

ARISTOTLE (Ἀριστοτέλης Aristoteles)—beside Plato, the most famous thinker and philosopher, b. 384 BC in Stagira in the Chalcidian Peninsula, from which he is called the Stagirite, d. 322 in Chalcis in Euboea on an estate inherited from his mother, Phaistis. He was the son of Nicomachus, court physician to king Amyntas of Macedonia, father of Philip.

LIFE. After the death of his father at a young age, Aristotle was educated under the care of the husband of his oldest sister, Proxenos of Atarneus in Mysia. In 367 he began to study in Athens and entered Plato's Academy where he spent 20 years. With Plato's journey to Sicily (367–364), Aristotle was educated under Eudoxus of Knidos who was then the director of the Academy. Eudoxus was at the time a renowned mathematician, astronomer, and geographer, also competent in etymology, medicine, and the philosophy of nature. Aristotle owed his budding interest in science primarily to Eudoxus. For a time he studied rhetoric, perhaps with Isocrates. He owed the most to Plato. After his return from Sicily in 364 Plato began to work on his philosophical dialogues. Their epistemological and ontological problems must have been the topic of lively discussion among the members of the Academy. He was one of the first to supplement what he had learned from lectures and discussions with his own reading of the works of the poets, historians, public speakers, and philosophers, and so is the Academy he was called the "reader". After a few years at the Academy, around 360, he wrote his first dialogue called *Gryllos* modeled after Plato's *Gorgias*. In this work, now lost, he criticized sophistic rhetoric and provoked a polemic with the school of Isocrates. Around 360 to 355 he began to lecture on rhetoric in the Academy. Scholars (I. Düring, E. Berti) date the writing of his *Rhetoric* to that period. Between 357 and 347 he most likely also wrote dialogues which have been lost but which are known from many fragments: *Eudemos, or on the soul*, and *On ideas*. The following lost dialogues dealt with all the most important problems of the culture of that time: *On the good, On justice, On wealth, On prayer, On nobility, On pleasure*. It is thought that while Aristotle was at the Academy he worked out the framework of his logical works and the dialogues widely known in ancient times: *Protrepticus*, and *On philosophy*, in which he presented the foundations of his doctrine in the history of philosophy, ontology, the philosophy of nature, cosmology, and theology. In the light of these discoveries (chiefly the work of Düring, Berti, and Chroust), Jaeger's position that Aristotle's views evolved gradually is untenable, because even as a member of the Academy he did not share Plato's views on the ideas and gave a popular lecture containing the foundations of the doctrine we know from his school treatises. Plato's questions on the principles of being, the beginning and manner of the world's existence, the immortality of the soul, and the character of human knowledge inspired Aristotle to develop the logical sciences, natural sciences, ethics, politics, rhetoric, and metaphysics. Contemporary researchers (e.g., E. Berti) try in various ways to show that such treatises as *Physics, On the heavens (De caelo), On generation and corruption (De generatione et corruptione), Meteorology (Meteorologica)*, books I, V, XII, and XIV of the *Metaphysics*, and the *Eudaimian Ethics* were also drawn from his lectures and studies during his final years at the Academy.

In 348 or 347 he left Athens. With Xenocrates (the most renowned pupil of the Academy besides Aristotle who in 338 would become director of the Academy), he went to the court of the Persian vassal Hermis in Atarneus in Mysia. His reasons for leaving the Academy and travelling to Asia Minor are unknown. He may have been influenced in this decision by an anti-Macedonian climate in Athens after Philip's conquest of Greek cities in Thrace (in 348), or by Plato's death (in 347). If he departed before Plato's death and if his departure was inspired by Plato, he may have been motivated by the ideal of the "philosopher-king". Two

other disciples of Plato had arrived earlier at the court of Hermias, Erastos and Coriscos, and Aristotle and Xenocrates joined them. According to the testimony of ancient writers, discussions and friendship with the philosophers who were his guests influenced Hermias to change the form of government, and adjacent territories of Asia Minor voluntarily came under his rule. Hermias was grateful and intended to reward them by “giving as their possession” the city of Assus. It is not very likely that the philosophers had a school in Assus along the lines of the Academy. Rather they played an indirect role in rule the state and worked on their own investigations. As described in his *History of animals*, Aristotle’s studies of the fauna of that area indicate that he did research there. After three years as a guest of Hermias, he left for Lesbos in 345 or 344. There, together with Theophrastus, he observed and studied the local fauna and flora. The surviving work *History of Animals* and *History of Plants* were the result of those studies. They are not collected lectures but scientific treatises. From Lesbos he was called in 343 by Philip to tutor his thirteen-year-old son Alexander. Aristotle taught the future king for three years. He introduced him to the world of Greek literature (Homer, the lyrical poets, drama), and taught him rhetoric, philosophy, politics, and prepared him in the art of governing. According to Plutarch, an edition of the *Iliad* was connected with the completion of this function, with which Aristotle would never part, and the dialogues: *Alexander, or on the colonies, On kingly governments, and On the poets*.

