FROM SIMPLE TO COMPLEX

It is an essential part of the theory of evolution that all life has developed from one very simple start. This was easy to believe in the days of Charles Darwin when tiny creatures, barely visible through a microscope, seemed to be simplicity itself in comparison with the complex structures of the higher animals and plants. More recently the science of biochemistry has developed, and the structure and inner workings of these so-called simple forms of life have been examined. It has been found that no type of life is really simple. Even the simplest types of life known, very small plants or animals consisting merely of a single cell, have been found to have a complex structure with a nucleus and a cell wall, and to have the capacity for performing extremely complicated chemical processes. In fact, some of the very simplest types of life have as many as one hundred enzymes within their single cell, acting together as a unit to hasten the performance of very intricate chemical processes. It requires about as much credulity to believe that the so-called simplest forms of life came into existence by pure chance as to believe it about the so-called advanced animals.

Every type of life, even the simplest, includes many very complicated molecules, some of them containing one thousand or more atoms, arranged in a complicated structure. It has been calculated that if merely one of the various macromolecules included in every type of life were to be formed simply by a chance combination, it would require more than four billion years for the process.

Yet the formation of these intricate molecules is only a tiny first step in the making of life. A leading scientist said recently: "The macromolecule to cell transition is a jump of fantastic dimensions which lies beyond the range of testable hypothesis. In this area all is conjecture." The great number of steps that would have to be taken to form the simplest sort of life by pure accident is fantastically great and fantastically difficult. If one can believe that all this happened by chance he can believe anything.