objective; measured by the pre-sophistic standard, it emphasizes the rights of the subject.

Cf. Siebeck: Ueber Sokrates Verhältniss zur Sophistik. Halle, 1873. his Untersuchungen zur Philosophie der Griechen.)

2. These two determinations, that all truth is contained in the subject, but only in so far as it is universal, are expressed in the method of Socrates in this way, that on the one hand all learning is regarded as mere recollection, all teaching as the delivering of the learner, or as eliciting knowledge from him, while, on the other, it is maintained that it is only in thinking in common, i.e. in conversing, in which the merely individual views neutralize one another, that truth is found. Hence the ignorance of Socrates, which continually induces him to put questions, is not a jest (repeated, too, for fifty years!), but perfectly serious. The dialogue is as necessarily the form of his philosophizing, as the monologue was that of the Sophists, who idolized opinion and denied the possibility of mutual explanations. The φιλόλογος or φιλέταιρος, who, himself unfruitful, cannot produce but only deliver others, seeks for what is brought out of other men, by which he gives up his isolation; i.e. he seeks knowledge, and not opinions. Hence Aristotle rightly states as the peculiarity of the Socratic dialogue, that its method is inductive, and its aim is the definition of a conception. He sets out from the particular instance, which, it is shown, cannot be maintained, and thus, especially by his famous "irony," produces a feeling of perplexity, in consequence of which one-sided determinations are given up, and in the most favourable case the universal and generic conception is found. This, together with the specific differences found in the course of the inquiry, gives the concrete conceptions and definite definitions which Socrates wishes to put in the place of the views from which the argument started. Where, as is often the case, there is no positive result, but only the negative one of perplexity, it may come about that the partner in the dialogue feels as though he had been mocked, and thinks that Socrates wished merely to confuse him, while knowing better himself. He is mistaken, as the Sceptics are mistaken in accounting Socrates one of their number. For the knowledge which they deny is the guiding star of his inquiries.

3. If from the method of his investigations we proceed to VOL. I.

their content, we find that with Socrates, as with Anaxagoras and the Sophists, the wherefore is the chief question. no contradiction of this assertion, that, according to the best authorities, he always inquired τί ἕκαστον είη; for it is just the purpose of a thing that tells us what it really is, and also what is its reason. Hence Socrates everywhere requires that the purpose should be considered: he blames Anaxagoras for giving only the reasons of natural phenomena; and when he himself considers nature, as in the conversation with Aristodemus reported by Xenophon (which, however, may be of a later date), he does so quite teleologically. Connected with his contemplation of nature, are his utterances as to the universal reason which governs and orders all things, and the connection of which with the vovs of Anaxagoras is obvious. On the whole, however, he is little interested in nature; trees and fields teach him nothing, whereas men do; and hence his chief problem is, What is the purpose of man's existence and action? Here again, just as he had opposed knowledge to the opinion of the Sophists, he opposes to that which is an end only for particular individuals, i.e. the useful, that which is an end in and for itself, viz., the Good. Philosophy, which until then had been successively physics and logic, either in the form of mathematics or of metaphysics, and lastly both, thereby becomes ethics; and the heir of Socrates can enunciate what since then has remained an indisputable axiom, that logic, physics, and ethics are the essential divisions of philosophy. The Good is regarded by Socrates as being the object of knowledge as well as the content of action. For just as he considers it inexplicable to know what is good and not to do it, so he declares it impossible to do what is good without insight. Thus knowledge is one with the essence of virtue to such an extent, that he expressly says that no one can knowingly be bad, and that it is preferable to go wrong knowingly than unknowingly. Hence he is continually repeating that virtue is ἐπιστήμη, and can be taught in so far as anything at all can be taught. His καλοκάγαθον, which coincides with happiness, is the Good willed and recognised as such. He no more regards a happy natural disposition as virtue, than he is satisfied with the discipline and morality which is based upon custom. On the contrary, he requires a morality which is conscious of the grounds of its action and can impart them to others; nor has any foreign

authority, or anything but a man's own insight, the right to determine what is good. The virtuous man has, as it were, made a contract with the laws of the State, and does not And though the emphasis thus laid on the insight of the individual has induced many to speak of the subjectivism of the Socratic ethics, and even of their sophistic character, it must yet not be overlooked that he always maintains with the same energy, as against the Sophists, who placed inclination above everything, that the Good consists in obedience to law, and in agreement not only with the written enactments but also with custom and usage. And he showed how seriously he interpreted his own precepts by dying in obedience to his country's laws. These two determinations are so completely united in his mind, that it is possible to say without any real contradiction, that Socrates, like the Sophists, only followed his own inclination; and again, that, in opposition to them, he made his country's laws his standard of conduct. For he never inclines to anything else than what Their voice is heard in the most subjective of they enjoin. all sensations, as a tingling in his ears.

