

DICTIONARY OF SCIENTIFIC BIOGRAPHY

ABAILARD—BERG

ABAILARD, PIERRE, also known as **Peter Abelard** (*b.* Le Pallet, or Palais, Brittany, France, 1079; *d.* near Chalon-sur-Saône, France, 21 April 1142), *logic, theology, philosophy*.

Abailard was the son of Berengar, lord of Le Pallet, but he abandoned the militaristic and governmental traditions of the nobility. He did preserve, however, a determination to impose his personality on the studies and intellectual polemics of his time, and often he dominated the entire field. Intolerant of what was not the best, he moved from school to school, fighting against his masters and colleagues and founding his own schools and a religious community. When he was forced as a punishment to reside in a monastery and when he accepted the leadership of another, he applied his exacting moral principles, his scholarship, and his energy to correcting and reforming mistakes and practices; if defeated, he prepared for further battle.

Of the subjects forming the basic curriculum for scholars, Abailard was interested only in those concerning language, especially grammar and dialectic. He confesses not to have mastered mathematics, although he shows himself competent to deal with the question of continuity. In astrology he follows the accepted views. At this time in France doctrinal conflicts centered largely on dialectic, both within its proper field and in its applications to the problems of human life, then usually presented in theological terms. As a discipline in its own right, it was expanding into the province of metaphysics. Combined with deeper inquiries into grammatical concepts, it was developing new distinctions, refining its procedures, and purifying itself from the sources of easy sophistry. In its applications, it would claim to be the method of clarifying ideas, organizing statements, even extending the province of knowledge, and producing statements normally accepted as having a supernatural origin as valid conclusions derived from non-revealed truths.

Such was the background of Abailard's career. He was an uneasy pupil at the school of Roscelin in

Loches (*ca.* 1094–1096). Roscelin's doctrines on significant words being merely words had appeared to endanger traditional views on knowledge and the dogma of the Trinity. Abailard soon passed on to William of Champeaux's school in Paris; but impatient of this master's opinions concerning the existence in our world (and possibly also in a Platonic world of ideas) of things referred to by general words, he began teaching in Melun and Corbeil. Perhaps, too, he was impatient of being just a pupil. About 1106 illness forced him to return to Brittany. Again in Paris (*ca.* 1110) he fought it out, victoriously, with William. The latter abandoned his chair, which soon after was given to Abailard. But intrigue had the better of learning; Abailard was dismissed. Undaunted, he opened a new school on the outskirts of the city, on the Montagne Ste. Geneviève.

So far, language, logic, and their metaphysical implications had dominated Abailard's mind; after a business sojourn in Brittany he was attracted to Anselme and Ralph of Laon's theological school (*ca.* 1114). Instead of clear words he found verbosity, instead of a scientific approach the smoke of traditional apologetics. The cathedral school of Paris now opened its doors to him as to an honored master of dialectic and theology. The disturbing love affair with Héloïse, physically concluded with Abailard's emasculation, turned into a friendship of a religious and intellectual character. He withdrew to the abbey of St. Denis outside Paris, and became a monk (*ca.* 1118): a bad choice for the abbey and for Abailard. He attacked the laxity of the monks; they attacked the dangers of his dialectical theology. The monks promoted the Council of Soissons (1121), where his doctrine of the Trinity was condemned. An attempt at demolishing, with the tools of historical criticism, the legend concerning the foundation of St. Denis by a pupil of St. Paul involved the *enfant terrible* in further trouble. He escaped, and finally obtained permission to settle at a place of his choice: a new convent was thus born under the symbolic name of Paraclete (the consoling Holy Spirit).

