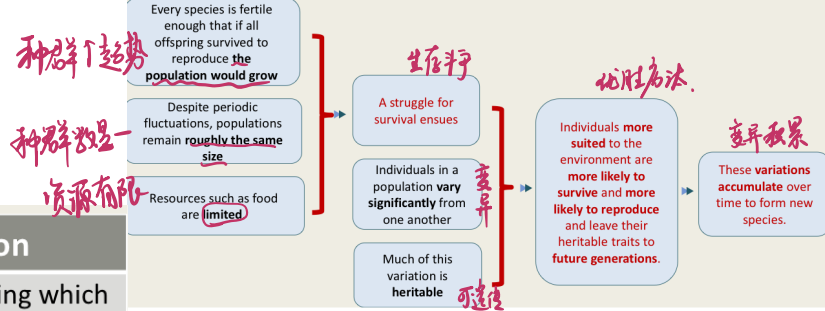


1. 自然选择: 有利变异个体保存, 有害变异的毁灭.

Natural selection

2. 人类选择 Artificial selection

Artificial Selection	Natural Selection
Selects only for his own <u>good</u>	Selects for <u>good</u> of the being which she tends. <u>适者自然存活</u>
Act only on <u>external</u> and <u>visible</u> characters.	Cares <u>nothing</u> for appearance.
Does not rigidly destroy all inferior animals. <u>较差的</u>	The slightest <u>variations</u> will turn on the <u>competition</u> between lives.
..... <u>只选择 appearance</u> <u>短暂但快速, 不消灭劣等</u> <u>选择一切 everything</u> <u>长久但缓慢, 优胜劣汰</u>



* 动物一生仅用过一次的构造, 若在生活中高度重要 → 自然选择生效.

Eg1 昆虫专门破茧的大颚 Jaws → open cocoons 茧
Eg2 未孵化的雌鸟啄破蛋壳的喙 Egg tooth → break eggs.
hard tip to the beak →

3. Sexual selection

① 结果: 少留 or 不留后代, 比自然选择轻微.

② 雄性/雌性均存在 Sexual struggle, usually happen between man & man

4. Extinction:

① Precursor (先导) → Rarity.

② 灭亡概率↑: a. fluctuations in the seasons

b. Enemies increase

c. Rare species beaten by modified descendants of commoner species (in the race for life) 资源空间被竞争物种抢占.

③ 灭亡概率↓: 构造、体质、习性差异大 → 数量越多.

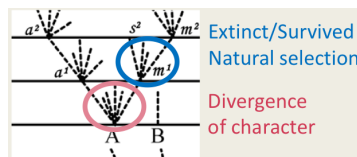
Eg. Farmers grow different types of plants in sequential seasons.

④ 灭亡核心原因: Rare species produce few offspring → less quickly modified or improved.

小概率 cause variety 以及遗传

5. 性状差异 Divergence of Character.

原因: Domestic production 繁殖



6. 生命树 Tree of Life.

生绿芽的小枝 → 现存物种 existing species } 遮羞地面.

以往枝条 → 长期连续的绝灭物种 long succession of extinct species

枯落枝条 → 未留下后代而处于化石态的全目科属 → 填满地壳

Taxonomy

种 species
属 genus
科 family
目 order
纲 class
门 phylum
界 kingdom

7. Evidence for Evolution:

Comparative Anatomy 解剖
Embryology & Development 胚胎学
Fossil Record 化石证据
DNA Comparisons

My favourite sentence:

By generation I believe it has been with the great Tree of Life,
which fills with its dead and broken branches the crust of the earth,
and covers the surface with its over branching and beautiful ramifications.
(后果)