4. If this subjective feeling filled with an objective content be called conscience, Socrates was the first to assert the principle of conscience. For conscience is that god or "dæmon" which every man hears within him, and which is the true measure of all things. But in Socrates it took such a form, that it connected itself with a warning presentiment, which kept him back by a peculiar "sign" from injurious but morally indifferent actions. The secure abandon which makes him so attractive, consists in his giving himself up wholly to his natural and moral genius: when Socrates consults Socrates, he obtains the best advice. It is true that, because his virtue is natural genius, he displays it more perfectly than he can describe it. When he does so, he always extols mastery of one's self (called sometimes εγκράτεια, sometimes σωφροσύνη), whether he defines it quite formally as the being by and with oneself, or calls it divine to have no wants, with a reference to the natural instincts, and requires of the sage that he should be the master and not the slave of pleasure. because all these are only various manifestations of σωφροσύνη. he emphasizes the fact that there is only one Good and one Virtue, and a single opposite of these, viz., ignorance, under which he includes both unconsciousness and uncertainty.

# § 65.

#### SOCRATES' FATE.

F. W. Forchhammer: Die Athener und Sokrates. Berl., 1837.

That a man's own conscience is to decide what is right and what is wrong, is an innovation from the point of view of ancient morality. And so long as this stands unshaken its representatives will not with nervous dread regard every new movement as dangerous. And again, so long as it is only stray foreigners who preach egotism, it does not much mat-But the case is different when discipline and morals are everywhere shaken, and at this very time the noblest son of one's own city announces a new wisdom. This elicits a reaction on the part of those who long for the good old times. Aristophanes shares these feelings to the extent of Philistinism; and hence, though he seems to have esteemed Socrates personally, he attacks his principle in the most violent way, and represents him to the people as the worst of the Sophists, teaching the worship of new gods (the clouds), and generally destroying the proper respect for parents, and more particularly as having made Alcibiades an ungrateful son of Athens. Upon this accusation, which was very seriously intended in spite of its comic form, there followed the legal accusation,and very characteristically it took place during the brief period of reaction under Thrasybulus, -which brought forward precisely the same charges. It is difficult to decide whether all the three accusers,—Meletus the poetaster, Lycon the rhetorician, and Anytus the leather-worker,—were merely prompted by feelings of personal vindictiveness, or whether the last was impelled by his zeal for the old times, which is known also from other sources. But we may be sure that the fact that his political opponents sat in judgment on him contributed to his condemnation. But it may also be explained on other grounds. For his defence on the charge of religious innovation, by putting his "dæmonic" sign on the same level with the oracles recognised by the State, really proves the correctness of the accusation; to say nothing of the fact, that many of his judges may have thought of what might not be mentioned, viz., that Socrates had disdained to be initiated in the Eleusinian mysteries, and thus not displayed the reverence for them cherished by every good Athenian; and that

it might perhaps be something more than an accident, that persons so closely connected with him as Euripides and Alcibiades, should respectively have indiscreetly profaned and even desecrated the mysteries. The second charge also is really admitted, when Socrates confesses, that where he recognised the proper vocation of the children better than their parents, he has instructed them accordingly. And lastly, however great and sublime Socrates may appear in claiming to be supported at the Prytaneum as the punishment he had deserved, it is sublimity in the modern sense, and explains the exasperation of the judges and the people. That this continued after his death, is proved by the fact that five years afterwards Xenophon found it necessary to oppose it by the defence con-The behaviour of Socrates after tained in his Memorabilia. his condemnation, the constancy with which he refused the flight which his friends had made secure, and lastly his death, the most sublime that any mere man has ever died,—all this has been preserved for all time in the wondrously beautiful description of Plato. Socrates drank the hemlock in April 399 B.C., Ol. 95. 1. His is a tragic figure because he perishes in the conflict between a new and higher principle with one that is obsolete, but supported by the right of long existence. His is a prophetic nature because his principle is that destined to sway the future.

Ritter and Preller, § 194-200.

§ 66.

