

sur l'Obligation morale (1898); FRED BON, Über das Sollen u. das Gute (1898); J. MARK BALDWIN, Social and Eth. Interpret. (1898); works on Ethics generally; BIBLOG. F, 2, j.

Obscurantism [Lat. *obscurare*, to darken]: Ger. *Obscurantismus*; Fr. *obscurantisme*; Ital. *oscurantismo*. Opposition to intellectual progress or enlightenment arising out of ignorance or fear of the effects which enlightenment will produce on traditional institutions and beliefs; the principles of those who practise such opposition. (A.T.O.)

Observation [Lat. *observatio*, from *observare*, to look at]: Ger. *Beobachtung*; Fr. *observation*; Ital. *osservazione*. Attentive experience; especially, an act of voluntarily attentive experience, usually with some, often with great, effort. Cf. the following topics.

More or less fixity in the object is requisite. Indeed, experience supposes that its object reacts upon us with some strength, much or little, so that it has a certain grade of reality or independence of our cognitive exertion. All reasoning whatever has observation as its most essential part. Whatever else there is in the act of reasoning is only preparatory to observation, like the manipulation of a physical experiment.

Much stress has been laid upon the distinction between 'sciences of observation' and 'sciences of experiment'; and undoubtedly there is a great contrast between the proceedings, let us say, of the anatomist and of the physiologist. Although the anatomist has to make many experiments (with stains, for example), yet the stress of his labour comes upon the act of observation; while the preparations for observation of the physiologist are far more elaborate, and the mere act of observation itself often very easy and coarse. The difference is, however, chiefly one of degree, and from a philosophical point of view is of quite secondary importance. (C.S.P., J.M.B.)

Observation (errors of): see ERRORS OF OBSERVATION.

Observation (mental): Ger. *Selbst-* (or *innerliche*) *Beobachtung*; Fr. *observation de soi*; Ital. *osservazione (interna, also introspezione)*. (1) The deliberate examination of what is in one's own mind, with consciousness of the act itself; called 'self' or 'inner' OBSERVATION (q. v.). Cf. REFLECTION.

The term thus defined is useful to indicate reflection for purposes of examination, and not merely as designating the reflective state of mind in general. One observes when he

reflects, but when he observes he reflects for a purpose. Observation is the means of INTROSPECTION (q. v.).

(2) A second use (which is not recommended) makes observation synonymous with mere awareness of the progress of experience.

Literature: JAMES, Princ. of Psychol., i. chap. vii; BRENTANO, Psychologie; LADD, Psychol., Descrip. and Explan., chaps. i, ii. (J.M.B.—G.F.S.)

Observation (method of, in education). The acquisition of knowledge by direct sense-perception.

At one time teachers were inclined to regard observation as a method complete in itself, programmes being supplied with courses of so-called object-lessons. Educators are now disposed to view observation as but one step or stage in a rational method. This is, at all events, the position of the Herbartians. See METHOD, and INTUITION (in education).

Literature: Index to Proceedings of the National (U.S.) Educational Association; N.A. CALKINS, Object Lessons. (C.De G.)

Observations (adjustment of): Ger. *Beobachtungsrechnung*; Fr. *calcul des observations*; Ital. *ordinamento dei risultati d'osservazione* (suggested—E.M.). The department of experimental or scientific method concerned with the treatment of experimental results to determine their evidential value.

The method of procedure in adjusting the results of a series of observations depends upon the nature of the particular problem had in view. The number and distribution of cases, the ERRORS OF OBSERVATION (q. v.) of various sorts, the comparison of the results of one series with another, the elimination of accidental cases or of those vitiated by this condition or that—these are some of the questions concerning which exact analysis is required. An illustration of such adjustment of observations is presented under VARIATION (statistical treatment of). In many cases the application of the theory of PROBABILITY (q. v.) is demanded. (J.M.B.)

Observer: see SUBJECT (of experiment).

Obsession [Lat. *obsessio*, a besieging]: Ger. *Besessenheit*; Fr. *obsession*; Ital. *ossessione, fissazione*. (1) The explanation of marked neurotic and abnormal mental symptoms in a patient as due to the persevering efforts of an evil spirit to gain mastery over him.

It differs from POSSESSION (q. v., as also DEMONOMANIA) in that it emphasizes the efforts of the demon from without, while in possession the demon is supposed actually to

be resident in the body, and must accordingly be exorcized by appropriate agencies.

