

Absonderung; Fr. *sécrétion*; Ital. *secrezione*.
 (1) The elaboration and separation of substances by glandular cells. See GLAND.

(2) Substance thus elaborated or separated.

The term was early applied to the original conception, viz. that a gland simply separated out different constituents already existing in the blood and lymph. More careful analysis soon demonstrated that the characteristic substances of many secretions were not present in the blood, hence more and more importance has come to attach to the work of secreting cells in transforming and elaborating their special products. The secreting cells must be supposed to have the power of causing their secretions to flow in a definite direction, generally towards the duct of the gland or towards a free surface, while other products of their activity are turned back towards the basement membrane and enter the lymph and blood stream. The entire secretion of certain ductless glands, such as the glandular portion of the pituitary body, thymus, and advenal body, as well as an important part of the secretions of other glands, come into this relation with the blood. These are called internal secretions. Substances secreted that are of use to the body are sometimes designated as true secretions; while those that are injurious and must be removed from the body are termed excretions. (C.F.H.)

The importance of certain of the internal secretions has recently been shown both in the economy of organic life and growth and as of developmental significance; especially in two ways: (1) as being necessary to the health and normal function of organs seemingly very remote, and (2) as showing utility in organs having apparent function. (J.M.B.)

Sect [Lat. *secta*, from *secare*, to cut]: Ger. *Religionspartei, Sekte*; Fr. *secte*; Ital. *setta*. A body within a larger organization, whose members are bound together, and to a greater or less degree differentiated from the remaining members, by certain distinctive doctrines or practices.

A sect may exist without organization or it may organize and reach the stage of a schism. The Reformation created a schism in the Romish Church, and many of the sects of Protestantism have led to schisms.

The topic and the term have become important in recent sociological discussion (cf. Simmel, 'The Persistence of Social Groups,' *Année Sociol.*, 1); see (for literature) SOCIOLOGY, and SOCIAL PSYCHOLOGY, and cf. GROUP (social). (A.T.O.)

Secundum quid [Lat.]: relatively; under limitations in certain respects. See PERSEITY, *passim*. (C.S.P.)

Segmentation [Lat. *segmentum*, a segment]: Ger. *Segmentation* (cf. CLEAVAGE); Fr. *segmentation*; Ital. *segmentazione*. (1) The division of the developing ovum into several cells. See CLEAVAGE.

(2) The division of the body of an animal into a series of segments, or metameris, of more or less similar structure.

Amongst animals, especially those of elongated shape, there is almost always a tendency, so to speak, towards a reduplication of parts, which may lead to the formation of a series of very similar segments, as in worms and arthropods. Segmentation usually takes its origin in the mid-layer, mesoderm, the coelom being formed as a series of cavities in the embryo. In higher forms this metameric segmentation may again become obscured by the fusion and modification of a number of segments, as for instance in the formation of the vertebrate head. See EMBRYOLOGY, and COELOM.

(C.L.L.M.—E.S.G.)

Segregation: see ISOLATION.

Selection (in biology) [Lat. *selectus*, chosen]: Ger. (1) *Auswahl*, (2) *Auslese, Selektion*; Fr. *sélection*; Ital. *selezione, scelta*. The process by which preferential survival is effected in the struggle for EXISTENCE (q. v.).

Selection in this sense may be (a) conscious and purposive, i. e. with the improvement of the race as a definite end in view, e. g. man's selection in many of its phases; (b) conscious but not purposive, e. g. sexual selection (selective mating) among animals; or (c) unconscious, as in natural selection, when, for example, hardy birds survive through a severe winter.

Thus (cf. SELECTION, in psychology):

- (1) Conscious selection—
 - (a) Purposive (artificial, social).
 - (b) Non-purposive, e. g. sexual.
- (2) Unconscious selection (natural selection).

Under conscious selection we have:

(a) *Purposive selection*. Darwin used the phrase ARTIFICIAL SELECTION (q. v.) for the purposive improvement by man of animals or plants by breeding. One of two broadly contrasted methods may be employed in accordance with circumstances: (1) the best animals or plants may be chosen out for the propagation of the race; (2) the weakly, or those which depart in some way from the desired type, may be eliminated or excluded from such propagation. The net result, so

P 60919