REGRESS — REGULAR

regenerative power is also greatest in simple tissues, lies in the highly differentiated tissues, and at the minimum in the brain.

Many of the facts of regeneration have long been known, but until recent years they have been widely discussed in relation to Weismann's theories. This has generally been regarded as a general and unexplained power of the organism to resume its integrity after the loss of a part. Weismann regards it as a specifically developed adaptation to off-recovering needs under the influence of natural selection. He seeks to prove that it occurs only in those parts of animals which are specially liable to loss; and contends that special germinal rudiments are developed to meet the off-recovering need. On the other hand, it is held by certain of the experimental morphologists (e.g., Wilson) that cases of regeneration, such as the regeneration of the lens of the eye by injury, which would not happen in actual life, render this explanation inadequate.

Literature: (a) A. Weismann, The Germ-Plasm (1892—9); and 'Regeneration' in Nat. Sci. (April, 1899); and the literature there referred to; (b) E. H. Wilson, The Cell in Devel. and Inheritance; T. H. Morgan, Regeneration (1914).

REGRESS see PROGRESS.

Regeneration [Lat. regeneratus, a going back-ward]: Ger. Rückbildung; Fr. retour aux types; It. riproduzione.

(i) In biology: the maintenance or repair of animals of a certain type or standard in any given character through the interlacing and levelling effects of heredity, whereby extreme variations are not perpetuated. It should be carefully distinguished from Perversity or Aeta-like evolution.

(ii) In etymology: sometimes erroneously used for social regeneration and decay. See SOCIAL EVOLUTION.

The principle was first given a general formulation by F. Galton. It is important as a conservative factor in evolution, since through it progress, being made by change in the average character of a race, becomes continuous and steady. The arts of all kinds have influence only as single individuals, and characters are balanced by other variations according to the law of distribution about a mean. The influence of a 'sport' therefore, would be greatest in the smaller group in which it appears, A.Hilgard, writing of the regenerative power, states that natural selection appears in the shifting of the mean value.

The principle was embodied in Galton's law of the mid-parent (see MEN) and assumes more exact form in the more accurate 'law of ascendant inheritance,' known as Galton's law (q.v.). It has been worked out most thoroughly on the basis of statistics illustrating Galton's law by Pearson, who establishes the relative stability of groups, and introduces a 'coefficient of stability.' Cf. FANXIA.

The principle occurs, however, to apply mainly in cases of 'blended' inheritance (in which the characters of the two parents blend) and not in cases of 'mutually exclusive' inheritance (cf. Galton, Nat. Inheritance, 2, and Ensat, Proc. Academ., Sect. Zool., Brit. Assoc., 1901).

(iii) The principle has been discussed in connection with social evolution; but it evidently does not apply, since its operation is entirely through physical heredity (the mating of varieties of different values). In social life a single individual mind, or a single thought, may dominate and colour all subsequent progress, its propagation being by imitation and tradition. Such propagation is inconsistent with the law of biological regeneration. If such an analogy holds, it would indicate a law of regeneration (law of retraces) of some abstract.

Literature: G. H. Galton, Natural Inheritance; and papers cited under Galton's law, notably Proc. Roy. Soc. (1921), 15, 451; Pearson, Read., meeting of Jan. 25, 1898; Science, Mar. 11, 1898, 337 f.; and Grammar of Science, 3rd ed. (1890); Conn, Method of Evolution (1900); Bradley, Problems of Evolution (1900); S. H. Broadhead, Expositions of Evolution (q.v.). On the social application see Charles and Biological Evolution; also: (i) Social Evolution; (ii) M. Moreau de Saint-Marc and L. Monod, Religion and Science; Baldwin, Social and Eth. Inheritance, sect. 419 (1895). C.G.L. (C.G.L.)

Regressive (in logical): see REGRESSION.

Regret: Ger. Bedauern; Fr. regret; It. rimpianto. Emotion of nervous, of attachment to portions of the past into which one's own voluntary actions or sets have entered. Cf. REGRET and REPENTANCE.