Socrates put Knowledge and the Idea in the place of the subjective Opinion and the finite End idolized by the Sophists; his philosophy, being subjectivism as well as objectivism, is precisely, Idealism. But the Idea appears with him in its immediacy, as life, and idealism as Socrates himself, its incarnation. For this reason, the question of what is good, reduces itself to questioning his genius, knowledge of truth to the knowledge of self; and his opponents, like himself, identified him with his opinions. It was only possible to refute his philosophy by killing him. But it is only in his person that the two factors, the combination of which constitutes the Idea, interpenetrate each other: as soon as they leave the individuality of this genius in virtue, they fall apart. This happens also when he attempts to express his own interna

life. Then he sometimes speaks exactly like a Sophist, and says, e.g., that in some circumstances stealing, etc., is good for us, and therefore not to be censured; and at another time, just like an honest citizen of the good old times, who regards the laws and customs of his forefathers as sufficient to decide what is right and wrong. But the contradiction exists only outside himself, when he expresses himself, not within him; for since only that is advantageous for him which is demanded by law and custom, he can without danger seek his own advantage. And just as the elements combined within him are liberated when he utters them, so too they are liberated when he bequeaths the doctrines to his disciples and dies. When his individuality is taken away, the bond is gone which united the opposite sides, and the Socratic teaching falls apart into one-sided Socratic tendencies.

### FOURTH DIVISION.

## The Socratic Schools.

§ 67.

THE lesser Socratic schools attempt to conceive consciously what Socrates had been, and to answer the questions as to what the Good is, and what knowledge is, not merely as he did by a, "Come and see! Philosophize with me, and you shall find out!" They wish to formulate an answer in which the guiding principle is always, as the most important of this class of philosophers continually confesses—to learn from Socrates. This was necessary, and therefore it was an advance, all the more because Socrates himself had demanded that knowledge based upon reasons was everywhere to take the place of the immediate voice of genius (the sacred madness of the artist); and hence inspired Socratism also had to give way to the clearly conscious form it received after the process of reflection. It is true, indeed, that none of the schools succeed in grasping more than a single side of the Socratic character. But even this one-sidedness is the indispensable condition, and promotes the progress, of philosophy. For it brings to light a thing which also belongs to the self-knowledge of Socratism, viz., the extent to which it surpasses the content of previous points of view. Its author, the innovator, only knows that he

agrees with none of these, and that none satisfy him. But that his own point of view is not only different from, but higher than theirs, is shown by the demonstration that it attains to all they achieved, and still more. Thus the lesser Socratic schools show how much of the pre-Sophistic metaphysics and physics, and how many of the Sophistic doctrines, may be derived from the theoretic side of Socratism, and further illustrate how the Good of Socrates may be interpreted logically and physically, just as well as ethically. Their labours enabled the fully self-conscious Socratism to boast that it combined everything hitherto taught as to the reasons of existence, and to set up a system of ethics which can find room for logical, physical, and ethical virtues. Or, to put it more concretely; without the Megarians, Cyrenaics, and Cynics, no Plato was possible, and without Plato no Aristotle.

#### A.—THE MEGARIANS.

G. L. Spalding: Vindiciæ philosophorum Megaricorum tentantur, 1792. Deycks: De Megaricorum doctrina. Bonn, 1827. H. Ritter: Bemerkungen über die Megarische Schule. Rhein. Mus. ii., No. 3.

### § 68.

- 1. The founder of this school, Euclides, of Megara, or according to others, of Gela, had been initiated into the Eleatic doctrines before he attached himself devotedly to Socrates. When he began to teach at Megara, still in the life-time of Socrates, he not only zealously practised the dialectic of Zeno, but combined the Parmenidean doctrine of the One in a peculiar way with the ethics of Socrates. He was a friend of Plato, and is said to have written dialogues, some of which bore the same titles as those of Plato. They have not, however, come down to us. His successors seem to have used their dialectic in a very one-sided fashion, in order to confuse the ordinary conceptions, and were hence called dialecticians and eristics. Eubulides and Alexinus are mentioned as the inventors of new fallacies, Diodorus Cronus as having disputed the possibility of motion with novel arguments. Stilpo, however, seems to have devoted more attention to ethical questions. The doctrine of Phædo the Elean, whose school was called the Eretrian from the time of Menedemus, and died out about the same time as the Megarian, seems to have been closely akin to it.
- 2. The fact that Euclides made the Good his proper subject

