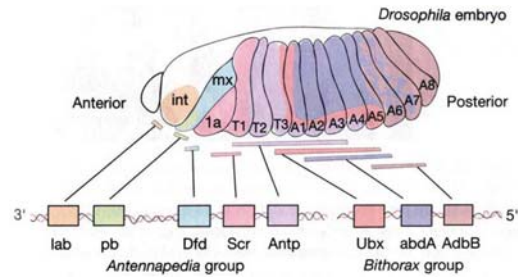
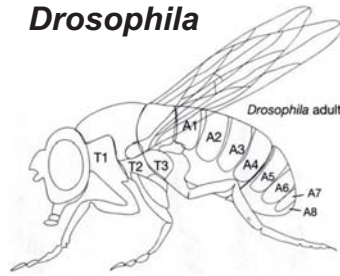
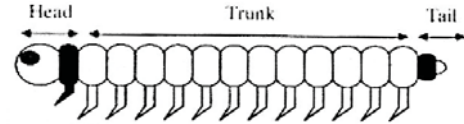
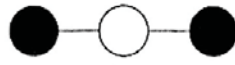


DNA
 ↓ transcribe
 RNA
 ↓ translate
 Protein

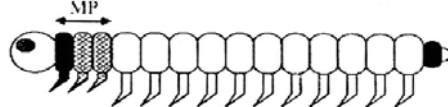
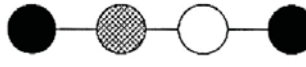
HOM gene expression in *Drosophila*



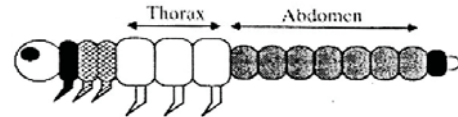
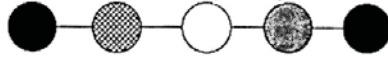
Ancestral arthropod



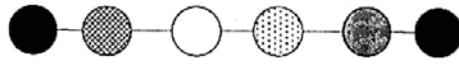
Myriapod



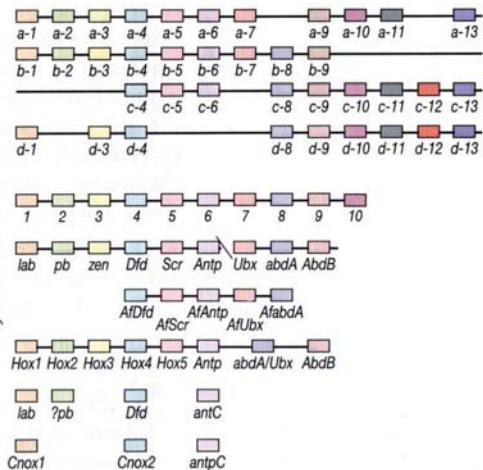
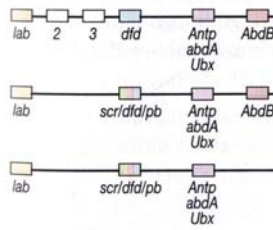
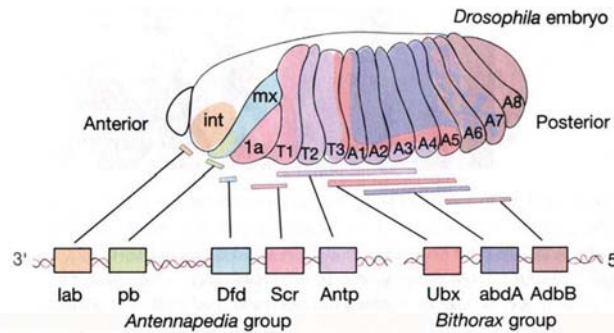
Ancestral hexapod



