## The Man and His Work

Pantes anthrôpoi tou eidenai oregontai physei: "all humans strive for knowledge by nature." The opening sentence of one of the most famous books in Western civilization, Aristotle's *Metaphysics*, explicitly speaks about man and knowledge and implicitly about its author as well. As far as the anthropological claim—a natural craving for knowledge—applies, Aristotle is not only an exceptional thinker, but also a great human being.

## 1.1 THE MAN

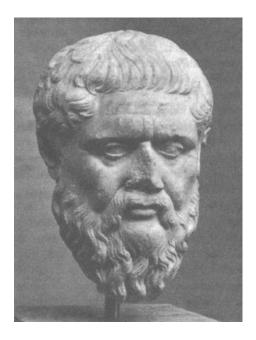
It is surprising that we have only a very general idea of Aristotle's personality and biography. The scarce evidence consists of the *Testament*, various letters and poems, as well as honorary decrees of Stagira, Delphi, and Athens. Ancient biographies, on the other hand, can only be trusted to a limited extent. Compiled generations after his lifetime, some have pro-Aristotelian, others anti-Aristotelian bias. The best-known text—in Diogenes Laertius's *Lives and Opinions of Famous Philosophers* (220 C.E. ch. VI)—combines fact and, not always benevolent, fiction (cf. Düring 1957). Thus, he says about Aristotle's physical appearance: "He spoke with a lisp and he also had weak legs and small eyes, but he dressed elegantly and was conspicuous by his use of rings and his hair-style."

It cannot be ascertained whether Aristotle really was a bit of a dandy, but the following is more or less certain: his lifetime coincided with the period in which a form of society common to many Greeks, the free city-state, lost its freedom. Aristotle experienced the Athenian and Theban defeat against Philip II at Chaeronea (338 B.C.E.). He was also a contemporary of Philip's son, Alexander the Great. However, a long time had passed since the Periclean age (443–429), the years when Athens was both politically and culturally in a position of hegemony, when artists such as Ictinus or Phidias created the buildings on the Acropolis, when Sophocles wrote his tragedies, for example *Antigone* and *Oedipus the King*, and philosophers such as Anaxagoras and Protagoras were active in Athens.

Aristotle was born in 384 B.C.E. in Stagira (Starro), a small city-state in northeastern Greece. Since, unlike Plato, he was not a scion of the Athenian high aristocracy and not even an Athenian citizen, his status in Athens was that

of a *metoikos* (alien resident), a foreigner with a "permit of residence," but without any political rights. Nevertheless, he was not a nobody. Born to a renowned family—his father Nicomachus was royal physician at the Macedonian court—Aristotle was given an excellent education, which was supervised by his warden after his father's early death. In 367 B.C.E., possibly because of tensions at the royal court, the seventeen-year-old Aristotle took himself to Athens, the center of Greek culture, in order to study with Plato. Plato's school, the Academy, was much more than just a public "gymnasium"; it was the intellectual Mecca for the scientists and philosophers of the time, an international meeting point and a model of the unity of teaching and research, in a way in which it has hardly ever been achieved again.

During a period of twenty years, his "first sojourn in Athens" (367–347), Aristotle familiarized himself with the questions we know from Plato's dialogues,



PLATO. Roman copy (from the reign of Tiberius) of a portrait statue made in the middle of the fourth century B.C.E. (Munich, Glyptothek)

including the late ones. At the same time he studied with members of the Academy such as Speusippus, Xenocrates, and Eudoxus of Cnidus. However, he did not remain a "disciple" for long: through confrontation with Plato and his colleagues he soon developed his own position. We do not know of any road-to-Damascus experience, any sudden enlightenment that turned the follower of Plato into his critic. Nor do we hear of a philosophical turning point by means of which one could contrast a late Aristotle, or Aristotle II, with an early Aristotle, or Aristotle I. In these aspects, Aristotle's intellectual biography appears remarkably straightforward and downright matter-of-fact.

