

ent form of our universe as the result of a gradual evolution from an earlier unknown form, the development of successive solar systems being mere incidents of the larger process, the evolution as a whole directively governed by the law of the degradation of energy.

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THE PERIODIC SYSTEM

In either hypothesis the remarkable systematic relationship between the elements which is manifest in the periodic classification has a peculiar place. If the second hypothesis be accepted, there seems to be little room for doubt that at an early period the chief cosmic process was the evolution of the elements themselves; and in the first theory the nebula, whose properties depend almost wholly upon chemical constitution and chemical and molecular energy, occupies a unique position, like the leaf in the organic cycle, or spring among the seasons. Thus, whether or not the periodic system is to be regarded as the one remaining plain result of a process by which the elements were evolved, at least it takes precedence over the other properties of matter, and lies at the very foundation of the known processes of evolution. Clearly,