

Review
Big Quiz 1 - PER 3 - 1/8/14

Influences -

Hutton + Lyell -

- Earth was old enough
for evolution to have
occurred.

Malthus -
if human pop continued
to grow unchecked, eventually
shortage of food + space
→ Darwin - this occurs in nature
- struggle for existence

Lamarck -
evolution theory
- based on inheritance
of acquired traits
(use + disuse)
- NO evidence ←

Darwin didn't understand

- genetics (how traits were inherited)
- DNA (genes)

* VARIATION is key

Galapagos -

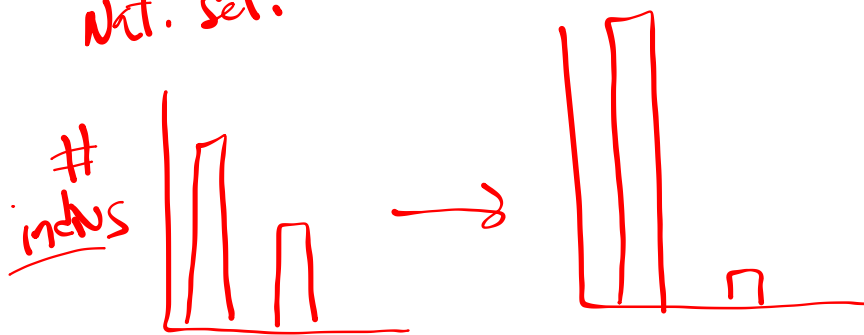
similar organisms

varied in predictable

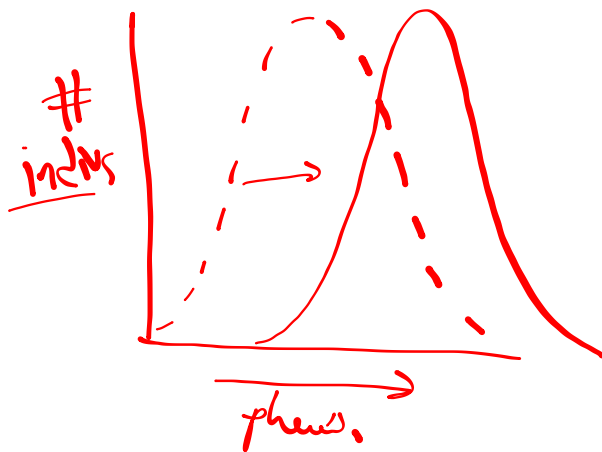
ways from island to island

- showed how several species
might descend from 1 species

Single gene traits
nat. sel.

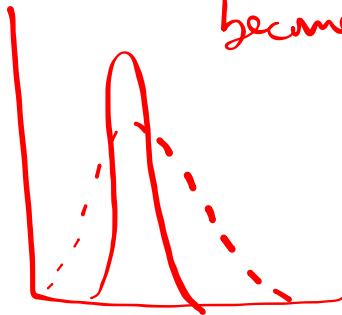


Polygenic traits
Nat. sel.



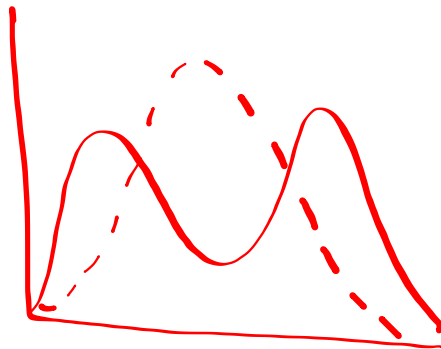
1. Directional selection
- indivs. @ 1 end of bell curve become more fit

2. stabilizing
selection
- indivs. in middle
of bell curve
became more fit



3. Disruptive sel.

- indivs @ both ends of bell curve become more fit



Artificial selection -

HUMANS select desirable
traits + allow only those
inds. to reproduce

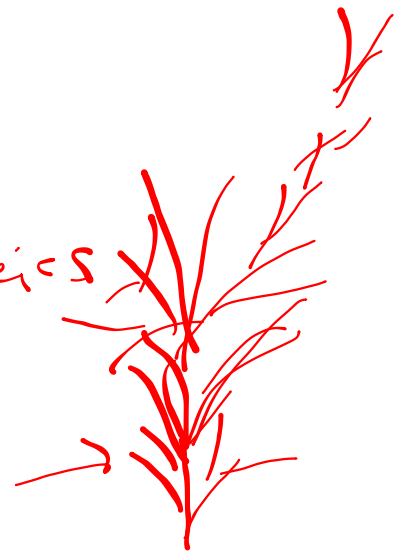
- D: this happens in nature

Reproductive Isolation - no longer interbreed
prerequisite for speciation

1. behavioral
2. temporal
3. geographic

Common descent -
all species have descended,
with modification, from
a single ancestor species

tree
of
Life



fitness - caused by
random inheritance
of traits