of inquiry, and regards Virtue, insight, god, vovs, etc., as being merely different names for it, shows that he was a decided disciple of Socrates. When, however, he calls the Good the One, because its essence consists in its unity with itself, or in its unchangeableness, or also Being, because its opposite does not exist at all; when he himself probably, his followers certainly, try to prove its reality by polemics against the possibility of Becoming and of motion, we cannot blame Cicero for calling the Eleatics the original authors of the Megarian doctrine. Moreover, such a fusion of Socratism with the doctrine of the One is rendered possible by Socrates' assertion that Virtue is One and excludes all plurality, and by the fact that he often described it as consisting in agreement with one's self, especially if we consider that motion and plurality were regarded as equivalent conceptions. This does justice indeed only to the formal side of the Socratic conception of virtue, and more and more overlooks the fact that, even if virtue is knowledge, it does not follow that all knowledge is virtue. The inquiries into the nature of knowledge, the opposition between rational cognition and opinion, because the former is concerned with the One and the universal, all this is quite in the spirit of Socrates. On the other hand, the Megarians display all the Eleatic fear of particularity, when they fail to penetrate to the conception containing its specific difference, but are contented with the abstract universal, excluding all This is the reason why reality is not attributed particularity. to the cabbage that is washed, but only to its generic conception; and why validity is only ascribed to the identical proposition: this is the ground, further, of Plato's rejection of the transcendent ideas of the Megarians in the Parmenides, as there was no third thing to mediate between them and reality. As to the further report respecting the Megarians, that they denied the antithesis of possibility and reality, this has been a favourite dictum of nearly all Pantheism. They also put it in the following way; that there could be no such thing as possibility—this middle term between Being and Non-being. This doctrine, afterwards, became important in their views as to the nature of the hypothetical judgment.

Diog. Laert. ii. 10 and 11. Ritter and Preller, l.c. § 228-243.

§ 69.

The reproach which Aristotle subsequently made to the

Pythagoreans, that in their conception of virtue they took no account of the material basis of all virtue, viz. the natural instincts, is perfectly applicable to the ethics of the Megarians. Their moral philosophy is formalistic, like that of Wolff and Kant in later times, because it has no consideration for individual divergences and natural capacities. It seems as if the undoubtedly important discovery of the Sophists, that the individual being is the standard of everything, had never been Similarly, when the Megarians cling to the made at all. Eleatic One, they quite forget that Heraclitus vindicated the claims of Becoming, and the Atomists the reality of plurality, and that because perception is concerned with both of these, it must nevertheless not be simply rejected as illusion and This one-sided interpretation of Socradeceptive opinion. tism, which draws it down from its superiority to these earlier points of view because it is opposed to them, must be met by a supplementary interpretation which lays special stress on the very things the Megarians had excluded from Socratism. Hence the antithesis to the Megarians is formed by the Cyrenaic School.

#### B.—THE CYRENAICS.

F. Mentzius: Vita Aristippi. Halle, 1719. A. Wendt: De philosophia Cyrenaica. Leips., 1835.

## § 70.

I. Aristippus, brought up in the luxurious city of Cyrene as the son of a rich merchant, came to Athens as a highly cultivated man of the world. He had been attracted by the fame of Socrates, and was so captivated by him that he did not again leave him. Even when, after the death of Socrates, he came forward as a teacher, he always wished to pass for a Socratic, although most of the others who called themselves followers of Socrates classed him among the Sophists, and not only because he received payment for his lectures. Nor was he altogether wrong, for it is really an aspect of the Socratic character which he makes his principle; and though it is a travesty, there is a Socratic element even in the  $\xi \chi \omega$   $\omega \omega \kappa$   $\xi \chi \omega \omega \omega \omega$  of Aristippus. Of the many writings attributed to him, a considerable portion perhaps really belonged to his successors. None of them have been preserved.

a. 2. Like all philosophers since the time of Anaxagoras, Aris-

tippus also inquires into the purpose of everything. And since he, like Socrates, is interested only in man, all his inquiries are directed towards the highest end for man, i.e., the Good. Whatever excludes the conception of an end, he neglects, as e.g., mathematics. Logic and physics also are without interest in themselves, but acquire it by becoming subsidiary to ethics. For since, according to Socrates, virtue was knowledge, inquiries into knowledge as such (περί πίστεως) must form the logical part of philosophy, all the more that mistakes of reasoning may cause us to miss the highest end. The result of this is, that since all knowledge is perception, and since perception perceives only how it is affected, we only know about our own states of consciousness. These and their causes  $(\pi \dot{\alpha} \theta \eta)$  and  $ai\tau iai$  form the subject of the physical portion of his doctrine. All states of consciousness are reduced to violence, moderation, and lack of motion, and of these the first and third are opposed to the second, as pain  $(\pi \acute{o} \nu o s)$  and apathy to pleasure  $(\eta \acute{o} o \nu \dot{\eta})$ . Which of these states of consciousness is to be sought and which to be avoided, is treated of in the properly ethical division of his system ( Tepi αίρετῶν, περὶ φευκτῶν). The decision is in favour of pleasure, which is declared to be the only good. reason given, viz., that all men seek pleasure, one is inclined to see a divergence from Protagoras' "every man," and an approximation to the "man" of Socrates. By pleasure. Aristippus means only momentary (μονόχρονος) well-being, especially on its physical side, and hence the exercise of bodily functions is the means to virtue. The wise man never chooses pain, not even to purchase pleasure thereby. maxim is to seize the enjoyment of the moment, not in order to be mastered by it, but in order to master it, as the rider does the horse. This levity, which does not think of the future in its enjoyment, distinguishes the hedonism of Aristippus from the deliberating and calculating eudæmonism of Epicurus and his followers (v. § 96, 4). Even here, however, we must recognise a Socratic element in the fact, that Aristippus is as little fond as Socrates of solitary enjoyment, and extols the art of living with men as the highest. It is true, however, that the addition of "like a stranger," again emphasizes the hedonistic aspect of social intercourse; and no one will wish to identify Aristippus' pleasure in society with the Eros of Socrates, which depended on the common pursuit of philo-

