

# Anthropology 215

## RACE

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## RACE

“The concept of race is mired in a biological, cultural, and semantical swamp” (James Shreeve, Discover Magazine 1994)



■ folk taxonomies

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## subspecies category

> only formal taxonomic category recognized below the species level. (i.e., subgroupings of *Homo sapiens*)

“A race is a division of a species which differs from other divisions by the frequency with which certain hereditary traits appear among its members”



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**“A race is a subdivision of a species, consisting of populations that have different combinations of gene frequencies”**



- race is a taxonomic category
- trinomen
  - > third name added to binomial designation (e.g., *H. sapiens neanderthalensis*)

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### Common factors in race definitions

- > Role of Geography
- > Importance of breeding populations



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### Typological Classifications

**Blumenbach in 1775 – proposed 5 human races**

- Caucasian-White
- Ethiopian/Negro-Black
- Am. Indian-Red
- Malayan-Brown
- Mongolian-Yellow

- > Linneaus: 4 races
- > Boyd (1950): 6, then 13 races
- > Coon, Garn and Birdsell (1951): 30 human races



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## Populational Model

- adopted as an alternative
- based on the idea that the only significant groups, in evolutionary terms, consist of people whose ancestors have more or less exclusively mated with each other over long periods of time

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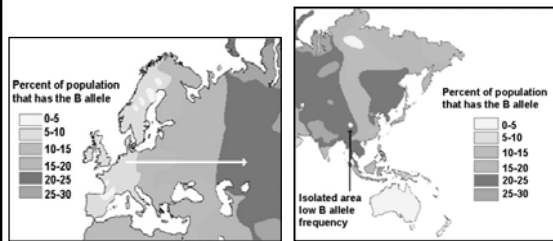
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## Clinal Model

- based on the fact that genetically inherited traits most often gradually change in frequency from one geographic area to another



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## Race and Behavior (behavioral genetics)

- racism - where value judgements of superiority and inferiority are assigned to race categories



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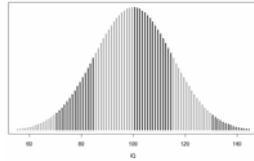
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## IQ Scores



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### I.Q. scores

- **Yasuhiro Nakasone (1986 Japan PM)**
  - Japanese I.Q. 111 vs. 100 for Americans

### Intelligence

- ❖ what is and how do you measure it?
- Problem solving ability
- Thinking logically
- Imagination and abstract
- Ability to synthesize theories and facts
- Motivation

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### ■ Idiot savants

- **Intelligence Quotient (I.Q.)**
- **Do Genes Affect Intelligence?**
- **Behavioral Genetics**

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- **Monozygotic (MZ) or identical twins are two genetically identical individuals arising from the same fertilized ovum.**
- **Dizygotic (DZ) or fraternal twins arise from two separately fertilized ova (they are as different as any sibs would be).**



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- Arthur Jensen
  - Charles Murray (*The Bell Curve*)
  - William Shockley (proposed that people with low I.Q. be sterilized)
  - **heritability coefficient  $h^2$** : ratio of genetically ( $V^G$ ) caused variation to the total variation ( $V^T$ ) in one population at a specific point in time
    - $h^2 = V^G/V^T$
    - $V^T = V^G + V^E$
- 1 = no environmental component, all variation is due to genetic differences  
 0 = no genetic component, all difference is due to environment

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- e.g., if  $h^2$  of I.Q. among U.S. elementary children is .70, this means that 70% of the I.Q. test score variation among elementary school children is attributable to genetic differences between members of that group and the rest is due to other (non-genetic) sources of variation in the same subjects. It does **NOT** mean that the trait relies on 70% heredity and 30% environment.

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1.  $h^2$  applies only to the populations for which its was initially calculated. It says nothing about heritability of the same trait (like intelligence) in another group of humans.
2.  $h^2$  refers to a particular trait for which it was calculated, it says nothing about other traits.
3.  $h^2$  refers to variation differences from person to person for that trait in some specified population

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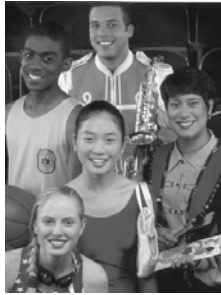
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#### Environment and I.Q.

- > environment is important in influencing such traits as intelligence

#### Equality does not mean identity

- > Equality means that all humans are entitled to equal opportunity to develop their capacities to their fullest, not that these capacities are identical



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