In Pelli he received the sad news that Hermias had been deceived, imprisoned, and murdered by the Persians in 341. In memory of Hermias, Aristotle raised a statue in Delphi and wrote a hymn *On courage* that survives to this day. Hermias’ family found shelter in the court of Philip. Probably at that time Aristotle took care of Hermias’ niece Pythias whom he later married. Their marriage produced a daughter who was named Pythias after her mother. We have no information about where Aristotle was from that time until 335 when he returned to Athens. He may have been at Philip’s court and been a royal advisor, or he may have managed his own home and economy in the rebuilt Stagira. During that period he wrote together with Callisthenes a history of the Pythian games and a letter to the victors of those games. In 1895 a tablet was found in Delphi with an inscription that was a memorial to their being honored for this work by a crown. In that period he also began to collect and write on the constitutions of 158 states, but only his *Political constitution of Athens* has survived. Following these stormy years in the history of Greece (Cheroneia in 338, an anti-Macedonian revolt after Philip’s death, and Alexander’s bloody suppression of the revolt in 335), Aristotle was involved in diplomatic peace-making missions. The Athenians were to honor his work for them with a decree of gratitude inscribed on a column raised on the Acropolis.

After the Athenians made a treaty with Alexander in the spring of 335, Aristotle was able to return to Athens without hindrance. Aristotle was exceptionally powerful and enjoyed the friendship of Alexander, the King of Macedonia. He was surrounded by his family, many servants and friends, and he collected a wealth of varied scientific materials. Since the Academy had been directed for a few years (since 339) by his colleague from Assus, Xenocrates, whose philosophical views Aristotle did not share, he was prepared to open and direct his own school. He had the proper resources at his disposal. He started the Lyceum as a place where he taught independently. It was an extensive area with a temple of Apollo Lyceos (“he who protects from wolves”) and a gymnasium built by Pericles. The gymnasium consisted of a group of buildings with courtyards, closed porticos, areas for games and diversions, and boulevards shaded by trees. A hidden colonnade built by Lycurgos led to the temple. It was called the “place for strolling”—περιπατος [peripatos] which provided the

name for Aristotle's school. The Lyceum had long been a favorite place where philosophers, sophists, and rhetoricians met publicly with the youth of Athens. Aristotle's will made no mention of the school. There is also evidence that Theophrastus bought part of the garden. Some contemporary scholars (including Brink and Düring) say that Aristotle used the Lyceum only as a place for public meetings, but Theophrastus was the true founder of the school. Since Aristotle not only taught but also carried out research in a group, he possessed a great collection of materials, a large library, and these could not have been kept in a public gymnasium. Even if the buildings adjacent to the Lyceum did not come into Aristotle's possession, he may have simply rented them. The school was organized after the model of the Academy as a religious fraternity in honor of the muses. To a greater degree than the Academy, the Lyceum was a place of research. The surviving treatises are the best proof that Aristotle resumed the lectures he held in the Academy on logic, physics, metaphysics, ethics, and rhetoric. He enriched his lectures and completed them with new thoughts. In the case of his ethics, only a few separate treatises have been preserved. These certainly are a reflection of sequential courses of lectures. In other cases, such as in the case of metaphysics, old and new lectures were joined together in a single treatise. It is thought that books III–IV and VI–X of the *Metaphysics* were the basis of lectures in the Lyceum. Aristotle took a new approach in the *Rhetoric* and the *Politics*. He widened the scope of lectures with new subjects, including poetics, and especially subjects in biology, zoology, and psychology. These were based on his investigations in Assus and Mytilene. He worked upon them in his years at the Lyceum in works such as *On the soul*, *On the parts of animals*, *On the generation of animals*, *On the movement of animals*, and in the collection of the so-called minor natural writings (*Parva naturalia*). This happy period in Aristotle's life was filled mostly with lectures, research, and editorial work and it lasted more than twelve years, as long as the Macedonian authorities could guarantee political stability in Athens. When news of Alexander's death reached Athens (in 323), anti-Macedonian feelings arose again in Athens. Aristotle had been a friend of Antipater, the acting regent of Macedonia and Greece, and was accused of impiety. To avoid a trial, he entrusted the direction of the school to Theophrastus and left with his family to Chalcidica on the island of Euboea where he had inherited an estate and house from his mother. Less than a year after his arrival on Euboea, in the spring of 322 BC, separated from his duties and his friends, he succumbed to a stomach ailment and died. He left a testament that shows him as a dedicated and kind father and master of his house.

