

an enzyme possessing the power to select and catalyze any one of the reactions, the formation of any special one of the many possible products in comparative purity is an automatic result.

Such processes are in nature carried out with a perfection which to the chemist is almost inconceivable, by means of organic structures of the highest intricacy; but in the last analysis they rest upon the native properties of the three elements.

The important consideration, I repeat, is this: that reduction, the necessary first change of carbonic acid and water, can lead directly by a single continuous chemical transformation, of which the exact control is no whit more remarkable than the accurate control of the other processes of chemical physiology,<sup>1</sup> to the full intricacy of organic chemistry; to the very most notable instance of number, variety, and activity of substances, all formed inevitably, in the nature of the case, which has yet come to light. It is of no consequence that most of the substances must be formed in mere traces by the spontaneous synthesis, for in highest degree the organism possesses the power, by enzymatic catalysis, to select

<sup>1</sup> Consult the work of Bayliss on Enzymes. London, Longmans, Green & Company.