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e trino. An appellation of God employed in Trinitarian theology, used to express the tri-personality of the one divine substance. See TRINITARIANISM (also for literature). (A.T.O.)

Trivium [Lat. a cross-road, public square; in scholastic Latin the three arts of grammar, logic, rhetoric]. A term used throughout the scholastic period (for example, by Dante) for the three arts, grammar, logic, and rhetoric. Cf. PHILOSOPHY, *passim*. (C.S.P.)

Trophism [Gr. τροφή, nourishment]: Ger. *trophische Funktion*; Fr. *influence trophique*; Ital. *trofismo*. That power or control which the nervous system exercises over growth and metabolism in various parts of the body. The term trophic nerves was first used by Samuel. Permanent changes are produced in the structure of the body by changes in or suppression of the nervous influence. Such are atrophy, aplasia, hypertrophy, hyperplasia, paraplasia, and various neuropathies. The classical experiment is the section of the ischiatic nerve, which not only produces paralysis of the leg, but is followed by swelling, inflammation, and spontaneous ulceration and decubitus. At the same time an irritable zone develops upon the neck, the mere touch of which is sufficient to bring on an attack of epilepsy (in rodents).

The effects of nervous weakness or excitement upon the hair and skin, and a long list of diseases of neurotic origin, illustrate the perversions of trophic action (erythema, erysipelas, urticaria, herpes, prurigo, eczema, pemphigus, pityriasis, acne, furunculi, &c.). Even embryonic development seems to be largely under nervous control, at least in later stages. The power of self-repair is lost upon the section of the nerve supplying a muscle.

Gaule reports that he has been able to produce within five or ten minutes a localized sore on the surface of the exposed biceps by electrically irritating the corresponding spinal ganglion. These and other facts discredit the idea of special trophic nerves, but accrue to the theory that all nerves are trophic in their action upon the part which they innervate. Cf. END-ORGAN.

Literature: ARNDT, *Über trophische Nerven*, Arch. f. Anat. u. Physiol. (1891); J. GAULE, *Deutsch. med. Wochenschr.*, xx (1894); trans. of same, in *Brain*, xvii (1894); and *Congrès Int. d. Sci. Méd.*, Arch. Ital. de Biol., xxii (1895); SCHIFF, *Deutsch. med. Wochenschr.* (1888); VIRCHOW, *Handb. d. speciellen Pathol. u. Therapie* (1854). (H.H.)

Tropism [Gr. *τρέπω*, to turn]: Ger. *Tropismus*; Fr. *tropisme*; Ital. *tropismo*. The property possessed by certain organisms (plants), or their organs, of turning, in whole or part, towards a source of stimulation in the environment, as towards the sun (heliotropism), towards the earth (geotropism), &c.

It is often used in compounds. On certain of the tropisms and the terminology of the subject see Roux, *Arch. f. Entwicklungsmech. d. Organismen*, viii. 2 (1899), 355. (J.M.B., E.B.P.)

Trust: see FAITH, and RELIGION (psychology of, 'dependence').

Trust (corporate) [ME. *trust* and *trist*]: Ger. *Verband*; Fr. *syndicat*, (3) '*trust*'; Ital. *sindacato*. (1) A device by which stockholders put their shares in the hands of trustees, to secure permanence of management.

(2) The practice of putting shares of companies which might compete into the hands of the same trustees, so as to secure harmony of action.

(3) Any device for the permanent restriction of competition. This is the current sense of the word to-day.

A trust differs from a pool chiefly in the element of permanence. A pool is a contract, and being in restraint of trade, has in America little or no legal sanction. It is therefore precarious. A trust agreement is in the nature of things permanent until the trust itself is dissolved. But the legislation against trusts has in recent years so far endangered their existence that it is difficult to find in America any means of permanently restraining competition, or even the abuses of competition, short of actual consolidation. (A.T.H.)

