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other than it is, had the conditions been other than they were. The conditions being what they were, the results could be no other than they are. A certain degree of adaptation is necessary to the existence of a form ; therefore, for forms to exist at all, they must be to a certain extent adapted. If those forms that now exist had not existed, others must have existed. These, like the present ones, would also have heen adapted. They would have stood the same chance to be higher as to be lower forms. We have as much reason to wonder that we do not see higher forms, as that we see forms as high as those actually existing. Were men not sufficiently adapted to their surroundings, they would not exist to contemplate their want of adaptation. If animals and plants were not similarly adapted, they would likewise be wanting. Therefore, instead of wondering at the degree of adaptation displayed, the only true object of wonder would be the existence of wholly unadapted forms. But these are never seen, because they cannot exist. In nature there are none but loaded dice. This is no chance world. It is a world of law, of mechanical causation, of necessity. The example of the dice is a poor one. In only one sense can it be made to apply. If we assume the number of dice thrown to be unlimited, only a small percentage of which are loaded, and all that are not thus loaded to be lost, a crude conception of nature's process may be formed. But there is no distinction betweep the dice and the players. One set of dice is the causal antecedent of a new set, from which, as from the parent set, only the loaded ones are selected and the rest lost. But, still, the analogy is forced and awkward.

II.

As will be more fully shown further on, nature's processes are not teleological, but genetic. The cause not only always precedes the effect, but it immediately precedes it. The effect is in immediate proximity to the cause. The changes take place by differentials, and all advance is through differentiation. Differentiation is distinguished from variation in that the changes are necessarily produced by means of differences too minute to be severally taken account of. It is a molecular process. The motion of one molecule is directly imparted to others. The single effect is imperceptible, but multiplication and repetition, number and time, accomplish the results observed. An initial motion inhering in the primary form of matter is, therefore, the sole source of all causation and the true "first cause." This explanation of the universe, although substantially that of Epicurus, Democritus, and Lucretius, has thus far failed to receive an appropriate name. That of the "Atomic Theory," never adequate to the full conception, has now been transferred to the chemical law of proportions. The idea of matter in motion, which embraces the totality of the conception, would be well expressed by the Greek word Hylokinensis, and this mode of viewing phenomena could then be referred to as the hylokinetic theory.

The wholly unconscious and unintelligent character of nature's processes may be safely concluded from their genetic stamp. Intelligence works quite otherwise. The inseparable characteristic of conscious action is, that it is teleological. Cause and