WORKS. Aristotle's writings are divided according to their character and form into literary works traditionally called "exoteric" (λογοὶ ἑξωτερικοὶ [logoi exoterikoi]) and scholastic writings called "acromatic" (ἄκροασεῖς [akroaseis]), writings intended for listening, namely lectures.

Literary works. Aristotle often called his literary works "published" (ἐκδεδομένοι [ekdedomenoi]). For the most part, they took the form of philosophical dialogues in which the philosopher himself played the leading role. They were intended for a wider public and were marked by beautiful literary form. Most of these were written while Aristotle was at the Academy. They were known to neo-Platonic commentators in the fifth and sixth century but later disappeared. The best known of which the most fragments have survived include *On philosophy* (Περὶ φιλοσοφίας [Peri philosophias]), *Exhortation to Philosophy* [Προτρεπτικός [Protreptikos]), *On the good* [Περὶ τ'ἀγαθοῦ [Peri t'agathou]), *Eudemos, or on the soul* [Εὐδημὸς ἢ περὶ ψυχῆς [Eudemos e peri psyches], and *On ideas* [Περὶ ἰδεῶν [Peri ideon].

School writings. His school writings constitute today's *Corpus Aristotelicum* (CA) which has retained almost in its entirety the form that Andronicus gave it in the middle of the first century BC. Andronicus organized and published the works. These works were the basis of Aristotle's lectures. They are divided into four groups.

(1) Logical works (the so-called 'Όργανον [Organon], includes six works: *Κατηγοριαί* [Kategoriai] (*The Categories*), *Περί ἑρμηνείας* [Peri hermeneias] (*Hermeneutics* or *On Interpretation*), *Ἀναλυτικά προτερα* [Analytica protera] (*Prior Analytics*), *Ἀναλυτικά ὑστερα* [Analytika hystera] (*Posterior Analytics*), *Τοπικά* [Topika] (*Topics*), and *Περί σοφιστικῶν* [Anemon theseis kai prosegoriai] (*On the position and nature of the winds*), *Περί Ξενοφάνους, Πιλάτου, Μελισσοῦ, περὶ Γοργίου* [Peri Xenophanous, peri Melissou, peri Gorgiou] (*On Xenophanes, on Melissus, on Gorgias*), *Περί ἀκουστικῶν* [Peri akouston] (*On things heard*), *Φυσιολογικά* [Physiognomika] (*Physiognomy*), *Περί θαυμασιῶν ἀκουσμάτων* [Peri thaumasion akousmaton] (*Amazing accounts*), *Περί τῆς τοῦ Νείλου ἀναβάσεως* [Peri Neilou anabaseos] (*On the floods of the Nile*), short writings on nature, called the *Parva Naturalia* which include *Περί αἰσθησεῶς καὶ αἰσθητῶν* [Peri aistheseos kai aistheton] (*On the senses and their objects*), *Περί μνήμης καὶ ἀναμνήσεως* [Peri mnemes kai anamneseos] (*On memory and reminiscence*), *Περί ὕπνου καὶ ἐγρηγορέως* [Peri hypnou kai egrorseos] (*On sleep and waking*), *Περί ἐνυπνίων* [Peri enyption] (*On dreams during sleep*), *Περί τῆς καθ' ὕπνον μαντικῆς* [Peri tes kath' hypnon mantikes] (*On prophecy in sleep*), *Περί μακροβιοτικῆς καὶ μικροβιοτικῆς* [Peri makrobiotetos kai mikrobiotetos] (*On length and shortness of life*), *Περί ζωῆς καὶ θανάτου* [Peri zoes kai thanatou] (*On life and death*), *Περί ἀναπνοῆς* [Peri anapnoes] (*On respiration*).

(4) Works on practical philosophy include the following: *Ἠθικά Ἐυδημεία* [Ethika Eudemeia] (*Eudemian Ethics*), *Ἠθικά Νικομαχεῖα* [Ethika Nichomacheia] (*Nicomachean Ethics*), *Ἠθικά Μεγάλα* [Ethika megala] (*Major ethics*), *Περί ἀρετῶν καὶ κακῶν* [Peri areton kai kakon] (*On virtues and vices*), *Πολιτικά* [Politika] (*Politics*), *Ἀθηναίων πολιτεία* [Athenaion politeia] (*Political system of Athens*), *Τέχνη ῥητορικῆ* [Techne rhetorike] (*Rhetoric*), *Ῥητορικὴ πρὸς Ἀλεξάνδρον* [Rhetorike pros Alexandron] (*Rhetoric for Alexander*), *Ὀικονομικά* [Oikonomika] (*Economics*), *Περί ποιητικῆς* [Peri poietikes] (*Poetics*).