- sophy. But it can be identified just as little with the isolating egoism of the Sophists. Even where Aristippus' utterances completely agree with those of the Sophists, he neutralizes them by others which show the impression made upon him by Socrates. Thus, when he regards nothing as being right by nature, but everything by enactment, this opinion is rendered harmless by his saying, that the sage would live just the same if there were no laws, as if there were. Many, in short, of the characteristic traits of Aristippus handed down to us display him as a man who might have served as a model of virtue to many a Cynic and Stoic.
- 3. The successors of Aristippus seem soon to have diverged from him, and to have approximated to the later position of the Epicureans. And then many of them formed schools of their own, which were called by their names. Besides the younger Aristippus, the son of the sister of the founder of the school, Theodorus is mentioned, together with Theodoriacis, who preferred the more reflective joy to the pleasure of the moment, and converted the myths into mere history. In this, his disciple Euhemerus went still further. Hegesias and his followers, in opposition to Aristippus, extolled freedom from pain as the highest good, and consistently preferred death to life. Anniceris and his adherents seem to have again approximated more closely to the original hedonism. But even they are wholly classed among the Epicureans by many authorities.

Diog. Laert. ii. 8. Ritter and Preller, l.c., 210-219. Mullach. ii. 397-438.

## § 71.

The moral philosophy of Socrates is degraded from its eminence both by its conversion into logic and into care for physical health and well-being. Whoever therefore maintains its opposition to such one-sided views may so far be called the true Socratic. But the attack upon each of them must necessarily bring about an approximation to the other; and any thinker with a deeper insight should come to see that both are not only wrong but also right, and hence consciously combine the sum of their doctrine. But where the profundity of thought required for this is lacking, the negative side only, viz., that both are wrong, will be upheld. But the Socratism which is opposed to them thereby becomes one-

sided in another way, and Socrates is conceived abstractly, to the exclusion of the pre-sophistic and sophistic elements within him. Hence the Socratism of the Cynics is abstract and exaggerated, or, as Plato calls it, Socratism gone mad.

#### C.—THE CYNICS.

Chappuis: Antisthène. Paris, 1854. A. Müller: De Antisthenis Cynia vita et scriptis. Marburg, 1860.

### § 72.

- I. Antisthenes, the son of an Athenian of the same name and of a Thracian mother, came to Socrates after having received the training of a Sophist and Rhetorician under Gorgias. He was attracted by nothing so much as his god-like freedom from wants. This, however, so captivated him, that when, after the death of Socrates, he came forward as a teacher of philosophy in the gymnasium of the Cynosarges, from which the name of the school is derived, he maintained that he was only learning from Socrates, together with his hearers. But his rigid pride in his virtue, which Socrates censured so delicately, only enabled him to produce an exaggerated copy of the noblest of mortals. Of the large number of writings attributed to him, the authenticity of the greater part was denied already in ancient times. His rhetorical training seems to have come out strongly in those which really belonged to him. Besides himself there are mentioned, as representatives of his views, Diogenes of Sinope, whom the anecdotes told of him make into a model of impudent rudeness, perhaps to a greater extent than he deserved, and next to him Crates, who led the doctrine of the Cynics over into Stoicism.
- 2. Though his education as a Sophist might have inclined Antisthenes, like Aristippus, to lay most stress upon subjective satisfaction, he was preserved from one-sided individualism by the circumstance that Gorgias had been trained in the Eleatic doctrines. Hence, he regards as the highest end, neither, like Protagoras, what every man, nor, like Aristippus, what men in general, but what the universal principle in man, viz. the reason, requires. This doctrine completely harmonizes with Socrates, as does this, that virtue is one and consists in insight, and its opposite in ignorance, and that it is teachable; and it also agrees well with his continual appeal to the Socra-