During his first stay in Athens, the philosopher began to give lectures in a lecture hall provided with a blackboard, various scientific instruments, and two wall paintings, as well as astronomical tables (*Int.* 13, 22a22; *EN* II 7, 1107a33; *EE* II 3, 1220b37; *APr.* I 27, 43a35; cf. Jackson 1920). It was during this period that he produced copious collections of data, especially the first drafts on natural philosophy ("physics"), fundamental philosophy ("metaphysics"), ethics, politics, and rhetoric. It is a matter of controversy whether the writings on logic and scientific theory later combined in the *Organon*, as well as the *Poetics*, were also written during that time.

Plato, the founder and head of the Academy, was forty-five years Aristotle's senior, roughly the same age difference as that between Socrates and Plato. We have no reliable information about the relationship between "student" and "teacher," but presumably Aristotle's feelings toward Plato were similar to the latter's toward Homer. Thus, his criticism of Plato in the *Ethics* (I 4, 1096a11–17) opens almost like Plato's criticism of Homer and the poets in the Republic (X, 595b; cf. Phaidon 91b f., concerning Socrates): "Of course such an examination is contrary to us, given that those who introduced those ideas were [our] friends. However, . . . for the preservation of truth, we would seem to be obliged not to spare our own sentiments, since we are philosophers . . . "This is the basis of the later dictum amicus Plato, magis amica veritas, which means, loosely translated: "I love Plato, but I love truth even more." Socrates is treated with a similar combination of respect and criticism (e.g., Metaph. XIII 4, 1078b17-31; Pol. II 6, 1265b10-13). We may consider ourselves lucky that Plato was Socrates' pupil and Aristotle was Plato's, that is, that twice in a row an outstanding philosopher studied with another outstanding philosopher, developing his own views against the background of the other's well-considered views.

Aristotle did not interfere in matters of the *polis*, not least because he was a *metoikos*, but he is the founder of politics as an autonomous science. Nevertheless, he cannot avoid political practice entirely: he acted as a mediator between Macedon and various Greek cities, a task for which the "citizens of Athens" thanked him in an inscription (see Düring 1957, 215). However, sceptical about the—finally unsuccessful—political vocation of the philosopher proclaimed by Plato, he did not consider such missions the "natural" extension of political philosophy.

Most of the time, Aristotle concentrated on his studies, his own research, and independent teaching. If one is to believe the evidence on the subject, he was

a speaker endowed with incisive wit and gave clear and captivating lectures. A diligent reader, but also a collector and analytic, he is the prototype of the learned professor—not, however, in his impractical guise, but one who is open toward the world, even versed in its ways. His urbanity extended to intellectual matters: Aristotle familiarized himself not only with the views of his own "school," that is, Plato's and the Academy's, but also with the works of the Sophists, the Pre-Socratics, and the medical writers, as well as with Greek lyric, epic, and drama, and not least with the constitutions known at the time.

After Plato's death in 347, Plato's nephew and heir Speusippus (410–339) was made head of the Academy. It was not vexation, though, that made the now thirty-eight-year-old philosopher leave Athens, but political danger, given that Aristotle was considered a friend of the Macedonians, who were threatening the freedom of Greece. Since the political situation required further displacements, his life did not run as quietly as one would expect given the size of his œuvre. Aristotle's ability to keep to his lifework, that is, research, even under adverse circumstances, is astonishing.

Together with other members of the Academy, he spent the beginning of the following twelve "years of travel" (347–335/4) with a former fellow-student, Hermias of Atarneus. Generously provided with all the necessities by this ruler of the city of Assus in Asia Minor, Aristotle was free to devote himself to philosophy and the sciences. It was presumably in Assus that he met his later collaborator and friend, Theophrastus of Eresus (c. 370–288). The philosopher married Pythias, Hermias's sister (or niece), with whom he had a daughter of the same name, followed by a son, Nicomachus. It was probably in the years spent away from Athens that Aristotle collected the wealth of zoological material that, together with the research related to it, would make his reputation as an outstanding zoologist.

