

Genes, Memes, & Selfish Genes

PHIL 340
PHILOSOPHY OF SCIENCE
WINTER 2008

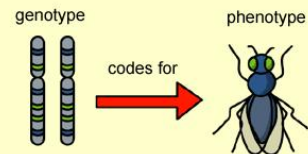
Gene

- HEREDITY
- MENDEL
- 1900
- MODERN SYNTHESIS
- DNA
- MOLECULAR BIOLOGY



Genotypes & Phenotypes

- GENOTYPE
 - UNIT OF GENETIC INFORMATION
- PHENOTYPE
 - MANIFESTATION OF THE GENOTYPE
 - MORPHOLOGICAL
 - BEHAVIORAL
- GENETIC DETERMINISM?
- NATURE/NURTURE?



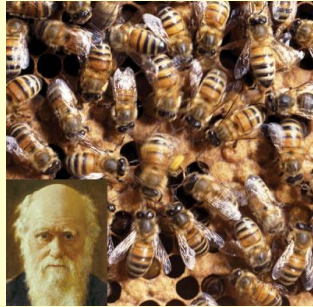
Units of Selection

- INDIVIDUAL
 - 'SURVIVAL OF THE FITTEST'
- GROUP
 - DARWIN
 - BIOLOGY IN THE EARLY 1900S
 - WILLIAMS CRITIQUE
- GENE



Altruism

- **BIOLOGICAL DEFINITION**
- **PUZZLE IN EVOLUTIONARY THEORY**
- **DAWKINS ON SELFISHNESS**
- **SELFISH INDIVIDUALS**
- **SELFISH GENES**
- **KIN SELECTION**



Memes

- **ETYMOLOGY**
- **STRUGGLE FOR REPLICATION**
- **DENNETT'S ALGORITHM**
- **SPEED OF REPLICATION**
- **UNIQUE TO OUR SPECIES?**
- **DEFEATING EVOLUTION?**