tic force as the first thing requisite. But as soon as he defines more closely what the model thus held up really is, it becomes clear that Antisthenes only perceived in Socrates what the Megarians and Cyrenaics had neglected, and also that where he agrees with them he cannot combine the doctrines they had severally emphasized. This is especially illustrated by what we know of his *logical* inquiries. The Megarians by ascribing reality only to generic conceptions, and the Cyrenaics by ascribing it only to objects of perception, divided what the concrete conception of Socrates had contained as a whole, This Antisthenes feels; but when he demands that universal assertions should never be made concerning particular things, but that identical propositions should be uttered on the one hand, and the things be pointed out on the other, he never succeeds in uniting what Socrates combined, both in his process of induction and in his definitions. But what was remarked above, that Antisthenes was capable only of a limited comprehension of what Socrates was, is especially illustrated by his inquiries in ethics proper, to which he seems to have passed on without paying much attention to physics.

3. The Socrates of whom Antisthenes wishes to be a disciple, is only the man who defied all hardships, who stood in front of silversmiths' shops in order to rejoice that he did not want so many things, who wore no shoes, etc. The Socrates, on the other hand, who could give himself over to enjoyment so safely, at the feast of Agathon, he has never seen, and hence he thinks that Socrates always did things he found irksome. Hence he considers the struggle against the pleasures of the senses, the  $\pi \acute{o} \nu o s$ , as the true Good, in conscious opposition to Aristippus, and defines pleasure as an evil, which the wise man should shun in order to be self-sufficient, and This anti-Aristippean formula to associate with himself. Antisthenes was certain to enunciate, since he regarded social life as arising simply out of the fact that man is not sufficient for himself. The same holds good also of moral associations; hence marriage, family, and country become things indifferent to the sage; and there results a moral goism, ill compatible with his master's passionate attachment to his city. And he is even put to shame by hedonism, when Aristippus connects with the proposition accepted by both viz. that all laws are valid only by enactment, the assurance that the sage always acts in accordance with them, while

Antisthenes opposed virtue to obedience to the laws of the State. And reason he opposed not only to the natural instincts, but also to the ordinary opinions of men. Hence Antisthenes occupies a negative position with regard to all prophetic and divine influences, often in conscious opposition to Socrates; and this has induced him to regard the myths of popular religion as mere allegories, and probably, like many of the Sophists, as allegories with a moral meaning. This refers especially to his moralizing commentaries on the Odyssey and on Theognis.

Diog. Laert. vi. 1, 2. Ritter and Preller, l.c. § 220-227. Mullach ii. 261-395.

§ 73·

The universal objective reason which Anaxagoras had meant (or at least included) in his vovs, has by the moral genius of Socrates become subjective in him (the  $a\nu\theta\rho\omega\pi\sigma\sigma$  of Protagoras); so that when he consults his own genius, the deity answers in it, when he follows his own pleasure, reason is followed. Thus he stands above Anaxagoras and Protagoras as their higher unity. But when his genius is withdrawn, the two factors fall apart in such a way that the Megarians emphasize the first (νοῦς, θεός, εν), i.e. the content of the will of Socrates, the Cyrenaics the second, and therefore put pleasure above everything (ήδονή, χαρά), which, in the case of Socrates, always accompanied his willing what was rational. Antisthenes could censure their one-sidedness, and hold fast the rights of subjectivity in opposition to the Megarians, and the objective content of the Good in opposition to the Cyrenaics. But as he was unable quite to comprehend the two as one, he also could not consciously reproduce the whole, but only one aspect of Socrates. But these attempts to comprehend more definitely single aspects of Socrates are only preludes to the achievement of combining them all, and of thus representing the idealism, in which Socrates had lived, as conscious and fully-comprehended And comprehended also in this respect, that its Socratism. connection with the past is recognised. The Megarians had shown how much room there was for Eleatic metaphysics in the Socratic doctrine; Aristippus had indicated its points of contact with Protagoras, and hence with the physics of Heraclitus and the Atomists; finally, Antisthenes had proved the possibility of being an adherent of Socrates, and yet remaining a dialectician after the fashion of a Gorgias trained

by Zeno and Empedocles. None of these facts were forgotten, and at the same time the last of the pre-Sophistic views of the world, that of the Pythagoreans, is consciously incorporated with Socratism. The representative of this Socratism, thus apprehended from every side, is Plato; and it is no accident that he connects all his inquiries with the person of Socrates, in whom philosophy had become personal.

### FIFTH DIVISION.

### Plato.

§ 74.

#### PLATO'S LIFE.

Diog. Laert.: Lib. iii. Olympiodori et Anonymi: Vita Flatonis. (Also in Didot's ed. of Diog. Laert. etc., Appendix, pp. 1-14.) K. Steinhart: Plato's Leben, Leipzig, 1873.