After Hermias's death in 345, he moved on to Mytilene on Lesbos. Two years later, upon the request of King Philip, he took charge of the education of the thirteen-year-old Alexander. It is an extraordinary situation that one of the greatest philosophers should take on the responsibility for one who was to become one of the greatest rulers. Nevertheless, Aristotle does not mention his unusual student anywhere in his works, although he is said to have written a text with the title Alexander, or On the Colonies, and, more importantly, to have opened an access to Greek culture for his student. For example, he had a copy made of Homer's *Iliad*, which Alexander, an admirer of its protagonist, Achilles, took with him on his campaigns. Aristotle also seems to be partly responsible for the fact that Alexander took Greek scientists along in order to pursue cultural and scientific interests as well as military aims. It would seem, however, that a letter to Alexander, preserved only in Arabic, is spurious (Stein 1968): it is one of the oldest princes' codes, containing advice to Alexander on his behavior toward his subjects, the foundation of Greek cities, and the question whether the Persian nobility should be relocated by force. It culminates in the vision of a world state, a kosmo-polis (see ch. 15. 3).



DETAIL (ALEXANDER) OF A BATTLE BETWEEN

ALEXANDER THE GREAT AND DARIUS. Pompei, House of the Faun;

probably based on an original by Philoxenus of Eritrea

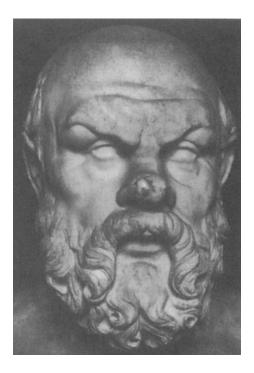
Toward the end of his "years of travel," Aristotle accepted a commission for Delphi to compile a list of victors of the Pythian Games. The fact that he was given this honorable commission demonstrates his scientific renown—and his acceptance of it documents once again his far-reaching intellectual curiosity in adding historiography to his other lines of research. He was awarded a decree of honor for his achievement which was, however, revoked in the anti-Macedonian rebellion of 323.

After Greek resistance against Macedonia had been broken by the destruction of Thebes (335), Aristotle, by then almost fifty, returned to the place of his earlier studies. This was the beginning of the "second sojourn in Athens" (335/4–322). Three or four years earlier Xenocrates—a philosopher far inferior to Aristotle in knowledge, acumen, and intellectual flexibility—had been elected leader of the Academy. It cannot be proved that this election led to the split from the Academy, but it is not implausible. In any case, during the following twelve years Aristotle worked at the Lyceum (*Lykeion*) near Mount Lycabettus, a gymnasium open to everyone. Because of its architecture it is also called *Peripatos*, which originally meant "walk," but later came to mean "roofed gallery" or "hall for strolls and discussions."

It remains uncertain whether the circle that formed around Aristotle there consolidated into a firm unit for teaching and research, into a working team. What certainly did not develop is something like a university with a fixed curriculum,

exams, and academic degrees. Not even a formal foundation of the school took place, since, as an alien, Aristotle was not entitled to acquire property. In "nationalist" Athens he always remained a suspect stranger, and just one foreign scientist among many as far as Athenian intellectual life is concerned. Aristotle brought his library, which was of extraordinary size for his times, to the Lyceum, as well as a considerable amount of scientific instruments. In the course of public lectures—the philosopher kept up the unity of teaching and research familiar from the Academy—he revised earlier drafts of his thoughts and elaborated a mature version of his didactic writings. He also evaluated his collections of data. Not least, he organized his research by delegating certain areas of research to friends and colleagues, such as Theophrastus, Eudemus of Rhodes, and Meno.

After Alexander's death in June 323, Aristotle left Athens again. Although his political philosophy was, if anything, contrary to Macedonian interests, he was nevertheless afraid of becoming a victim of anti-Macedonian intrigue. He had also been charged with impiety (asebeia), the same accusation that had brought about Socrates' death. Hinting at the fate of that "best, wisest and most just man among those alive at the time" (Plato, *Phaidon* 118a), he is said to have justified his

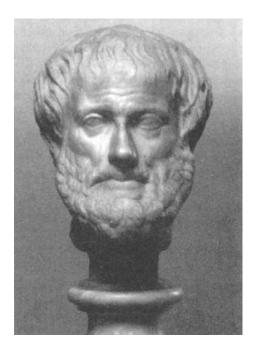


Socrates. Copy of a Hellenestic bust (Rome, Villa Albani)

departure from the city by saying that he would not allow the Athenians to sin against philosophy for a second time (Aelian, *Varia historia* III 36). Aristotle retreated to his mother's house in Chalcis on Euboea and shortly thereafter, in October 322, died of an unspecified illness at the age of sixty-two.

