

the inorganic and the organic, exhaust the entire field. Hence a quantitative study conducted in pure and applied mathematics and biology (or the study of life in its manifestations) covers nature.

It has been asked whether drawing does not belong to a separate group in the course of study, and whether manual training is not a study co-ordinate with history and grammar. There are a number of branches of study such as drawing, manual training, physical culture, and the like, which ought to be taught in every well regulated school, but they will easily find a place within the five groups so far as their intellectual co-efficients are concerned. Drawing, for instance, may belong to art or æsthetics on one side, but practically it is partly physical training with a view to skill in the hand and eye, and partly mathematical with a view to the production of geometric form. As a physical training its rationale is to be found in physiology, and hence it belongs in this respect to the second phase of the study of nature. As relating to the production of form it belongs to geometry and trigonometry and arithmetic, or the first phase of nature, the inorganic. As relating to art or the æsthetic, it belongs to the third group of studies, within which literature is the main discipline.

But besides literature there are architecture, sculpture, painting, and music to be included in the æsthetic or art group of studies. Manual training, on the other hand, relates to the transformation of material such as wood or stone or other minerals into structures for human use, namely, for architecture and for machines. It is clear enough that the rationale of all this is to be found in mathematics, hence manual training does not furnish a new principle different from that found in the first or the second study relating to nature.

The first study relating to human nature, as contrasted with mere organic and inorganic nature, is literature. Literature, as the fifth and highest of the fine arts, reveals human nature in its intrinsic form. It may be said in general that a literary work of art, a poem, whether lyric, dramatic, or epic, or a prose work of art, such as a novel, or a drama, reveals human nature in its height and depth. It shows the growth of a feeling or sentiment first into a conviction and then into a deed; feelings, thoughts, and deeds are thus connected by a literary work of art in such a way as to explain a complete genesis of human action. Moreover, in a literary work of art there is a revelation of man as a member of social institutions.

The nucleus of the literary work of art is usually an attack of the individual upon some one of the social institutions of which he is a member, namely, a collision with the state, with civil society, or with the church. This collision furnishes an occasion for either a comic or a tragic solution. The nature of the individual and of his evolution of feeling into thoughts and deeds is shown vividly upon the background of institutions and social life. The work of art, whether music, painting, sculpture, or architecture, belongs to the same group as literature, and it is obvious that the method in which the work of art should be studied is not the method adopted as applicable to inorganic nature or to organic nature. The physiology of a plant or an animal, and the habits and modes of growth and peculiarities of action on the part of plants and animals, are best comprehended by a different method of study from that which should be employed in studying the work of art.

*(To be continued.)*