In the more complex substances, such as the various ring systems of organic chemistry, it is not possible to discuss such problems of molecular mechanics. There too, however, hydrogen predominates over all other elements except carbon, and that may well be taken as a sufficient indication of its continued importance.

All of these considerations taken together suffice, I believe, to prove, or at least to make it exceedingly probable, that organic chemistry is in truth a unique field, and that no other elements can form compounds in such variety, complexity, and number as carbon, hydrogen, and oxygen. At any rate there can be no possible doubt that the compounds of organic chemistry are in these respects very remarkable indeed, and that similar cases must be extremely rare among all the possible systems of compounds made up of all the known elements.

It follows from the peculiarities just explained that the first great factor in the complexity of living organisms as we know them, the complexity and variety of their chemical constituents, depends principally upon the nature of the elements which compose such substances, and is most probably a unique, certainly a very rare characteristic of matter.