Peace was short-lived: too many people were attracted to the rebel. He accepted the position of abbot of St. Gildas in Brittany, leaving the Paraclete to Héloïse and her nuns, only to fight once more in vain against irreligiosity and immorality. By 1136 he was again on his Montagne Ste. Geneviève, again provoking hostility by his methods and doctrines. The unflinching St. Bernard was among the attackers. The Council of Sens (1140) dramatically—or theatrically—condemned, with the pope's support, the man for whom reason was a good companion of faith and intention rather than action the touchstone of sin. Abailard set out toward Rome for an appeal, but was persuaded by Peter the Venerable of Cluny to accept the verdict. From Cluny he moved to the priory of St. Marcel, where he died soon after.

Abailard's more strictly logico-philosophical works are partly documents of the elaborate development and preparation for his activity as a teacher and partly the systematic organization of his knowledge and critical evaluation of others' views concerning the whole of logico-philosophical studies. The *Introductiones parvulorum* is an elementary commentary on the three basic texts studied by every boy aiming at a career that required learning: Porphyry's *Isagoge* and Aristotle's *Categories* and *De interpretatione*. The more extensive commentaries on these same works and on Boethius' *De differentiis topicis* embody, both in the form of a penetrating analysis and in the form of constructive and destructive argument, much of Abailard's most original philosophical production. The *Dialectica* is the first full-scale attempt, in the Latin West, at producing a system of logic covering all the recognized sections of that discipline, until then dispersed in disconnected works composed by authors of different periods and treated without a uniform pattern and often without a clear plan. Abailard's own plan, however, depended too much on a traditional set of texts and on an old division of the parts of logic: his contribution is to be found more in details than in the general scheme.

Most of Abailard's philosophico-theological works, including sections of two biblical commentaries (on the beginning of Genesis and on St. Paul's Letter to the Romans) contain elaborations of the main themes of Christian doctrine from the point of view of the man of faith. But the elaborations are aimed at showing how much of this doctrine is accessible to the man without faith who uses his reason (itself, after all, of divine origin) both for directly establishing truth and for critically accepting non-Christian reasonable authorities, such as Plato and Aristotle. This is most evident in the successive editions of his *Theologia*. His *Scito te ipsum* (*Know Yourself*), the study

of the psychology of intention, volition, and action, as related to the concept of guilt, appeared to revolutionize the dogma of original sin. The *Sic et non* (*Yes and No*) is an analysis of texts chosen from works of the Fathers of the Church; in it, critical rules of interpretation of the written word are applied to show to what extent apparently contradictory statements can be seen to agree in their basic meaning.

Abailard's contributions that are of interest to science are more of a methodological character than discoveries of facts and laws of nature. From the introduction to the *Yes and No* the following principles or rules can be elicited: (1) methodical doubt (doubting is necessary [Aristotle]); search and you will find (the Gospels); (2) distinguish statements that compel assent from those on which free judgment must be exercised; (3) distinguish between the levels of language used (technical [proper] or common [vulgar, improper], explicit or metaphorical or rhetorical, stating the writer's views or quoting the opinions of others); (4) meanings of words change with time; (5) fallibility of human writers, however authoritative (mistakes even in Scripture); (6) fallibility of written tradition (textual criticism); (7) context affects meanings.

Abailard's discussion of "universals" in his longer commentary on Porphyry's *Isagoge* exemplifies his procedure. It can be schematized in this way: (a) be clear about the meaning that is ascribed to "universal," starting, as one normally does, from Aristotle's statement "universals are those that are predicated of many"; (b) properly used, the key term "predicated" applies only to words; (c) consequently "this kind of universals" can only be words, i.e., universal (or common) words; (d) these words have, in a proposition, the special function of "being predicated," not of "signifying"; (e) a more serious problem is this: What makes us invent and use universal words, i.e., what is the cause (common cause) of common words; is it a community in things or a community in our concept; (f) there is a common state of affairs ("status") for A and B such that each can be said to be man; this "status" is not a thing (*res*); (g) our mind "melts together" (*confundit*) into one image that which it elicits, abstracts, from things according to their "common status"; (h) the "common cause" of universal words is primarily to be found in the common "status" of things, secondarily in the *imago confusa*, i.e., in our concept; (i) extrapolating from the common status to the knowledge of it possessed by the maker of things (not by us, men), it is possible to conceive a knowledge of the common cause as *forma* (a Platonic idea in God's mind). In this way, Abailard surveys the linguistic, logical,

naturalistic, gnoseological, metaphysical, and theological aspects of the problems of universals.