Publications of Aristotle's works include: *Aristotelis Opera*, ed. I. Bekkeri (I–V, B 1831–1860, rep. B 1960); *Aristotelis, cum fragmentis*, ed. A. F. Didot (I–IV, P 1848–1869, V indexes 1874); *Aristote, Organon*, J. Tricot (P 1946–1950); *Aristotle's Categories and De interpretatione*, J. L. Acrill (Ox 1963, 1968); *Aristotle's Prior and Posterior Analytics*, W. D. Ross (Ox 1949); *Topica*, ed. W. D. Ross (Ox 1958, 1963, 1970); *Aristotle's Physics*, W. D. Ross (Ox 1936, 1950); *De Coelo*, ed. D. J. Allan (Ox 1936); *De anima*, ed. W. D. Ross, (Ox 1961); *Aristotle's Metaphysics*, ed. W. D. Ross (I–II, Ox 1924); *Parva Naturalia*, ed. W. D. Ross (Ox 1955); *Parva Naturalia*, P. Siwek (R 1963); *Histoire des animaux*, P. Louis (P 1964–1969); *Aristotle, Poetics*, ed. W. D. Lucas (Ox 1968); *La Poétique*, ed. R. Dupont-Roc et L. Lallot (P 1980); *Ars rhetorica*, W. D. Ross (Ox 1959); *Ars rhetorica*, ed. R. Kassel (B 1976); *The Ethics of Aristotle*, ed. J. Burnet (Lo 1900, NY 1973); *Ethics*, ed. J. Warrington (Lo 1963); *Politica*, W. D. Ross (Ox 1957).

Modern translations include the following: *The Works of Aristotle*, ed. J. A. Smith, W. D. Ross (I–XII), Ox 1908, 1952); new corrected edition: *The Complete Works of Aristotle*, ed. J. Barnes (I–II, Princeton 1984). In the Polish Language translations include: Arystoteles [Aristotle], *Dzieła wszystkie* [complete works] (I–VII, Wwa 1990–1996, with vol. VI

planned for the year 2000); other editions include: *Poetyka* [Poetics] (Kr 1987); *Ustrój polityczny Aten* [Political system of Athens] (Kr 1931); T. Sinko, *Trzy pojęcia klasyczne* [Three classical concepts] (Wr 1939, 1951²); *Poetyka* [Poetics], ed. J. Podbielski (Wr. 1983, 1989²); *Polityka* [Politics] (Wr 1953, Kr 1964²); *Etyka nikomachejska* [Nicomachean ethics], trans. D. Gromska (Wwa 1982); *Metafizyka*, trans. K. LeŹniak (Wwa 1983); *Metafizyka*, Polish text by A. Krąpiec and A. Maryniarczyk on the basis of the translation by T. Źeleźnik (I–II, Lb 1996).

W. Jaeger, *Aristoteles Grundlegung einer Geschichte seiner Entwicklung*, B 1923, 1955; L. Robin, *Aristotle*, P 1944; P. Moraux, *Les listes anciennes des ouvrages d'Aristote*, Lv 1951; D. J. Allan, *The Philosophy of Aristotle*, Ox 1942; R. Stark, *Aristotelesstudien*, Mn 1954; I. Düring, *Aristotle in the Ancient Biographical Tradition*, Gt 1957; J. H. Jr. Randall, *Aristotle*, NY 1960; E. Berti, *La filozofia del primo Aristoteles*, Pd 1962; J. Moreau, *Aristote et son école*, P 1962; M. Grene, *A Portrait of Aristotle*, Lo 1963; K. LeŹniak, *Aristoteles* [Aristotle], Wwa 1965; I. Düring, *Aristoteles, Darstellung und Interpretation seines Denkens*, Hei 1966; E. Berti, *Aristoteles dalla dialettica alla filosofia prima*, Pd 1977; J. L. Ackrill, *Aristotle, the Philosopher*, Ox 1981; W. K. C. Guthrie, *A History of Greek Philosophy*, VI, C 1981; C. Natali, *Bios theoretikos. La vita di Aristoteles*, Bol 1981.

Henryk Podbielski

ARISTOTLE'S VIEWS include his metasystemic thoughts, metaphysical theory, ethical theory, and his philosophy of nature.

Metasystemic views. Aristotle is a creative continuator of classical thought in the following areas: (1) considering the role of natural language in the domain of systematizations and justifications; (2) building a general theory of science; (3) using an aporetic (problem-oriented) mode of thought.

