

nature of idioplasm, which is analogous to my plasson, is said to consist in "the configuration of the cross-section of strings of parallel rows of mi-cells." The strings of idioplasm are said to extend through the whole organism in the form of a large connected (invisible) network. This changes from generation to generation from *internal causes*, and is not at all dependent upon the influence of the external conditions of existence, or is so only to a very small extent. For the same reason *external causes* (especially variations of climate, nutrition, surroundings, etc.) are said not to exercise any or merely a very unimportant influence upon the transformation of species. Naegeli assumes rather that transformation proceeds from an internal, innate principle of perfecting; that this effects the transformation of the smaller or larger groups of forms, in a definite and progressive direction, and that selection exercises only a very trifling influence, or none at all.

As is evident, Naegeli again introduces a *purely teleological principle* into biology for the explanation of inheritance and organic development. His "internal principle of perfecting," which determines the whole development, is nothing else than the old "vital force" in a new form; and this unknown power is not rendered any the more intelligible to us by the fact that Naegeli sets it up as an inherent quality of his idioplasm. It is difficult to understand how so clear-sighted a naturalist (who even regards himself as one of the strictly exact physiologists) could be so completely deceived as to the true value of his molecular hypothesis. He rejects both Darwin's Pangenesis and my Perigenesis, and considers them the "products of nature-philosophy, and, as such, as good as any other products