In the *Dialectica* as well as in the several commentaries there are many statements of importance to philosophy, theory of language, logic, methods of expression, and possibly of research in science, which were either first put forward clearly or strongly endorsed by Abailard. Some are to the effect that (a) "is," "are," etc., in sentences like *John is a man* and *John is*, have no existential import (the second sentence being elliptical = *John is an existing being*) but are connectives (*copulae*); (b) propositions in the future or past must be resolved into propositions in the present; (c) a self-referring word, e.g., "Man" (= "the word *Man*"), does not alter the nature of "is" qua *copula*; (d) "not every . . ." and "some . . . not" are not equivalent; (e) "all" implies both collectivity and exclusivity; (f) modal words ("possible," "necessary" . . . , "true," "false" . . . , etc.) have two different functions according to whether they affect the relationship between subject and predicate or the status of a proposition. In the study of conditional propositions, often called by Abailard *consequentiae* (possibly a new, systematically technical use of this term), a number of rules are made explicit in forms easily translatable into modern symbolism, e.g., the rules of transitivity of entailment, of incompatibility between a true affirmation and a true negation, and of entailments between modalities.

With his inquiries into the logic of language Abailard contributed possibly more than anyone else to the developments of the new logico-linguistic theories, especially those concerning *suppositio*, *copulatio*, and *appellatio*.

BIBLIOGRAPHY

I. ORIGINAL WORKS. All the known works of Abailard have been published at least once, but no single edition contains more than about half the extant texts. The largest collection is in J. P. Migne, ed., *Patrologia Latina*, 178 (Paris, 1855). This volume includes all the works ed. before, with the exception of the logical texts published by Victor Cousin as part of *Ouvrages inédits d'Abélard* (Paris, 1836). Migne gives, for each work, the necessary information on the eds. reproduced in his volume. We mention here only the two complementary collections older than Migne's. The first was ed. by F. d'Amboise and A. Duchesne, *Petri Abaelardi filosofi [sic] et theologi . . . et Heloissae coniugis . . . opera* (Paris, 1616); the second, ed. by Cousin, Ch. Jourdain, and E. Despois, *Abaelardi opera hactenus seorsim edita* (Paris, 1849–1859), includes little of what Cousin had published in 1836.

The following eds. contain, with minor exceptions, all the works that had not been published by 1855, or had

been published in an incomplete form: (a) the longer commentaries on Porphyry's *Isagoge* and Aristotle's *Categories* and *De interpretatione* (the latter incomplete and with an apocryphal last section), which came to be known as *Logica "Ingredientibus,"* together with an incomplete commentary on the *Isagoge*, now known as *Logica "Nostorum petitioni,"* were ed. by B. Geyer, *Peter Abaelards philosophische Schriften* (Münster, 1919–1935), Vol. XXI of *Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters*; (b) the shorter commentaries on Porphyry and Aristotle (*Introductiones parvulorum*) and the commentaries on Boethius' *De divisione* and *De differentiis topicis*, all published—incompletely—by Cousin in 1836, were published in full by M. Dal Pra, *Abelardo, Scritti filosofici* (Rome–Milan, 1954); (c) the *Dialectica*, also incompletely published by Cousin, was published in full by L. M. De Rijk (Assen, 1956); (d) the last section of the longer commentary on Aristotle's *De interpretatione*, missing from the Geyer ed., was published, together with two shorter texts, by L. Minio-Paluello, *Abaelardiana inedita* (Rome, 1958), Vol. II of *Twelfth Century Logic*; (e) *De unitate et trinitate*, R. Stölzle, ed. (Freiburg, 1891); (f) "Ein neu aufgefundenes Bruchstück der Apologia Abaelards," P. Ruf and M. Grabmann, eds., in *Sitzungsberichte der Bayerischen Akademie der Wissenschaften*, Philos.-hist. Abt., 5 (1930); (g) *Theologia "Summi boni,"* H. Ostlender, ed. (Münster, 1939), Vol. XXXV. 2–3 of *Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters*.