1. Aristotle followed Socrates and Plato in holding that the meanings of general expressions are not arbitrary but stable, necessary, and generally important, and he recognized that the analysis of subject-predicate language is an effective way of solving basic questions about the structure of changing material reality. If Socrates and Plato in their analysis of the meanings of general expressions recognized valid scientific cognition in ethics or the general theory of reality, then when Aristotle examined the role of predicates in judgements and propositions, he made an analysis of the structure of reality. Reality is a collection of subsistent subjects (᾽ουσια [ousia]) that have definite properties. The structure of natural language is generally a faithful model of the structure of reality. The categories of propositional predication indicate the categories of existing subjects and properties. Language as a sign of reality is formulated and understood in cognition. Cognition is intellectually abstract and models our language into a set of signs that exist in a different way than does reality (here Aristotle is criticizing the Platonic theory of ideas and the mode of intellectual cognition of ideas). This happens in this way because there is a distance between natural language and concrete individual reality that must be known and to a certain degree filled by a system of definitions and by syllogistic demonstration.

2. Aristotle transformed Anaximander's question about the principle (ἀρχή [arche]) of the world into the question of "on what account" something is such as it is. Aristotle noted that scientific cognition is primarily concerned with showing the reasons "due to which" something is such by necessity. Aristotle's conception of science was a continuation of

Plato's views and concerned the valid (scientific) cognition of the real, changing, sublunary world (the cosmos). The understanding of a being on earth is performed by the intellectual recognition of the thing in itself, that is, by grasping: (a) its form (the formal cause—μορφή [morphē]), which is something like a realization of a Platonic idea, and establishing connections between the thing grasped (its essence) and its other basic factors or causes; (b) matter ('ύλη [hyle]), which is a condition for change in being; (c) the efficient cause ('υποτινος [hypo tinos]) which changes being by its action; (d) the end (το 'ου 'ενεκα [to hou heneka]), which is the motive for the action of the efficient cause. Under the influence of Plato, Aristotle emphasized the role of the formal factor, which constitutes the being-ness and marks the rational and essential content of a thing, which can be grasped in a concept, and expressed in the form of a real definition (Aristotle used the term "definition" as *definiens*). Aristotle said that concepts are not produced as the result of a movement from mental images to concepts, but they are produced by a special act of the intellect as it spontaneously or methodically abstracts by way of induction, which Aristotle called 'επαγωγή [epagoge]. The result of this induction is the conscious production of a concept that is operative in science and is expressed by definitions and axioms. The concept can be used in the construction of a syllogism (according to Aristotle definitions constitute the major premises in a syllogism) as the starting point of a syllogistic deduction from the επαγωγή. The syllogism, which in its various forms becomes a tool for constructing scientific knowledge, sometimes shows the proper and adequate reason (διότι [dioti]), sometimes only a partial reason or statement of fact ('οτι). The investigation of real definitions, their objects, character, and conditions is an important part of philosophical analysis. Aristotle here was particularly critical of Plato's theory of ideas and regarded definitions and syllogisms as two ways of valid scientific cognition. Aristotle outlined a theory of science concerned with the empirical foundations ('επαγωγή). This theory overcame the previous views that saw the object of scientific cognition not in the changing material world but in "identity". Aristotle's syllogistics, although it continued some of what Plato said about division (διαίρεσις [diairesis]) was an original and lasting scientific contribution.

3. One of the most notable features of philosophical and scientific cognition, according to Aristotle, is its aporetic character whereby our knowledge is constantly increasing. The starting point in analysis, according to Aristotle, is an *aporia*, a particular state of mind where we are not so much wondering at the sight of a thing known (as in Plato) as we are posing questions on real states and formulating problems; the *aporia* is the beginning of our cognitive search and the process of sorting through knowledge. The process is called *diaporesis* (διαπορησις) and it allows us to investigate data "for" and "against" our hypotheses in scientific and historical terms. *Diaporesis* is ordered to *euporia*, which is the proper resolution of the problem. In the later development of our knowledge this *euporia* again becomes an *aporia*. The aporetic character of Aristotle's philosophy was reflected and creatively continued in the medieval theological *summas* and in university disputations (*quaestiones disputatae, quaestiones quodlibetales*).

