the civilized races of man will almost certainly exterminate, and replace, the savage races throughout the world. - Darwin, Descent, vol. I, 201.
Francis Galton studied the inheritance of intelligence
Francis Galton introduced the concept of eugenics

“The Comparative Worth of Different Races”

“I shall make frequent use of the law of deviation from an average... I shall assume the intervals between the grades of ability are the same in all races”

“a result which again points to the conclusion, that the average intellectual standard of the negro is some two grades below our own.”

“The ablest race of whom history bears record is unquestionably the ancient Greeks”
Eugenics developed in US academic institutions in the early 20th century

Positive eugenics - the promotion of marriages and matings that would result in children with desirable traits

Negative eugenics - called for preventing the reproduction of genetically unfit, possibly by state-enforced sterilization.

If the state had the right to take away life, why shouldn’t the state have the right to prevent undesirable births.

Charles Davenport

Carnegie Station for Experimental Evolution, Cold Spring Harbor, N.Y.
Eugenics developed in US academic institutions in the early 20th century

“One often sees in mulattos an ambition and push combined with intellectual inadequacy which makes the unhappy hybrid dissatisfied with his loty and a nuisance to others...

Miscegenation commonly spells disharmony.

A hybridized people are a badly put together people and a dissatisfied, restless, ineffective people.

Eugenics taught in leading academic institutions provided scientific rationale for racist policies

Chapter XIV: The color line

“Relative intelligence of Negroes and Whites (1916 study by Ferguson)”

- pure Negros scored 69.2% as high as whites
- Mulattoes scored 81.2% as high as whites
- Quadroons obtained 91.8% of white score

“The negro is out of his environment...[i]n the United States he is much less “fit”, in the Darwinian sense...[and is] eugenically inferior”

“Society - white society - long ago reaches the instinctive conclusion...that it must put a ban on intermarriage between the two races”

https://www.gutenberg.org/files/19560/19560-h/19560-h.htm
The Nazi incorporated eugenic ideas in racial hygiene

“Rassenhygiene” - the scientists who provided the scientific backing were respected university professors ...of the Kaiser Wilhelm Society (KWS), the predecessor of the Max Planck Society.


NEJM, Bachrach S, 2004

Weigmann K, EMBO Reports, 2001
1950 UNESCO Statement on Race

The importance which the problem of race has acquired in the modern world scarcely needs to be pointed out. Mankind will not soon forget the injustices and crimes which give such tragic overtones to the word “race”.

The original statement was drafted at Unesco House, Paris, by the following experts:

- Professor Ernest Beaglehole, New Zealand
- Professor Juan Comas, Mexico
- Professor L. A. Costa Pinto, Brazil
- Professor Franklin Frazier, United States
- Professor Morris Ginsberg, United Kingdom
- Dr. Humayun Kabir, India
- Professor Claude Levi-Strauss, France
- Professor Ashley Montagu, United States (Rapporteur).

The text was revised by Professor Ashley Montagu, after criticism submitted by Professors Hadley Cantril, E. G. Conklin, Gunnar Dahlberg, Theodosius Dobzhansky, L. C. Dunn, Donald Hager, Julian S. Huxley, Otto Klineberg, Wilbert Moore, H. J. Muller, Gunnar Myrdal, Joseph Needham, Curt Stern.

https://unesdoc.unesco.org/ark:/48223/pf0000128291
1950 UNESCO Statement on Race

The committee asserted human equality based on four premises:

1. the mental capacities of all races are similar,
2. no evidence exists for biological deterioration as a result of hybridization,
3. there is no correlation between national or religious groups and any particular race, and
4. “race was less a biological fact than a social myth,” and that biology proved the “universal brotherhood of man.”

https://unesdoc.unesco.org/ark:/48223/pf0000128291
Table 1. Human Genes or “Systems” Included in this Study and Extremes of Allele Frequency in Known Populations

