

temperature, pressure, and chemical constitution of environment and organism are really essential to life, and that there is great advantage in many other regulations and in finer regulations. Finally, a living being must be active, hence its metabolism must be fed with matter and energy, and accordingly there must always be exchange of matter and energy with the environment.

Returning to the concept of the organism as a durable form through which flow matter and energy, it is now possible to make these ideas more vivid. The complex structure of the living being is relatively stable, alike in the chemical composition of its individual constituent molecules, in their proportions and amounts, in their aggregation into the invisible structural elements of protoplasm, in the visible parts of the cell, in the organs and tissues, and finally *in toto*, as a man or a tree. Similarly stable are the physical conditions within this structure: temperature, pressure, alkalinity, and osmotic pressure. Finally, that which surrounds it, the immediate environment, possesses also a high degree of stability, or if the organism be very complex, it may be that it has an efficient protection against change of environment; a skin which insulates, for instance. But in this case