Drosophila



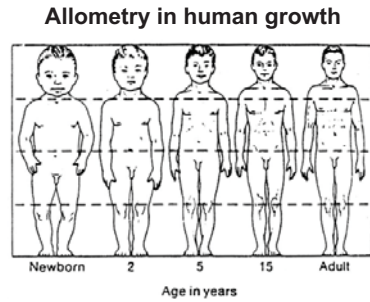
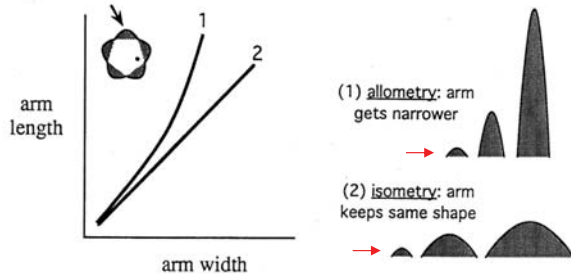
Reconstructing the phylogenetic pattern of HOM/HOX duplication events



38!

10

Growth: isometry vs. allometry



D'arcy Thompson's (1917) "Method of transformations" as applied to...

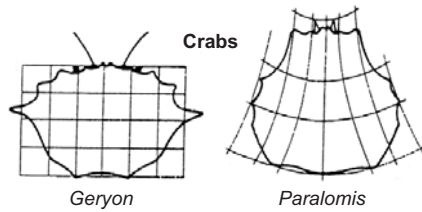
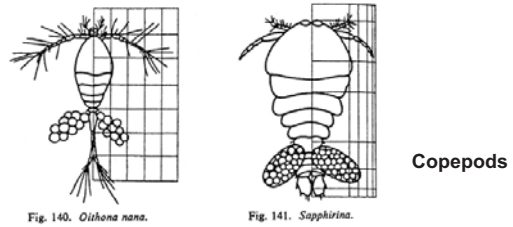
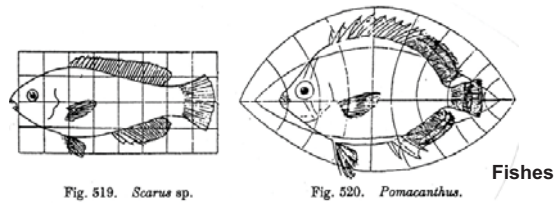
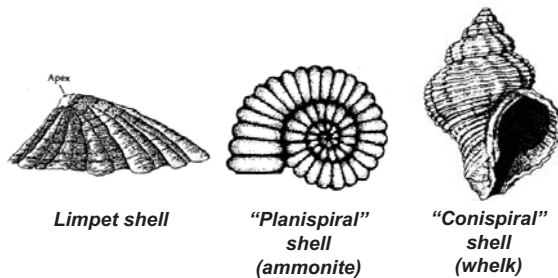


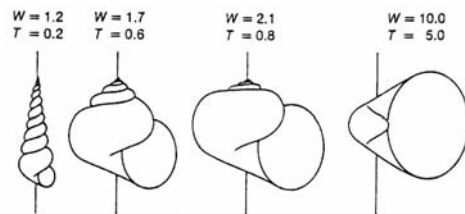
Figure 4-1 Two-dimensional outlines of the carapaces of several crabs. Appropriate transformations of the grid on which the outline of one genus is plotted give good approximations to the carapaces of the other genera. Numerous, apparently unrelated, minor differences in shape are thus seen as part of the same overall transformation. From Thompson (1917).



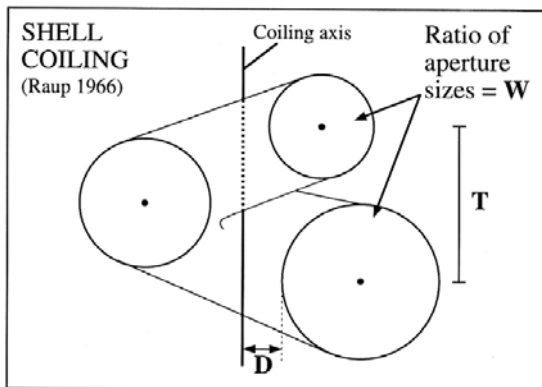
Modelling mollusc shell growth and diversity



Computer-generated "diversity"



Simple rules for shell growth?



A shell "morphospace"

