

appear constantly to vary, sometimes appearing separated into round or elliptical disks, single or in pairs, occasionally connected by a thread of light; while, at another time, these nebulæ occur in forms of larger dimensions, and are either elongated, or variously branched, or fan-shaped, or appear like well-defined rings, inclosing a dark interior. It is conjectured that these bodies are undergoing variously developed formative processes, as the cosmical vapor becomes condensed in conformity with the laws of attraction, either round one or more of the nuclei. Between two and three thousand of such unresolvable nebulæ, in which the most powerful telescopes have hitherto been unable to distinguish the presence of stars, have been counted, and their positions determined.

The genetic evolution—that perpetual state of development which seems to affect this portion of the regions of space—has led philosophical observers to the discovery of the analogy existing among organic phenomena. As in our forests we see the same kind of tree in all the various stages of its growth, and are thus enabled to form an idea of progressive, vital development, so do we also, in the great garden of the universe, recognize the most different phases of sidereal formation. The process of condensation, which formed a part of the doctrines of Anaximenes and of the Ionian School, appears to be going on before our eyes. This subject of investigation and conjecture is especially attractive to the imagination, for in the study of the animated circles of nature, and of the action of all the moving forces of the universe, the charm that exercises the most powerful influence on the mind is derived less from a knowledge of that which *is* than from a perception of that which *will be*, even though the latter be nothing more than a new condition of a known material existence; for of actual creation, of origin, the beginning of existence from non-existence, we have no experience, and can therefore form no conception.

A comparison of the various causes influencing the development manifested by the greater or less degree of condensation in the interior of nebulæ, no less than a successive course of direct observations, have led to the belief that changes of form have been recognized first in Andromeda, next in the constellation Argo, and in the isolated filamentous portion of the nebula in Orion. But want of uniformity in the power of the instruments employed, different conditions of our atmosphere, and other optical relations, render a part of the results invalid as historical evidence.