(2) The persistent and irresistible presence of an idea or emotion; in this sense equivalent to an IMPERATIVE IDEA (q. v.). (J.J.)

Obversion [Lat. *obversio*, a turning]. Hamilton (*Lect. on Logic*, xiv, and especially Appendix V. iii) states that CONVERSION (q. v., also for foreign equivalents) in logic is sometimes called obversion.

This is a surprising statement, which neither he nor his editors are able to support by citations. It is, therefore, not unlikely that Hamilton took it at second hand.

Bain (*Logic*, Pt. I. Bk. I. chap. iii. § 27) says: 'In affirming one thing, we must be prepared to deny the opposite: "the road is level," "it is not inclined," are not two facts, but the same fact from its other side. This process is called obversion.' Bain gives no reference. The regular scholastic name for the process he describes—a name given by Abelard (*Dialectica*, 225)—is *infinitatio*. This word is very common (see, for example, Albertus Magnus in II. *Peri hermeneias*, iii; Ockham, *Logica*, II. xii, xiii; and the index to Prantl, *Logik*, iv). But somebody may have got the notion that it was 'barbarous,' and have preferred to use a more classical-sounding designation. (C.S.P.)

Occam (or **Ockham**), **William of**; so called from Ockham, England. Studied at Merton College, Oxford; became a Franciscan, 1319, and then studied at Paris under Duns Scotus. He became the most eminent of Nominalists. He opposed the pretensions of the pope to political power and the possession of property. He was finally summoned to trial, and took refuge (1328) with Emperor Louis of Bavaria. He never signed the article of recantation, although he sought peace with the pope late in life. He died in 1347. See OCCAMISM.

Occamism: Ger. *Occamismus*; Fr. *doctrine d'Occam*; Ital. *dottrina di Occam*. The doctrine held by the followers of William of Occam, the founder of scholastic Nominalism (see REALISM). They were also called Terminists, because of the doctrine of Occam that universals are not anything really existing, but are only *termini*, predicables. (J.D.)

Occam's Razor: see PARSIMONY.

Occasion (-al): see OCCASIONALISM, and CAUSE.

Occasional Cause: see OCCASIONALISM.

Occasionalism [Lat. *occasio*, an event]: Ger. *Occasionalismus*, *Theorie der Gelegenheitsursache* (occasional cause); Fr. *occasionalisme, hypothèse des causes occasionnelles*; Ital.

occasionalismo. The theory that matter and mind do not act upon each other directly, but that upon occasion of certain changes in one, God intervenes to bring about corresponding changes in the other. Each is then called the 'occasional cause' with reference to the other.

The theory was developed by Geulincx and Malebranche in order to deal with the problem—arising from the extreme dualism asserted by Descartes between thought and extension—of the interaction of mind and matter in general, and of the body and soul in particular, combined with the growing difficulties felt in forming any intelligible theory of causation. The same problem was dealt with in the single-substance theory of Spinoza and the Leibnizian doctrine of pre-established harmony. Descartes in general had asserted that all changes of matter-in-motion are to be accounted for by reference to extension, while all psychical matters are to be referred to the nature of mind. This latter theory, however it might do for clear and adequate ideas, could not explain confused ideas and the passions and emotions connected with them. Here was an exception, and God had arranged in man a co-existence of the two substances, so that a disturbance of the 'animal spirits' (centring in the pineal gland) excited in the mind an unclear idea, whether sensation, passion, or emotion. This doctrine of *influzus physicus* was so obviously contradictory to the rest of the system, that the Cartesians at once set about doing away with it. With Geulincx the causal problem was the chief one; and he denies completely the possession of any efficient causality by matter. Its changes are, so to speak, only 'cues' upon which God effects the real results. Malebranche adds to this point of view the epistemological one: not only can one substance not directly influence the other, but they are so heterogeneous that mind cannot know matter. We 'see things in God,' matter again being the occasion rather than the real object of our knowledge. *Literature*: DESCARTES, Principia, § 36; Meds., v and vi, Passions de l'Âme; GEULINCKX, Ethics, 113; Met., 26; MALEBRANCHE, Recherche de la Vérité, vi. 2, 3; FALOKENBERG, WINDELBAND, UEBERWEG, Histories of Philosophy (Index of each, sub verbo). (J.D.)

Occult [Lat. *occultus*, hidden]: Ger. *verborgen*; Fr. *occulte*; Ital. *occulto*. That which is hidden or secret. Cf. MAGIC.

It is applied to the assumption that insight into and control over nature is to be