Philosophical views. *Metaphysics*. Aristotle created above all the theory of act and potency as the two non-independent components of being. Real subjective potency is the reason for changes in beings. Act is the reason for the organization of beings and their capacity to be known. The form of a thing is the expression of act, and matter is the expression of its potency (form and matter). Aristotle used this theory to describe and explain changing reality, to refine and justify (negatively) the principle of non-contradiction, which is the basis for systematization and argumentation, and above all to defeat monism. He therefore accepted the pluralism of subsistent beings (substances) endowed with properties

(accidents). The nine accidents together with substance create ten categories. These categories are not only modes of predication but also modes of being. He regarded three accidents as the most important: quantity (ποσον [poson])—the property that organizes substance with respect to the arrangement and organization of matter; quality (ποιον [poion])—the property that makes apt the form of being; and relation (προς τι [pros ti])—the property that orders one being to another; he describes the other accidents as: temporal conditions (ποτε [pote]), spatial conditions (που [rou]), conditions of action (ποιειν [poiein]), passion (πασχειν [paschein]), arrangement (κεισθαι [keisthai]), and possession (ἔχειν [echein]); substance is the concrete individual being composed of matter and form (τοδε τι [tode ti]). The object of scientific cognition cannot be substance (as a concrete individual being), matter, concrete form, or the concrete composition of matter and form, because all these are subject to change. The object of scientific cognition is substance conceived in its primary sense as constituted by a concrete form insofar as this form is the foundation for the concept expressed in the definition. Substance in this sense is connected with intellect conceptual cognition and appears as το τι ἦν εἶναι [to ti en einai] (the object of metaphysics). It is expressed in a definition as general, as the so-called second substance (ᾠουσια δευτερα [ousia deutra]). Substances as independent beings are arranged according to the hierarchy of natural classes. The highest and most perfect substance is pure form (pure act). This is the Aristotelian god who is life itself and the self-thinking thought; the heavenly bodies are perfect substances and are internally unchanging sine they are composed of intellectual form and immaterial ether, which is the perfect element. Substances in the sublunary world as a result of their composition of matter and form are susceptible to internal change and act upon each other through their accidents. They are subject to substantial changes wherein the dynamism of being is expressed. The “ascending” sequence of changes from the first elements of matter, through plants, animals, and to man, is dependent also upon the action of the heavenly spheres. Aristotle accepts that all substances, both in the sublunary and the superlunary world, are joined by a common motion. He saw in motion a proof of the unity of the cosmos and of the existence of the first unmoved mover who is the “god”. If motion is conceived univocally, then the first unmoved mover who moves everything would entail a contradiction, and so Aristotle in his analysis of the motion that connects the first heaven and the “god” starts from a conception of physical motion and moves to a conception of metaphorical motion (motion toward an end), and the reason for efficient causation.

Aristotle discussed almost all of the most important questions of the philosophy of being; some of these questions (in keeping with the aporematic mode of cognition) are still discussed (especially in the conception of being), while his theories of substance, accidents, motion, act and potency, matter and form, unity, and especially the theory of non-contradiction are important achievements in the philosophy of being.

Ethics. Aristotle attempted to create a synthesis of eudaimonism and areteology. Aristotle saw in man’s personal happiness, which results from the possession of the good and the practice of the virtues, the final end of human action. He regarded knowledge as the highest good. Knowledge is the actualization of the highest human potentialities (act and potency). The most valuable knowledge concerns divine matters, and so it concerns matters of which philosophy informs us. Since few people would achieve this end, and only briefly, Aristotle accented the role of friendship since it enables people to consider the most important matters together among a circle of wise friends. He thought of virtue as the so-called golden mean, which stands at different distances from each of its extremes, in various domains of habitual refinements. Sometimes the golden mean is closer to the shortcoming (e.g., fortitude),

sometimes closer to the excess (e.g., temperance). Aristotle introduced modifications to Plato's theory of the four cardinal virtues. He called wisdom prudence. He used Heraclitus' views on phronetic cognition, i.e., the practical cognition that directs human action. He also provided a different rational justification for these virtues (following from his conception of man). The role of the virtues consists in the best refinement of human potentialities in relation to the best objects of action. Aristotle observed the social life and political states of Greece and constructed a theory of the state and moral conduct that was contrary to Plato's *a priori* conceptions. He called man a social being (ζῷον πολιτικόν [zoon politikon]). He explained that only in a natural society can man develop his potentialities. He regarded the family as the first form of social life and the first model of the other forms of society. He thought that the best political system would be one in which there is no dissonance between the individual and society, and where the state would help man be honest. He listed political systems (monarchy, aristocracy, and democracy) and showed at the same time that their deformation (tyranny, oligarchy, and ochlocracy) destroy the ability to practice the virtues. At the same time he presented a justification for the existence of slavery, saying that certain people because of a lack of intellectual and leadership abilities must be directed by others and should only perform physical functions as ordered.

