

character for which the samples are to be used as inductive instances must be specified independently of the result of that examination. Upon the same principle only those consequents of a hypothesis support the truth of the hypotheses which were predicted, or, at least, in no way influenced the character of the hypothesis. But this rule does not forbid the problematic acceptance of a hypothesis, which has nothing to do with the theory of probability. (C.S.P.)

**Predestination** [Lat. *praedestinatio*, a determining beforehand]: Ger. *Prädestination*; Fr. *prédestination*; Ital. *predestinazione*. The aspect of the divine foreordination which applies to moral agents as predetermining either their election to eternal life or their reprobation. See FOREORDINATION. (A.T.O.)

**Predetermination** [Lat. *prae + determinatus*, limited]: Ger. *Predetermination*; Fr. *pré-détermination*; Ital. *predeterminazione*. (1) DETERMINATION (q. v.; especially psychical, ad fin.) beforehand. (2) PREDESTINATION or FOREORDINATION (q. v.). (J.M.B.)

**Predeterminism**: DETERMINISM (q. v., various topics).

**Predicable** [Lat. *praedicabilis*, meaning in classical Lat. praiseworthy]: Ger. *Prädicabilien* (pl.); Fr. *prédictible*; Ital. *predicabile*. One of the five logical kinds of predicates of the early peripatetic school: genus, species, difference, property, accident (*γένος, εἶδος, διαφορά, ἴδιον, συμβεβηκός*), also called the *quinque voces* or *modi praedicandi*.

The indications, at present, are that the word was first used in the logical sense in translations from the Arabic. For Albertus Magnus, who did little more than report the views of Arabians, explains at considerable length the appropriateness of the term, as if it were a new one (*In praedicabilibus*, tr. ii. cap. i). It was, however, probably earlier that it was used by Lambert of Auxerre (Prantl, *Gesch. d. Logik*, iii. 28, note 114), who gives somewhat similar explanations.

Persons beginning the study of logic had better give such time as is necessary to reading the *Isagoge* of Porphyry, one of the best executed pieces of logical exposition that ever was written, superior in that respect to anything in the *Organon*, except the first book of the *Prior Analytics*. There seems to be nothing in the book which is not in Aristotle. A few sentences in the first part of the *Topics* (I. iv. 2) virtually contain the whole matter, which in the following chapter is put together

substantially as Porphyry unites it. Still, it must be admitted that the mode of colligation is here no small matter. Before Porphyry, Apuleius has stated the doctrine nearly as well, and Prantl thinks he can detect it in its matured form even in Theophrastus; but this claim is excessive. One is inclined to think that the author who expounded the doctrine with such remarkable vigour must have thought it out for himself.

The school definitions of predicable are all very bad. That of Burgersdicius is: 'Predicables are what are affirmed of many truly, properly, naturally, and immediately.' Blundeville says: 'Predicables are certayne degrees, or rather pedigrees of words that be of one affinitie, shewing which comprehend more, and which comprehend lesse.' Most of the books define universals instead of predicables, or say that predicables differ from universals only in being spoken of a subject instead of being in a subject. It is easy to see that this does not answer. A universal is 'aptum natum dici de pluribus.' Such is any general term, as *man*. But the five terms genus, species, difference, property, accident, are surely not ordinary class names. Some say they are second intentions. This is very good indeed, so far as it goes; but it is not sufficiently definite.

Kant undertook to set up his own 'predicables of the pure understanding,' which were to be derivative conceptions under the categories (*Krit. d. reinen Vernunft*, 1st ed., 82). (C.S.P.)

**Predicament** [the Eng. form of the Lat. *praedicamentum*, translating Gr. *κατηγορία*, category (Aristotle)]: Ger. *Praedicament*; Fr. *catégorie*; Ital. *categoria*. As a term of philosophy, predicament is exactly equivalent to CATEGORY (q. v.). Cf. Trendelenburg, *Beitr. z. Logik*; Baldwin, *Handb. of Psychol.*, i. chap. xiv. § 4; Peirce, *Proc. Amer. Acad. Arts and Sci.*, May, 1867. (C.S.P.)