Mention should also be made of the new critical ed. of the first letter of Abailard, the autobiographical *Historia calamitatum*, prepared by J. Monfrin (Paris, 1959), and of the new ed. by J. T. Muckle of "The Personal Letters Between Abelard and Heloise," in *Mediaeval Studies*, 15 (1953), 47–94.

There are English trans. of the following: (a) the section on universals from the *Logica "Ingredientibus,"* in R. McKeon, ed., *Selections From Medieval Philosophers*, I (New York, 1929, 1957), 208–258; (b) C. K. Scott Moncrieff, *Letters to Heloise* (London, 1925–1926); (c) J. R. McCallum, *Scito te ipsum (Ethics)* (Oxford, 1935); (d) J. T. Muckle, *Historia calamitatum (The Story of Abelard's Adversities)* (Toronto, 1954).

II. SECONDARY LITERATURE. A quite extensive bibliography on Abailard down to 1928 is in B. Geyer, pp. 213–214 and 702–703 of the vol. mentioned below. More detailed bibliographical material for special fields will be found in several of the works listed here.

The following general histories contain important sections on Abailard: *Histoire littéraire de France*, XII (Paris, 1763), 86–152 (repr. in Migne, *Patrologia Latina*, CLXXVIII, 10–54); G. Robert, *Les écoles et l'enseignement de la théologie . . .* (Paris, 1909), pp. 149–211, reelaborated by G. Paré, A. Brunet, and P. Tremblay, *La Renaissance du XII^e siècle* (Paris–Ottawa, 1933), pp. 275–312; M. Grabmann, *Geschichte der scholastischen Methode*, II (Freiburg, 1911), 177–221; M. De Wulf, *History of Mediaeval Philosophy*, English trans. by E. C. Messenger of the 6th French ed. (London, 1935, 1952), pp. 194–205; L. Thorndike, *A History of Magic and Experimental Science*, II (New York,

1923), 3-8; B. Geyer, *Die patristische und scholastische Philosophie*, Vol. II of F. Ueberweg, *Grundriss der Geschichte der Philosophie*, 11th ed. (Berlin, 1928), 213-226; I. M. Bocheński, *Formale Logik* (Freiburg-Munich, 1956), English trans. by I. Thomas (South Bend, Ind., 1961); W. and M. Kneale, *The Development of Logic* (Oxford, 1962), pp. 202-224.

Comprehensive works on Abailard's life and doctrines include P. de Rémusat, *Abélard, sa vie, sa philosophie et sa théologie* (Paris, 1845, 1855); C. Ottaviano, *Pietro Abelardo, la vita, le opere, il pensiero* (Rome, 1931); J. G. Sikes, *Peter Abailard* (Cambridge, 1932); and H. Waddell, *Peter Abelard* (London, 1933).