Philosophy of Nature. Aristotle is the author of a definition of motion. Motion is central to his system and is described as “the act of a being which is in potency”. In principle he accepted the physical views of the Ionian philosophers (the Ionian philosophical school), esp. Anaximander. As a naturalist he was interested in zoology, physiology, embryology, botany, etc., and many of his observations have retained their value to this day. Aristotle joined his treatise on the soul to the philosophy of nature. In that treatise he teaches that man is a hylemorphic being (hylemorphism), composed of body and soul (being the form and first act of an organized physical body—ἔντελεχεια [entelecheia]). The body and soul are not capable of existing apart from each other since man is a synthesis of the two. Man has one soul, which is the form of his body. The soul acts by its own powers or faculties: vegetative, locomotive, sensual or cognitive, among which he listed the external senses that are in direct contact with the external world (touch, taste, smell, hearing, vision), and internal senses which are in contact with the world through the external senses (the common sense, imagination, the sensory estimative power, memory). Aristotle assigned a special role to imagination and memory. They are necessary for intellectual conceptual cognition, which engages the active intellect (νοῦς ποιῶν [nous poioun]). The active or agent intellect is separate from matter. It is difficult to establish whether Aristotle regarded the active intellect as a faculty and power of man, or as a deity that acts upon the human imagination and lifts it to intellectual life, or whether the active intellect becomes, or is merely joined with, the possible intellect (νοῦς πασχών [nous paschon]). We cannot determine whether Aristotle conceived of man as a mortal or as an immortal being.

In emphasizing the value of intellectual life, Aristotle reduced all the domains of culture to knowledge. This knowledge may be purely theoretical and scientific (ordered to the truth as the agreement of the intellect with things), or practical and phronetic (ordered to the good), or again poetic and productive (ordered to beauty in a broad sense). He regarded art as an imitation of beauty; reality perceived in informative cognition is transformed in poetic cognition in view of selected criteria (beauty, sublimity, harmony, need, etc.); art (esp., the profound experience of tragedy) purifies the human soul and improves it (καθάρσις [katharsis]).

Aristotle was also the creator of logic, esp., the theory of names, propositions, scientific knowledge, non-logical argumentation, and syllogistics. Aristotle's works are a first-rate source of information on the basic questions of European culture. Aristotle's work became even more significant when Aristotelianism was received into Christian thought.