In the *Testament* (Diogenes Laertius, ch. V 1, 11–16) we encounter a considerate man who cares for the well-being of his family. The Macedonian general Antipater, Alexander's governor in Greece, is appointed as executor, Theophrastus as Aristotle's successor at the Lyceum. Aristotle expresses his wish to be buried next to his wife Pythias, and makes arrangements for relatives and servants.

We have portrait busts of Aristotle made at the time of the Roman Empire but based on a Greek original, presumably one made by Lysippus, court sculptor to Alexander the Great, at his master's command. They show Aristotle, aged about sixty, with a beard, wide mouth, strong lower lip and—as the iconographic expression of his outstanding intelligence and powers of concentration—a conspicuously protruding forehead. In the biographical tradition of antiquity one finds the epithets "the reader" (anagnôstês: Vita Marciana 6) and "the spirit of (scholarly) discussion" (nous tês diatribês: Philoponus, De aeternitate mundi VI 27).



Aristotle. Roman copy based on a fourth-century B.C.E. statue (Vienna, Kunsthistorisches Museum)

## 1.2 THE WORK

Diogenes' list of Aristotelian works mentions 146 titles, but this does not include two of the works considered most important by us, the *Metaphysics* and the *Nicomachean Ethics*. If one believes the author's count of 445,270 lines and adds the two treatises not mentioned by him, the result is one of almost incredible productivity (even considering the quantity only), an œuvre the equivalent of forty-five volumes of about three hundred pages each. As Aristotle's works were not protected as carefully as Plato's, it seems that less than one-quarter has survived, still amounting to an impressive ten volumes. (On the ancient lists of Aristotle's works, see Moraux 1951.)

Aristotle's writings fall into three genres. Some, stylistically elaborate, texts address educated laymen. Since the audience were outside (*exô* in Greek) the school, these writings are called exoteric or, as they also addressed a larger circle (kyklos), encyclical writings. Among these are the Protreptikos, a hortatory text for philosophy, and also many dialogues, such as On Philosophy, On Justice, and On the Poets. Apart from these "popular" writings there are "professional" texts, the pragmateiai or treatises, also called esoteric writings, because they address students and colleagues "inside" (Greek: esô) the school. Surprisingly these only treat some central topics very briefly. This can be explained by the fact that Aristotle has already dealt with these topics in his exoteric writings and presupposes a knowledge of them these writings were, after all, available in the book trade. The third genre consists of collections of research material—about the tenets of earlier philosophers, research into nature (in particular zoology), about politics, proverbs, Homeric questions, etc. The collection of performance dates of the "tragedy competitions," the so-called Didaskalia, is lost, and of the most famous collection, that of 158 Greek constitutions, we have only the *Constitution of Athens*.

When comparing the extant works with Plato's, one must not forget that in Aristotle's case all writings of specific literary value, apart from a few fragments, were already lost in late antiquity. In Plato's case, however, what we know are specifically the works of literature, namely, the dialogues. One could blame this state of transmission entirely on the vicissitudes of history, but it may also be the case that Aristotle's dialogues were not transmitted because they did not hold their ground against this outstanding model. Cicero, who is of the greatest importance for the transmission of Greek culture, appears to be following the Aristotelian dialogues particularly closely. Nevertheless, it cannot be denied that, apart from Aristotle and Cicero, attempts to imitate Plato's art of the dialogue in philosophy—e.g., in Augustine, Abelard, Ockham, Galileo, Hume, or Leibniz—all seem to fall short of Plato's standards.