Among the many books and articles on particular fields or problems, the following call for special attention: E. Kaiser, *Pierre Abélard critique* (Fribourg, 1901); J. Cotiaux, "La conception de la théologie chez Abélard," in *Revue d'histoire ecclésiastique*, 28 (1932), 247-295, 533-551, 788-828; H. Ostlender, "Die Theologia 'Scholarium' des Peter Abailard," in *Beiträge zur Geschichte der Philosophie und Theologie des Mittelalters*, Supp. III (Münster, 1935), 263-281; T. Reinert, *Der Nominalismus in der Frühscholastik*, *ibid.*, VIII.3 (1910), 41-59; B. Geyer, "Die Stellung Abaelards in der Universalienfrage," *ibid.*, Supp. I (1913), 101-127; E. A. Moody, *Truth and Consequence in Mediaeval Logic* (Amsterdam, 1953); J. R. McCallum, *Abelard's Christian Theology* (Oxford, 1949); G. Engelhardt, *Die Entwicklung der dogmatischen Psychologie in der mittelalterlichen Scholastik in Beiträgen zur Geschichte der Philosophie und Theologie des Mittelalters*, Vol. XXX.4-6 (Münster, 1933); O. Lottin, "Le problème de la morale intrinsèque d'Abélard à S. Thomas," in *Revue Thomiste*, 39 (1934), 477-515; E. Gilson, *Héloïse et Abélard* (Paris, 1938, 1955, 1958), English trans. by L. K. Shook (Chicago, 1951).

The intros. to several of the eds. listed in Section I of this bibliography are of particular importance. The following deserve special mention: V. Cousin, *Ouvrages inédits*; L. M. De Rijk, *Dialectica*; L. Minio-Paluello, *Abaelardiana inedita*; P. Ruf and M. Grabmann, "Ein neu aufgefundenes Bruchstück"; H. Ostlender, *Theologia "Summi boni"*; J. Monfrin, *Historia calamitatum*; and the section "Untersuchungen" at the end of B. Geyer's ed. of *Peter Abaelards philosophische Schriften*.

L. MINIO-PALUELLO

ABANO, PIETRO D' (b. Abano, Italy, 1257; d. Padua, Italy, ca. 1315), *medicine, natural history, alchemy, philosophy*.

D'Abano completed his early studies in Padua and later took many voyages which focused his attention upon nature studies and ethics. He lived in Constantinople and then, about 1300, went to Paris, where he attended the university and perhaps taught and composed his *Conciliator differentiarum philosophorum et praecipue medicorum*. In 1307 d'Abano

returned to Padua, where for several years he taught philosophy and medicine, arousing the apprehension and the perplexity of the academic and ecclesiastical authorities. Although he was acquitted during his lifetime of the charge of heresy—of which he had been accused because of his attempt to interpret the birth and ministry of Christ as other than miraculous—his reputation as a sorcerer persisted. Some forty years after his death his writings were again put on trial; they were found to be heretical, and his bodily remains were disinterred and burned.

In his *Conciliator*, d'Abano undertook a superb synthetic program: the reconciliation of medicine with philosophy. In this he states 120 questions that give rise to as many controversies between physicians and philosophers. For their solution he adopts the method of didactic demonstration that is characteristic of the period, yet on the whole there are signs of a new intention and a new uncertainty.

The practice of medicine implies the necessity of resolving every problem in a natural manner. D'Abano maintained more or less that "the art of medicine must not consider only things that can be seen and felt." Hence he possessed a good knowledge of anatomy; he affirmed, in opposition to the authority of Aristotle (who thought the nerves originated in the heart) that the center of all sensation and motion resides in the brain. His notions of the central nervous system are probably derived from direct visualization. According to d'Abano, the doctor is the symbol of the zealous servant and the collaborator of nature. Considerable importance is attached to the relationship of trust that exists between the doctor and the patient. A good reputation is more useful to the doctor than rare drugs.

These concepts, as d'Abano developed them in his work, have considerable importance. The doctor must be free in his reasoning and must have no ties with scholastic authorities. Such ideas imply a revolt against established and wearisome tradition: they prepare for a rupture with the past and indicate a new path for scientific progress. D'Abano's voice was one of those that, at the dawn of humanism, announced the beginning of a scientific revival.

The Paduan master acknowledged the dependence of every living being and of earthly events on planetary influences. The *Conciliator* gives an outline of astrology as a two-part science comprising one that deals with the laws of celestial movements (astronomy) and another, more important, that draws from these laws the judgments and predictions concerning the effects of those motions on our world—on all human events, on human conception, and even on religion.