H. Bonitz, *Aristotelische Studien*, I–IV, W 1862–1867; J. Łukasiewicz, *Zasada sprzeczności u Arystotelesa* [The principle of contradiction in Aristotle], Kr 1910; F. Brentano, *Aristoteles Lehre vom Ursprung des menschlichen Geistes*, L 1911; idem, *Aristoteles und seine Weltanschauung*, L 1911; A. Goedeckemeyer, *Die Gliederung der aristotelischen Philosophie*, Hl 1912; O. Hamelin, *Le système d'Aristote*, P 1920; W. Jaeger, *Aristoteles Grundlegung einer Geschichte seiner Entwicklung*, B 1923; C. Lalo, *Aristote*, P 1923; W. D. Ross, *Aristotle*, Lo 1923, NY 1964⁵; J. Burnet, *Aristotle*, Lo 1924; M. D. Roland-Gosselin, *Aristote*, P 1928; R. Mugnier, *La théorie du Premier Moteur et l'évolution de pensée aristotelicienne*, P 1930; J. Salamucha, *Pojęcie dedukcji u Arystotelesa i Źw. Tomasza z Akwinu* [The concept of deduction in Aristotle and St. Thomas Aquinas], Wwa 1930; P. Siwek, *La psychophysique humaine d'après Aristote*, P 1930; G. R. S. Mure, *Aristotle*, Ox 1932; H. Maier, *Die Syllogistik des Aristoteles*, I–III, L 1936; N. Hartmann, *Der megarische und aristotelische Möglichkeitsbegriff*, B 1937; A. Korcik, *Teoria konwersji zdań asertorycznych u Arystotelesa w świetle teorii dedukcji* [Theory of the conversion of assertoric propositions in Aristotle in light of the theory of deduction], WI 1937; C. Arpe, *Das ti en einai bei Aristoteles*, H 1938; J.M. Le Blond, *Logique et méthode chez Aristote*, P 1939; L. Robin, *Aristotle*, p 1944; A. Cresson, *Aristotle, sa vie, son oeuvre, avec un exposé de sa philosophie*, P 1946, 1963⁵; A. Korcik, *Teoria sylogizmu zdań asertorycznych Arystotelesa na tle logiki tradycyjnej* [Theory of the syllogism of assertoric propositions of Aristotle upon the background of traditional logic], Lb 1948; P. Wilpert, *Zwei aristotelische Frühschriften über die Ideenlehre*, Rb 1949; J. de Tonquédec, *Questions de cosmologie et de physique chez Aristote et Saint-Thomas. Le système du mode, les théories de la lumière et de la couleur; la théorie de la mesure*, Pd 1950; L. M. Bocheński, *Non-analytical Laws and Rules in Aristotle*, Mi 1951; P. Mouraux, *Les listes anciennes des ouvrages d'Aristote*, Lv 1951; J. Owens, *The Doctrine of Being in the Aristotelian Metaphysics*, Tor 1951, 1963²; D. J. Allan, *The Philosophy of Aristotle*, Lo 1952, 1957²; J. A. van der Meulen, *Aristoteles*, Meisenheim 1952; O. Hamelin, *La théorie de l'intellect d'après Aristote et ses commentateurs*, P 1953; A. Mansion, *L'immortalité de l'âme et de l'intellect d'après Aristote*, Lv 1953; S. Mansion, *Les apories de la métaphysique aristotélicienne*, in: *Autour d'Aristote*, Lv 1955, 141–179; W. Brocker, *Aristoteles*, F 1957, 1964³; J. Düring, *Aristotle in the Ancient Biographical Tradition*, Gt 1957; J. Ambühl, *Das Objekt der Metaphysik des Aristoteles*, Fr 1958; T. Ando, *Aristotle's Theory of Practical Cognition*, Kyoto 1958; M. Jaworski, *Arystotelesowska i tomistyczna teoria przyczyny sprawczej na tle pojęcia bytu* [Aristotelian and Thomistic theory of the efficient cause upon the background of the concept of being], Lb 1958; J. Łukasiewicz, *Aristotle's Syllogistic*, Ox 1958; A. Mansion, *Philosophie première, philosophie seconde et métaphysique chez Aristote*, RPOL 50 (1958), 165–227; I. Düring, *Aristotle and Plato in the Mid- Fourth Century*, Gö 1960; J. H. Randall, *Aristotle*, NY 1960; V. Décarie, *L'objet de la métaphysique selon Aristote*, P 1961; P. Aubenque, *Le problème de l'être chez Aristote. Essai sur la problématique aristotélicienne*, P 1962, 1967², Krapiec, Dz [Works] IV; J. Moreau, *Aristote et son école*, P 1962; P. Aubenque, *La métaphysique d'Aristote*, P 1963; J. Kalinowski, *Au carrefour des métaphysiques. Pluralité des vues et indéterminations dans la théorie de la philosophie d'Aristote*, RSPT 47 (1963), 545–570; Krapiec Dz [Works] V; C. W. Schute, *The Psychology of Aristotle*, NY 1964; A. Achmanow, *Logika Arystotelesa* [The logic of Aristotle], Wwa 1965; R. McKeon,

Introduction to Aristotle, NY 1965; P. Siwek, *Le "De anima" d'Aristote dans les manuscrits grecs*, R 1965; J. Düring, *Aristoteles Darstellung und Interpretation seines Denkens*, Hei 1966; M. A. Krapiec, T. A. Źeleźnik, *Arystotelesowa koncepcja substancji* [Aristotle's conception of substance], Lb 1966; A. Stigen, *The Structure of Aristotle's Thought. An Introduction to the Study of Aristotle's Writings*, Os 1966; J. Vuillemin, *De la logique à la théologie. Cinq études sur Aristote*, P 1967; W. F. R. Hardie, *Aristotle's Ethical Theory*, Lo 1968; J. D. Monan, *Moral Knowledge and Its Methodology in Aristotle*, Lo 1968; T. Kwiatkowski, *Poznanie naukowe u Arystotelesowa* [Scientific cognition in Aristotle], Wwa 1969; *Metaphysik und Theologie des Aristoteles*, Da 1969; F. E. Cranz, *A Bibliography of Aristotle's Editions*, Baden-Baden 1971, 1984²; F. Wiplinger, *Physis und Logos. Zum Körperphänomen in seiner Bedeutung für den Ursprung der Metaphysik bei Aristoteles*, Fr 1971; *Ethik und Politik des Aristoteles*, Da 1972; *Logik und Erkenntnislehre des Aristoteles*, Da 1972; J. Barnes, *Aristotle*, Ox 1982; J. Dudley, *Gott und Theorie bei Aristoteles. Die metaphysische Grundlage der Nikomachischen Ethik*, F 1982; S. Panagiotou, *Justice, Law and Method in Plato and Aristotle*, Edmonton 1987; G. Brakas, *Aristotle's Concept of the Universal*, Hi 1988; T. Irvin, *Aristotle's First Principles*, Ox 1988; G. Freundhal, *Aristotle's Theory of Material Substance*, Ox 1995; L. Spellman, *Substance and Separation in Aristotle*, C 1995.

Mieczysław A. Krapiec