Truth and Falsity (1) and (2) **Error** [AS. *treowth*, Lat. *falsus*, false, and *error*, wandering]: Ger. (1) *Wahrheit und Falschheit*, (2) *Irrthum*; Fr. (1) *vérité et fausseté*, (2) *erreur*; Ital. (1) *verità e falsità*, (2) *errore*. 'Truth' and 'falsehood' are used in two main senses, according as (a) our belief in some proposition, (b) the proposition which we believe, is said to be true or false. True and false belief may be defined, respectively, as belief in propositions which are true or false: and *error* denotes false belief. Further, true and false propositions may be called, respectively, *truths* and *errors*. *Falsehood*, however, or *falsity*, and not *error*, is used to denote that property of a false proposition in virtue of possessing which it is called an error.

'True' and 'false,' as applied to proposi-

tions, denote properties attaching to propositions which are related to one another in such a way that every proposition must be either true or false, and that to every true proposition there corresponds a false one, and to every false proposition a true one, differing from it only as being its negation. There are, properly speaking, no degrees of truth or falsehood, but one error may be said to be truer or more erroneous than another, according as a greater or smaller number of the propositions it implies are true.

The following proposed definitions call for notice, both because of their wide acceptance, and because a notice of them will serve to isolate the properties which the terms really denote.

(1) It is commonly supposed that the truth of a proposition consists in some relation which it bears to reality; and falsehood in the absence of this relation. The relation in question is generally called a 'correspondence' or 'agreement,' and it seems to be generally conceived as one of partial similarity; but it is to be noted that only propositions can be said to be true in virtue of their partial similarity to something else, and hence that it is essential to the theory that a truth should differ in some specific way from the reality, in relation to which its truth is to consist, in every case except that in which the reality is itself a proposition. It is the impossibility of finding any such difference between a truth and the reality to which it is supposed to correspond which refutes the theory. For:—

(a) It is now generally agreed that the difference does not consist in the fact that the proposition is a mere grammatical sentence or collection of words; but that the popular sense, in which a *statement* may be said to be true or false, is merely derived from that in which what it signifies may be so.

(b) It is, however, generally held that the difference consists in the fact that the proposition is a *mental* copy of the reality, or an 'idea.' This view seems to be solely due to the almost universal error, whereby the *object* of a belief or idea is regarded as the attribute or content of such belief or idea; an error which is refuted by the fact that it denies the existence of that unique relation which we mean by knowing, and is therefore never consistently held: e.g. those who hold this view must, in consistency, deny any difference between those senses of truth in which it is

applied to a belief and to the object of such belief—a difference which in practice they cannot fail to recognize; for no one ever consistently held that when two persons are said to know the same truth, all that can be meant is that their states of mind are similar.

(c) No other difference has ever been proposed; and, indeed, once it is definitely recognized that the proposition is to denote, not a belief or form of words, but an *object* of belief, it seems plain that a truth differs in no respect from the reality to which it was supposed merely to correspond: e.g. the truth that I exist differs in no respect from the corresponding reality—my existence. So far, indeed, from truth being defined by reference to reality, reality can only be defined by reference to truth: for truth denotes exactly that property of the complex formed by two entities and their relation, in virtue of which, if the entity predicated be existence, we call the complex real—the property, namely, expressed by saying that the relation in question does truly or really hold between the entities. [Cf. the section *Psychological*, below, which states somewhat similar reasons for rejecting the 'correspondence' view. In the following, '*Logical*,' section, however, the 'correspondence' view is presented.—J.M.B.]

(2) It seems to be frequently implied that the truth of a proposition may consist in its relation to other propositions—in the fact that it 'fits into a system.' This view, however, simply neglects the admitted fact that any logical relations which hold between a set of true propositions will also hold between a set of false ones; i.e. that the only kind of system into which a true proposition will fit, and a false one will not, is a system of true propositions. The view derives its plausibility merely from the fact that the systems of propositions considered are ones to which we are so thoroughly accustomed that we are apt to regard their contradictories as not merely false but self-contradictory.

The Greek and Latin equivalents for 'true' and 'false' are respectively *ἀληθής*, *verus*; *ψευδής*, *falsus*. Error has the equivalents *ἀμαρτία* or *ἀμαρτήμα*, and *error*; but 'falsehood' as distinguished from 'error,' i.e. as denoting the property of a false proposition, has no corresponding abstract noun in Greek nor in classical Latin. There is, properly speaking, no history of the terms, since they have always been used in philosophy and always in very much the same senses. That truth consists