<table>
<thead>
<tr>
<th>Locus</th>
<th>Allele</th>
<th>Frequency Range</th>
<th>Extreme Populations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin</td>
<td>Hp</td>
<td>.09 - .52</td>
<td>Tsimi-Lacandon</td>
</tr>
<tr>
<td>Lipoprotein</td>
<td>Ag</td>
<td>.23 - .74</td>
<td>Italy-India</td>
</tr>
<tr>
<td>Lipoprotein</td>
<td>Li</td>
<td>.006 - .267</td>
<td>Labrador-Germany</td>
</tr>
<tr>
<td>Red Cell Acid</td>
<td>Xmn</td>
<td>.260 - .335</td>
<td>Easter L, U.S. Blacks</td>
</tr>
<tr>
<td>Phosphatase</td>
<td>APA</td>
<td>.09 - .86</td>
<td>Tristan da Cunha-Athabascan</td>
</tr>
<tr>
<td>6-phosphogluconate dehydrogenase</td>
<td>PGD</td>
<td>.763 - 1.000</td>
<td>Bhutan-Yucatan</td>
</tr>
<tr>
<td>Phosphoglucomutase</td>
<td>PGD</td>
<td>.430 - .978</td>
<td>Hambra Jews-Yakovar</td>
</tr>
<tr>
<td>Adenylate kinase</td>
<td>AK</td>
<td>0 - .130</td>
<td>Africans, Amerind-Indians</td>
</tr>
<tr>
<td>Kidd</td>
<td>Jk</td>
<td>.310 - 1.000</td>
<td>Chinese-Dyaks, Eskimo</td>
</tr>
<tr>
<td>Duffy</td>
<td>Fy</td>
<td>.061 - 1.000</td>
<td>Bantu-Chew, Eskimo</td>
</tr>
<tr>
<td>Lewis</td>
<td>Le</td>
<td>.298 - .697</td>
<td>Lapps-Kapangs</td>
</tr>
<tr>
<td>Kel</td>
<td>k</td>
<td>0 - .063</td>
<td>Many-Chew</td>
</tr>
<tr>
<td>Lutheran</td>
<td>Lu</td>
<td>0 - .086</td>
<td>Many-Iranian Amerind</td>
</tr>
<tr>
<td>P</td>
<td>P</td>
<td>.179 - .838</td>
<td>Chinese-West Africans</td>
</tr>
<tr>
<td>MNS</td>
<td>MS</td>
<td>0 - .317</td>
<td>Oceanians-Loads</td>
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<tr>
<td></td>
<td>MS</td>
<td>.192 - .747</td>
<td>Papuans-Malays</td>
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<td>NS</td>
<td>0 - .213</td>
<td>Berneos, Eskimo-Chew</td>
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<td>NS</td>
<td>.051 - .645</td>
<td>Naro-Chew</td>
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<td>Rh</td>
<td>Ce</td>
<td>0 - .960</td>
<td>Luo-Papuans</td>
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<td>Ce</td>
<td>0 - .166</td>
<td>Many-Chew</td>
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<td>De</td>
<td>0 - .308</td>
<td>Luo-Byak-Japanese</td>
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<td>De</td>
<td>0 - .374</td>
<td>Many-Ainu</td>
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<td>De</td>
<td>0 - .865</td>
<td>Many-Jao</td>
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<td></td>
<td>De</td>
<td>0 - .456</td>
<td>Many-Palaungs</td>
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<tr>
<td>ABO</td>
<td>IA</td>
<td>.007 - .583</td>
<td>Toba-Bodobs</td>
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<tr>
<td></td>
<td>i</td>
<td>0 - .297</td>
<td>Amerinds, Austr. Abo, Toda</td>
</tr>
<tr>
<td></td>
<td>i</td>
<td>.509 - .993</td>
<td>Orona-Tonga</td>
</tr>
</tbody>
</table>

Inclusive List of All Populations Used For Any Gene in this Study by the Racial Classification Used in this Study

**Caucasians**

**Black Africans**

**Mongoloids**
- Ainus, Bhotanese, Bogobos, Bruneians, Burmese, Chinese, Dzis, Filipinos, Gondogar, Indonesians, Japanese, Javanese, King, Koreans, Lapps, Makays, Senyu, Siamese, Taiwanese, Thais, Turks

**South Asian Aborigines**
- Andamanese, Badagas, Chenchu, Iruka, Marathas, Nairs, Oroons, Onge, Tamils, Todas

**Amerinds**

**Oceania**

**Australian Aborigines**
The results are quite remarkable. The mean proportion of the total species diversity that is contained within populations is 85.4%, with a maximum of 99.7% for the Xm gene, and a minimum of 63.6% for Duffy. Less than 15% of all human genetic diversity is accounted for by differences between human groups! Moreover, the difference between populations within a race accounts for an additional 8.3%, so that only 6.3% is accounted for by racial classification.
The apportionment of human diversity - Richard Lewontin 1972

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It is clear that our perception of relatively large differences between human races and subgroups, as compared to the variation within these groups, is indeed a biased perception and that, based on randomly chosen genetic differences, human races and populations are remarkably similar to each other, with the largest part by far of human variation being accounted for by the differences between individuals.

Human racial classification is of no social value and is positively destructive of social and human relations. Since such racial classification is now seen to be of virtually no genetic or taxonomic significance either, no justification can be offered for its continuance.
In 1942, the anthropologist Ashley Montagu published “Man’s Most Dangerous Myth: The Fallacy of Race,” an influential book that argued that 

race is a social concept with no genetic basis.

... 

Beginning in 1972, genetic findings began to be incorporated into this argument. That year, the geneticist Richard Lewontin published an important study of variation in protein types in blood. He grouped the human populations he analyzed into seven “races” — West Eurasians, Africans, East Asians, South Asians, Native Americans, Oceanians and Australians — and found that around 85 percent of variation in the protein types could be accounted for by variation within populations and “races,” and only 15 percent by variation across them. To the extent that there was variation among humans, he concluded, most of it was because of “differences between individuals.”

that among human populations there are no differences large enough to support the concept of “biological race.” Instead, it was argued, race is a “social construct,” a way of categorizing people that changes over time and across countries.

-David Reich
How Genetics Is Changing Our Understanding of ‘Race’
New York Times
March 23, 2018
Summary

- Race originated as a scientific concept.
- Science was used as justification for racist policies for several hundreds of years.
- Scientists played a key role in advocating and advancing racist policies.
- Following WWII scientists rejected the biological concept of race and it has become considered a social construct.
- However, the classification of humans based on ancestry, morphology and its conflation with social factors is an unresolved issue in science and medicine.