

umfang, &c.; Fr. *étendue de l'excitation (&c.)*; Ital. *ampiezza (or estensione) della sensazione (&c.)*. (1) Of stimulation: the entire region of those values of stimuli a change in which is accompanied by a change in sensation. It includes the entire series of stimulus values which are effective for the production of sensation from the lower to the upper lumen or THRESHOLD (q. v.) values.

(2) Of sensation: the corresponding continuum of sensations. Cf. LIMITS (of stimulation and sensation).

The determination of the range of sensation is much complicated by the relativity of the THRESHOLD, which is remarked upon under that term. (C.L.F., J.M.B.)

Rapport (*hypnotic*) [Fr.]: the Fr. term is used in English and German; Ital. *rapporto (magnético)*. The peculiar relation sustained by a hypnotized person to the hypnotizer during HYPNOSIS (q. v., also for literature).

It is a strong point in favour of the 'suggestion' theory of hypnosis that the 'rapport' may be transferred by suggestion from the hypnotizer to a third person. (J.M.B.)

Ratio [Lat. *ratio*, calculation, relation, reason, doctrine]: Ger. *Verhältniss*; Fr. *rapport*; Ital. *rapporto*. The following relation between quantities: the ratio of *A* to *B* is the same as that of *C* to *D* when the quotient of *A* divided by *B* is equal to the quotient of *C* divided by *D*; hence often equivalent to quotient, or fraction. (C.S.P.)

The word is not used in the senses equivalent to the Latin ratio, meaning REASON (q. v.). (J.M.B.)

Ratiocination [Lat. *ratio*, reason]: REASONING (q. v., also for foreign equivalents).

So the Schoolmen. Thus, Aquinas says it is 'quidam motus intellectus transcuntis ab uno in aliud,' which, however inexact in expression, conveys a clear idea. J. S. Mill confines the term to the process of necessary inference, because he is unwilling to admit that this is, properly speaking, reasoning. (C.S.P.)

Rational [Lat. *ratio*, reason]: Ger. *vernünftig, rational*; Fr. *rationnel*; Ital. *razionale*. (1) Based on a REASON (q. v., in logic). Thus a conclusion is called rational.

(2) Connected with the exercise, or having the power, of REASONING (q. v.). Thus man is said to be a rational animal. (J.M.B.)

(3) In mathematics: expressible in the form of a fraction, i. e. equal to the exact quotient of the division of one whole number by another. In this sense, the word rational translates the Greek *ῥητός*. (C.S.P.)

Rational and Empirical Ego or Self: see SELF.

Rational Number: see RATIONAL (3), and cf. NUMBER.

Rationalism [Lat. *rationalis*, from *ratio*, reason]: Ger. *Rationalismus*; Fr. *rationnalisme*; Ital. *razionalismo*. (1) The theory that everything in religion is to be rationally explained or else rejected. The application of ordinary logical standards and methods to dogma. Opposed particularly to supernaturalism. As Lecky (*Hist. of Rationalism*, i. 16) says, it signifies not 'any class of definite doctrines . . . but rather a certain cast of thought or bias of reasoning . . . which leads man on all occasions to subordinate dogmatic theology to the dictates of reason and of conscience.' In this sense it finds its best expression in the ENLIGHTENMENT (q. v.) of the 18th century.

(2) The theory that reason is an independent source of knowledge, distinct from sense-perception and having a higher authority. Opposed to SENSATIONALISM (q. v.). See REASON; and cf. INTELLECTUALISM, INTUITION, NOUS, and UNDERSTANDING.

(3) The theory that, in philosophy, certain elementary concepts are to be sought, and that all the remaining content of philosophy is to be derived, in a deductive way, from these fundamental notions. Opposed to EMPIRICISM (q. v.). In this sense it is used particularly of the method first explicitly stated by Descartes, developed by Spinoza and Leibnitz, formulated in detail by Wolff, and finally refuted by Kant.

The three senses are historically connected. The 18th century rationalism in morals and theology is derived from the insistence by Descartes upon method, and upon clearness and distinctness as criteria of truth. It is combined, however, with an empiricism which descends from Locke. The use of rational conceptions as the source from which other ideas are to be deductively derived is, of course, impossible unless there is some faculty through which these ideas are made known, as innate or *a priori* ideas; or through intuition, and so the second and third senses run together. None the less, rationalism in the second sense applies to a particular part of the content of philosophic doctrine, while in the third it expresses the *method* taken to be final in philosophy. The sketch that follows is confined to the third sense.

Descartes, seeking a criterion of certainty, hit upon the undoubted existence of inner

P (1901