

Scott Gilbert - Back to the Future - Evolution Rediscovered Development

The new synthesis suggested that evolution could be described by small genetic changes

Macroevolution
Homology
Embryology } all left out

T.H. Morgan

Dobzhansky - evolution = Δ in gene frequency

What about Micro vs. Macroevolution

Why New Synthesis so popular

- funded by AEC

- what was lost was homology

functional biology

developmental biology = $d(\text{funct})/dt$

evolutionary biology = $d(\text{dup})/dt$

Punctuated equilibrium = evolution by jerks

Homeotic genes

- same order

- same location

- replaceable