

Fig. 1. Handedness associated with chiral objects. An object is chiral if its mirror image is not superimposable on itself.

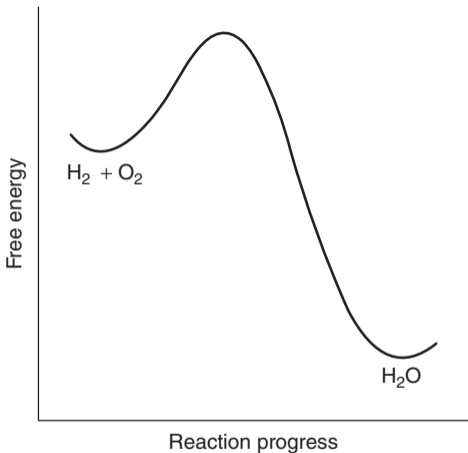


Fig. 2. Diagram illustrating the free energy change for the reaction of hydrogen and oxygen gases ($\text{H}_2 + \text{O}_2$) to give water (H_2O).

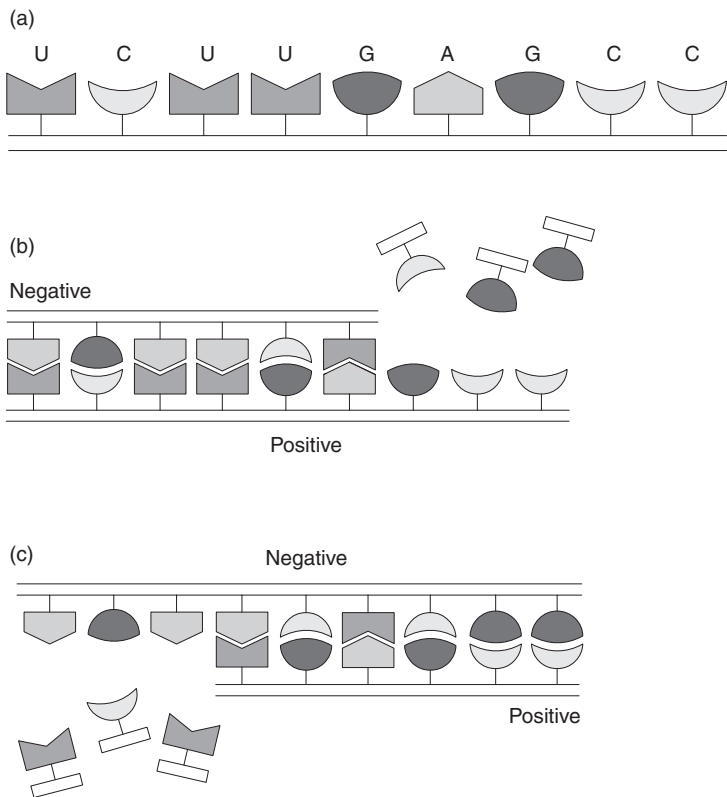


Fig. 3. (a) Schematic representation of an RNA molecule made up from a sequence of nucleotide building blocks, A, U, G, C. (b) Representation of the process by which an RNA chain induces a complementary copy of itself to be formed (positive to negative). (c) Representation of the process in which the complementary RNA copy induces a copy of the original RNA to be formed (negative to positive).

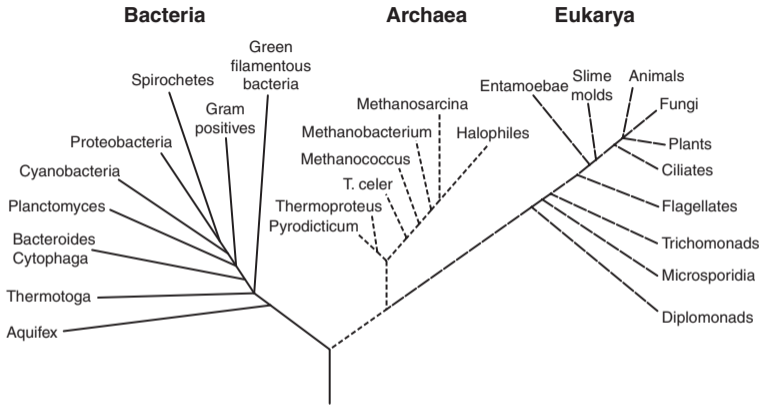


Fig. 4. Tree of life based on ribosomal RNA sequence analysis showing three kingdoms of life—Bacteria, Archaea, and Eukarya.

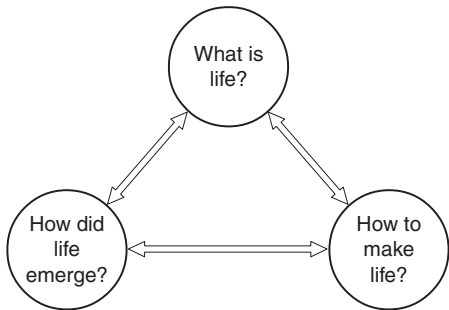


Fig. 5. Three key questions governing holistic understanding in biology

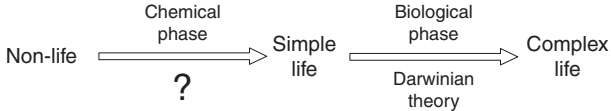
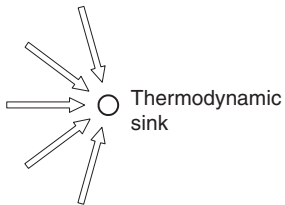
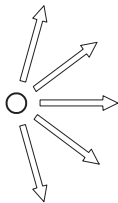


Fig. 6. Two-phase (chemical and biological) transformation of non-life into complex life.



(a) Convergent character of 'regular' chemical space



(b) Divergent character of replicator space

Fig. 7. Schematic representation of branching patterns within 'regular' chemical space (convergent), and within replicator space (divergent).