Matters are different with the writings intended for school use. At an intermediate level between lecture transcripts and structurally as well as stylistically refined works, they prepare the way for another textual genre developed by Aristotle, that is, the treatise, which can be "imitated" without problems and still is the form in use for science and philosophy. As far as we know, Aristotle wrote down his most essential thoughts in this form. This could result in a third, internal, reason

for the state of transmission: there was no longer a philosophical need for transmitting the dialogues as well. Nevertheless, the loss of the dialogues is regrettable. Firstly, it would be interesting to know which thoughts Aristotle intended to make accessible to a wider audience. Secondly, one would like to get to know their literary qualities, given that Cicero praises their "golden stream of speech" (*flumen orationis aureum: Academica* II 119), by which he means the rhythmically and syntactically refined style of an only slightly elevated colloquial language.

It would seem that of the "treatises" only the *Historia animalium*, the *Zoology*, is conceived for a reading, rather than listening, audience. The *Prior Analytics* and the *Nicomachean Ethics*, too, are carefully developed, without the leaps of thought or mere hints that can be found in other didactic writings. However, the majority of Aristotle's treatises are notebooks or either lecture notes or transcripts of lectures, not intended for publication. Presumably most of them are revised versions of a first draft, often made by Aristotle himself, but partly by Theophrastus and other pupils. Therefore, one can expect various layers of text, but also some reorganizing, excurses, annotations, and references. It appears, though, that Aristotle made final, revised versions of some texts, not only the *Nicomachean Ethics* but also the *Categories*, the *Topics*, and the *Analytics*. It is odd that there are several texts on some of the topics, in particular on ethics, on which we have the *Nicomachean Ethics*, the *Eudemian Ethics*, and the *Great Ethics* (the *Magna Moralia*, whose authenticity is disputed).

With great acumen and no less polemic spirit, learned philologists—called to the fore by the state of transmission of the didactic writings—have suggested a plethora of attempted datings, hypotheses of development, and textual emendations (conjectures). However, their work always involves the risk of losing sight of the actual philosophical content, and in spite of all this erudition the chronology of the works still remains disputed. Only the following is generally accepted: The *Topics*, one of the oldest treatises, was written before both the *Categories* and the *Prior Analytics*; the *Rhetoric* and—perhaps—the *Poetics* are both early works; the writings on biology and metaphysics refer to an early form of the logic and theory of proof (contained in the *Topics*), while the *Analytics* present a relatively mature elaboration of these. The *De generatione animalium* is the latest work on biology; as far as ontology is concerned, the *Categories* precede the *Metaphysics*, and within practical philosophy the *Nicomachean Ethics* must be written after the *Politics*.

Given that Aristotle only has a limited range of models at his disposal, he can be considered one of the creators of a sober scientific prose style. He is also the originator of a multitude of technical terms that, by way of their Latin translation, have become a fixed part of philosophical terminology. It has to be added, though, that the ensuing ossification has nothing to do with him. Many of his technical terms are originally questions: among the categories we find *til* "what," *posonl* "how big," *poionl* "of what kind," or *poul* "where"; among the principles of motion, he mentions "made from what," "what," "whence," and "for the sake of what." In any case, Aristotle does not aim at an artificial language of philosophy, but at the specification, differentiation, and occasionally the development of expressions familiar

from everyday language. That way he achieves a diction that is flexible and thoroughly unscholastic.

Usually Aristotle writes in a style that is clear, concise, to the point, and rich in variety—apart from some formulaic expressions. Occasionally, we even find the style praised by Cicero, for example in parts of *Metaphysics* XII, of the *Politics*, and in chapter I 5 of the treatise *On the Parts of Animals* (644b22–645a36). In general, however, the texts are dense and often elliptical, as one would expect from lecture notes, and interwoven with interpolations. They also contain abrupt transitions, and some connections remain obscure. It may be possible to read other philosophers by the section, or even by the chapter, but a precise thinker such as Aristotle needs to be studied line by line, even word by word. One needs to read, analyze, and reread, and to be able to follow his line of thought in such a way as to understand an argument that is only hinted at and to bring to philosophical life some "bone-dry" passages by illustration and by further consideration of their relevance ("What does this mean?"). However, those who confront this challenge will find access to a philosophy almost unequalled when it comes to thematic range, phenomenal wealth, conceptual acuity, and speculative power.