I. Aristocles, afterwards surnamed Plato, was the son of Ariston and Perictione, and born at Athens in Ol. 87, 3 (429) or 88, 1 (427 B.C.), and, as was asserted by his admirers in later days, on the 21st of May, the day on which the Thargelia were celebrated in honour of Apollo. With this they connected all sorts of fables; and they used also to celebrate the birthday of Socrates on the day before, which was the feast of Artemis. Growing up in the midst of the artistic and scientific glory to which the forty years of the activity of Pericles had raised his native city, and a continual eye-witness of the abuses following in the train of a degenerate democracy, Plato would probably have become an aristocrat, even if he had not been a descendant of the noblest families through both his parents, and if his nearest relations had not belonged to the oligarchical party. The men also who had the greatest influence on his development, and above all Socrates, were not favourably disposed to the democracy. His Dorism is just as little a proof of lack of patriotism, as Niebuhr asserted, as the Anglo-mania of Montesquieu and other Frenchmen in the 18th century. That Plato, when he had attained military age, took part, like the rest, in the campaigns that happened at

the time, can hardly be doubted, although the direct assertion of Aristoxenus and Ælian loses its value with regard to the third campaign, because in regard to the first two it contains an impossibility. Whether Draco, his teacher in music, and especially Epicharmus, who had been trained by the Pythagoreans, contributed to the development of his philosophic ideas, or whether they merely stimulated him to poetical efforts, is difficult to de-But it is certain that when, in his 20th year, he came to Socrates, he burnt his poems and henceforth devoted himself to philosophy alone. He seems to hint in the Phado, that he had even before this time become acquainted with the doctrines of the Ionian philosophers, and of Anaxagoras, and received instruction from Cratylus, the Heraclitean. According to Aristotle, he must also have known the doctrines of the Pythagoreans and Eleatics, at least superficially, before he gave himself up to the man whom he has always celebrated as his true teacher.

2. After the execution of Socrates, which filled him with disgust at all the pursuits of politics, he retired to Megara, and was there induced to study the Eleatic doctrine more thoroughly Thereupon he travelled; at first probably to than hitherto. Ionia, then to Cyrene and Egypt, where he studied mathematics, but at the same time opposed the doctrine of Aristippus, which was chiefly established in these countries. But most important of all, was his journey to Italy, where he came into closer contact with Pythagoreans, to whose influence we may also ascribe the fact that he moderated his repugnance to taking part in political life. His relations with the elder Dionysius, brought about by his friend Dion, could not of course prove In consequence of a disagreement, Plato left Syracuse, and was thereupon robbed of his liberty at Ægina, in a way that is variously explained. He owed the recovery of his liberty to the intervention of the Cyrenaic Anniceris. After his return to Athens, he opened his school, at first in the groves of the Academus, though it was afterwards transferred to the garden he had bought on the hill of Colonus. Except for two interruptions, caused by two fruitless journeys to Sicily, the first in order to win over the younger Dionysius to the cause of virtue and science, the second in order to reconcile him to Dion, Plato continued his activity as a teacher of philosophy until his death in Ol. 108, 1 (348 B.C.).

## § 75.

#### PLATO'S WRITINGS.

- I. All Plato's writings are exoteric dialogues, intended for the public of cultivated readers rather than for his school, elaborated more or less carefully, and of mimetic and dramatic beauty, each forming a whole in itself, and yet also a member of a larger whole. It has always been the aim of the critics' efforts to separate the spurious from the genuine; but because they formed either too ideal or too low a conception of Plato's point of view, they have not always avoided one-sided judgments, so that in many cases doubts have been cast even on writings which Aristotle quotes or indicates as Platonic. Besides these writings, we have also some, although imperfect, information, especially from Aristotle, as to the esoteric lectures, of which the form, though not the content, was confined to the school; and these also must be taken into account.
- 2. The attempts to arrange the Platonic dialogues in a systematic order date back to ancient times. The curious idea of the Alexandrian grammarian Aristophanes, to combine them in trilogies from a theatrical point of view, was not entirely carried out, and only deserves mention, because some editions follow this order (e.g., the Aldine, the Basel, and Tauchnitz stereotype edition). In favour of the arrangement in tetralogies made in the time of Tiberius by the Thrasyllus who also affixed the alternative titles to the dialogues, it may be urged that at least two such tetralogies were undoubtedly intended by Plato himself. This order is adopted by some of the earlier manuscripts and editions, and more recently by C. F. Hermann. Lastly, the arrangement of Serranus according to syzygies must be mentioned, as it passed into the edition of Henricus Stephanus, which was for a long time the only one quoted, and thence into the Bipontine.
- 3. In more modern times, it has been felt that an arrangement of the Platonic writings was valuable only if it was based on investigations into the genesis and the connection of his doctrines, and the honour of beginning these belongs to Tennemann (System der Platonischen Philosophie, 4 vols. Leipz., 1792-95), although his undertaking was bound to fail in consequence of his attempting to base everything on the chrono-