**Predicate** [Lat. *praedicatum*, from *prae + dicare*, to make public; used in Latin since Boethius, A. D. 500, in the logical sense. It was used by Boethius to translate *κατηγορημα, κατηγορούμενον*, or τὸ δ' of a proposition. *Praedicatio*, owing to its familiarity in the sense of preaching, was a little later in becoming a term of logic]: Ger. *Prädikat*; Fr. *attribut, prédicat*; Ital. *predicato*. (1) That element of a PROPOSITION (q. v.) which is brought into relation to the SUBJECT (q. v.). Cf. also JUDGMENT, and REASONING. (J.M.B.)

(2) The view which pragmatic logic takes

of the predicate, in consequence of its assuming that the entire purpose of deductive logic is to ascertain the necessary conditions of the truth of signs, without any regard to the accidents of Indo-European grammar, will be here briefly stated. Cf. NEGATION.

In any proposition, i.e. any statement which must be true or false, let some parts be struck out so that the remnant is not a proposition, but is such that it becomes a proposition when each blank is filled by a proper name. The erasures are not to be made in a mechanical way, but with such modifications as may be necessary to preserve the partial sense of the fragment. Such a residue is a *predicate*. The same proposition may be mutilated in various ways so that different fragments will appear as predicates. Thus, take the proposition 'Every man reveres some woman.' This contains the following predicates, among others:

- ' — reveres some woman.'
- ' — is either not a man or reveres some woman.'
- ' Any previously selected man reveres —.'
- ' Any previously selected man is —.'

See NEGATION. (C.S.P.)

**Predication** [Lat. *praedicare*, to assert]: Ger. *Aussage*, *Prädikation*; Fr. *attribution*, *détermination*; Ital. *affermazione*. (1) In psychology: the determination of a conceptual whole by the process of consciously including within it, or excluding from it, a new conceptual element.

The essential mark of the subject-predicate relation is that it constitutes that advance in thought which is expressed or expressible in a sentence. Thus we find that grammarians distinguish between the merely defining or determining use of adjectives, participles, &c., and their predicative or declarative function. To explain the nature of the subject-predicate relation is also to explain why discourse is broken up into distinct sentences. The required explanation is not far to seek, if we start from the popular use of the word subject as indicating the general topic or universe of discourse. The predicate of the subject, in this sense, is the whole discourse through which it receives determination and specification. Predication, from this point of view, consists just in the gradual definition and specification of what is at the outset relatively indefinite and indeterminate. It is because this process takes place gradually by a successive concentration of attention that language

is divided into sentences. 'The predicate of a sentence is the determination of what was previously indeterminate. The subject is the previous qualification of the general topic or universe of discourse to which the new qualification is attached. . . . Sentences are, in the process of thinking, what steps are in the process of walking. The foot on which the weight of the body rests corresponds to the subject. The foot which is moved forward to occupy new ground corresponds to the predicate' (Stout, as cited below, ii. 213). Symbolically, the process may be represented as follows:  $a = ab$ ,  $ab = abc$ ,  $abc = abcd$ , and so on, a formula suggested by Baldwin for such a 'conceptual interpretation' of the thinking processes. In continuous thought, so far as it is continuous, all determinations of the general topic which have emerged up to a certain point form an integral part of the subject, to which all subsequent determinations are attached as predicates. Consider the following: 'I took the train to London; I arrived at 12 p.m.; I went to an hotel; I found that all the rooms were taken.' The 'I,' which is the grammatical subject of the last sentence, is qualified by those which preceded. The full sentence is: 'I, having taken the train to London, and having arrived at 12 p.m., on going to an hotel found that all the rooms were taken' (Paul, *Princ. of the Hist. of Language*, Eng. trans., 144 ff.). See the adjacent topics, and cf. JUDGMENT.

*Literature*: BALDWIN, *Handb. of Psychol., Senses and Intellect*, 283 ff.; STOUT, *Analytic Psychol.*, ii. 212 ff.; BOSANQUET, *Essentials of Logic*, 108 ff.; PAUL, as cited above, 144 ff. (G.F.S., J.M.B., C.L.F.)

(2) In logic: the joining of a predicate to a subject of a PROPOSITION (q.v.) so as to increase the logical breadth without diminishing the logical depth.

On the relation between the psychological and the logical views of predication, see PROPOSITION (1).

This still leaves room for understanding predication in various ways, according to the conception entertained of the dissection of a proposition into subject and predicate. It is a question under dispute to-day whether predication is the essential function of the proposition. Some maintain that the proposition 'It rains' involves no predication. But if it is an assertion, it does not mean that it rains in fairyland, but the very act of saying anything with an appearance of seriously meaning it is an INDEX (q.v.) that forces the person