Unfortunately, most of this extraordinary œuvre, with the exception of the popular writings, was lost soon after Aristotle's death. The first meticulous edition of his didactic writings was not made until three centuries later, in Rome. According to ancient tradition, the editor, Andronicus of Rhodes, relied on original manuscripts, which had reached Rome by tortuous paths (see ch. 17. 1). This edition is the basis for all subsequent Aristotelian tradition, and it is essentially identical with our extant *Corpus Aristotelicum*. Through Andronicus's edition Aristotle's didactic writings quickly became widely known and commented upon, in the circle of Andronicus as well as later, in particular from the second century C.E. onward. It must not be forgotten, though, that unlike the example of Plato, there was no continual exegetic tradition for Aristotle; the first extant commentaries date to Imperial Rome.

The history of the textual tradition also has another, serious consequence: the systematic arrangement and the subdivision of the texts into four groups are not the work of the author himself, but that of his editor. Led by the idea of a philosophical system structured in a logical way, Andronicus places (1) the writings on logic and theory of science, considered as propaedeutic, at the beginning. Surprisingly, (2) the *Ethics*, the *Politics*, the *Rhetoric*, and the *Poetics* follow. Only then (3) come the writings on natural philosophy (including psychology). The final section (4) consists of texts on first philosophy, which are called "meta-physics" because of their position after (Greek: *meta*) physics, meaning, natural philosophy. On the other hand, the arrangement corresponds roughly to the ancient standard subdivision of logic—ethics—physics, which was already available to Aristotle, albeit in the inverse order (cf. *Top.* I 14, 105b20f.). The fact that, later, Andronicus's second section, ethics, was placed last, has remained there since, and is often disregarded, reflects the low esteem of practical compared to theoretical philosophy prevalent among some philosophers, although not shared by Aristotle.

Even after this rearrangement Andronicus's idea of a system was kept alive. Not infrequently it is the basis for a rigid Aristotelianism determining interpretation until a few generations ago, despite the epochal editions and investigations of the fifteenth and then the nineteenth centuries. The systemic idea was finally refuted by the interpretation based on historical development that originated in two monographs (1912 and 1955²) by the philologist Werner Jaeger. Inspired by nineteenth-century historicism, Jaeger sees in Aristotle's œuvre the result of his intellectual development, in which three phases can be clearly distinguished: years of study (*Lehrjahre*), years of travel (*Wanderjahre*), and a period of mastery (*Meisterschaft*). In the intellectual adolescence of his first sojourn in Athens, the "Academy period"—in Jaeger's construct—the philosopher represented Platonic positions and was an "idealist." In the time he spends away from Athens, the *Wanderjahre*, he progressively turned away from this position, and finally, in the *Meisterzeit* after his return to Athens, he pursued phenomenologically and empirically orientated research stripped of all speculation. In brief: idealist metaphysics is replaced by realism and empiricism.

The same model of interpretation has been used on Plato by K. F. Hermann (Geschichte und System der Platonischen Philosophie, Heidelberg 1839). It can even be traced back to the third century C.E. and the philosopher, and commentator of Aristotle, Porphyry. The basic idea is not so new, then. In any case, among philologists nowadays there is "a broad consensus that Jaeger's results are to be considered erroneous in their overall conception as well as in many details" (Flashar 1983, 177). Choosing biology and, within it, the classification of the animal kingdom as an example, one can see, on the one hand, how an increasingly complex "system" saturated in experience develops in the course of time, but, on the other hand, there is no question of empiricism in our modern sense, given the element of teleology. From the onset, the uncritical use of ancient biographical material and fragments, as well as the scheme of a linear, almost mechanical development, are questionable. Furthermore, one has to credit the philosopher with a development that is not determined by his emotional state vis-à-vis his teacher, but relies on reasoned insight. Anyway, the idea of development adds so little to our philosophical understanding that one feels drawn to the opposite position, expressed in a lecture by Heidegger in this pithy sentence: "He was born in such and such a year, he worked and died" ("Grundbegriffe der aristotelischen Philosophie," Gesamtausgabe Bd. 18).