Regret attaches itself not to, but to attitudes of former-selves and even of indifference, as well as to positive confusion of the keenest regret attaches to opportunities improved, to attainments not won. 'Nothing so soon as the spirit grieves others; the spirit grieves others, and wastes its own life!' (M.K.)

Regular [Lat. regularis, a rule]: Ger. regel.

Regular proof: proof which last the external form, and the demonstration is as follows: first, the proposition is true in general terms; second, the construction of a diagram is described: conforming the conditions of the proposition; third, the proposition is supported by reference to the construction; fourth, by means of additions to the diagram, parts of it are brought into comparison; from which it is made evident that the proposition is true of that construction. It is evident that the perfect proof, it ought then to be shown that what is true of the particular construction will be true in every case.

Regular syntaxis: a syntaxis which is stated precisely in the standard form, the major premise first, the minor premise next, the conclusion last; and with these propositions in the peculiar language or symbols, of the system of formal logic used.

REGULATORY: see CONSTITUTION.

Reid, Thomas (1710—96). Born at Strachan, Scotland, he was educated at home and at Marischal College, Aberdeen. College librarian and student of mathematics and philosophy, 1736—37, when he became minister at New Machar in Aberdeenshire. Professor of philosophy in King's College, Aberdeen, 1737; of moral philosophy in Glasgow, 1737—42; and, 1743, he devoted himself exclusively to philosophy until his death. He was the chief exponent of NATURAL REALISM (q.v.) and its leading figures.

Regularity (de jure) [Lat. reg.: re, thing; juris, to make, to speak]: not in use in the other languages. To change a mental attitude or abstraction into something real thing, to attribute objective substantiality to an idea. It is the practical equivalent to hypostatize; see HYPOSTATIZATION.

Regimental (a) [Lat. reg.: re, thing; juris, to make, to speak]: not in use in the other languages. To change a mental attitude or abstraction into something real thing, to attribute objective substantiality to an idea. It is the practical equivalent to hypostatize; see HYPOSTATIZATION.

Reimarus, Hermann Samuel (1664—1744). Born at Herzogt. and educated at Heidelberg, he became Privat-dozen in philosophy at Wittenberg; travelled in Holland and England, and professor of Hebrew at the University of Leiden, 1708. He was one of the figures of the ENLIGHTENMENT (q.v.).

Reinhardt, Ernst (1795—1865). Son of the preceding, he was born and educated in Lenn, and became professor of logic, philosophy, and metaphysics at the university there.

Reintegration. Rejected Termination (q.v.). See also REINTEGRATION. (I.M.R.)

Rejuvenation [Lat. rejuvenescere, to make young]: Ger. Regeneration, Fr. rejuvenement; It. ripristinamento. The production of young tissues or cells of the embryonic type, capable of further growth and differentiation.

Embryonic cells are characterized by the small amount of their protoplasm, and the absence of differentiation in both the protoplasm and the nucleus. In the biological sense old cells are those which are most differentiated, and such old cells are never rendered young; hence rejuvenation in its popular meaning cannot be applied in biology.

(L.C.M.)

Literature: Mayer, Sensencoren and Rejuvenation, J. of Physiol., XIII, 97; and Biol. Centralbl., XVII, 313; Dzena, Structure du Protoplasm, and Annuaire Bichon (passim); works on biology.

Relation [Lat. re, re, a thing, a point, to make]: Ger. Bedeutung, Verbindung, Verhältnis; Fr. relation, rapport; It. relazioni, rapporti. See RELATION (consciousness of).

More specifically, (1) Functional. The bearing or influence of one thing upon another—e.g., the way one thing 'has to do with' another; (2) Logical. The mutual dependence of two or more subjects upon a common principle, e.g., a thing, fact, or truth of such a kind that any assertion regarding one modifies the meaning of the other. Accordingly the predicate is true or false of one taken not independently or in isolation, but only in reference, regard, or respect to the other. Examples: the relation of father and son, buyer and seller, and of parent and host. Many qualities may be regarded as having bearing upon what is asserted or believed of B, but in so far as A stands in relation to B (as father upon individuals, for example), this influence passes, giving way to complete (logical) reciprocity. But it is not meant that A and B are the common subjects of the same predicate, or are taken

439