logical data given by Plato himself. The translation of Plato by Schleiermacher (*Platon's Werke*. Berlin, 1804–28, 6 vols.) marks an epoch in the history of the question of the order of the Platonic writings, as well as in their appreciation: for in the introductions that accompanied it, he justified the order he gave them, as well as their arrangement in three groups, the introductory, the dialectical, and the expository. order is followed in J. Bekker's edition.) The work of Ast (Platon's Leben und Schriften, 1816), and the much more sober, but often hypercritical work of Socher (Ueber Plato's Schriften. Munich, 1820), were composed with a reference to Schleiermacher. Socher's attempt to determine fixed points which might serve to distinguish the dialogues of different periods, was repeated far more successfully by C. F. Hermann (Geschichte der Platonischen Philosophie. The first and only volume, Heidelberg, 1839), who fixed upon Plato's voyage to Megara, and the beginning of his activity as a teacher, as such points. Hermann's arrangement, although it sets out from an entirely different principle than Schleiermacher's, since the latter tries to trace in the sequence of the dialogues the course of Plato's teaching, and the former that of Plato's learning, nevertheless displays many points of contact with Schleiermacher. The most important differences concern the Parmenides and the Phadrus. these, Hermann puts in the same position that Zeller had previously assigned to it in his Platonische Studien, whereas the second was, according to him, written as a programme at the outset of Plato's career as a teacher, as before him Socher, Stallbaum, and others had already asserted. (In fact, Hermann has in general many points of contact with the contents of the introductions accompanying Stallbaum's critical edition of all the Platonic Dialogues [3rd ed., Erfurt and Leipzig, 1846]. The order given by Hermann is in part approved and in part rejected by the valuable introductions with which Steinhart furnished H. Müller's translation of Plato, which, appearing from 1850 onwards, is at length completed (8 vols. 1856-66). All these different opinions are carefully considered and modified in some points in F. Susemihl's: Genetische Entwickelung der Platonischen Philosophie (2 vols. 1855-60). starting from quite other points of view, arrives at partially different conclusions (Die natürliche Ordnung der Platonischen Schriften. Berlin, 1857). The same remark holds

good also of Ueberweg's: Untersuchungen über die Aechtheit und Zeitfolge Platonischer Schriften. Vienna, 1861. The writings also of Michelis and Ribbing, mentioned at the beginning of the next §, discuss more fully the question of the order of the Dialogues. The second volume, especially, of Ribbing's book is entirely devoted to it; and by his often very severe criticism of the works that follow Hermann, he tries to do justice once more to Schleiermacher.

# § 76.

#### PLATO'S DOCTRINE.

- Van Heusde: Initia philosophiæ Platonicæ. Lugd. Bat., 1825; 2nd ed., 1842. Zeller: Platonische Studien. Tübingen, 1839. F. Michelis: Die Philosophie Plato's. 2 vols., Münster, 1859-60. H. v. Stein: Sieben Bücher zur Geschichte des Platonismus. Götting, 1862, 64, 75. S. Ribbing (Prof. at Upsala): Genetische Darstellung der Platonischen Ideenlehre. 2 vols., Leipzig, 1863-64. Ritter and Preller, §§ 244-280.
- 1. Before giving an account of the dialectics, physics, and ethics, into which Plato's inquiries are divided so naturally that this division of his system must be called the Platonic one (whether he expressly maintained it as the true one, or whether he only indicated it), it is necessary to consider the investigations scattered over the different dialogues, which have merely the propædeutic aim of raising the reader to the level of the Platonic standpoint. Their negative task is, to prove the untenableness of his readers' point of view, which thereby becomes as it were the starting-point which makes the jump possible (Rep. 511 B). Plato, like every philosophical writer, assumes in all his readers familiarity with the generally prevalent conceptions, and in those trained in philosophy an acquaintance also with the philosophy of the time. since, in the case of the majority, the doctrine of the Sophists was esteemed such a philosophy, and that of Socrates and the Socratics was current only in a small circle, with which Plato was connected by bonds of reverence for his master, and of grateful respect for many of his disciples, the negative side of his propædeutic inquiries consists in open attacks on the ordinary conceptions and the doctrines of the Sophists, combined with more concealed polemics against the point of view of Socrates.
  - 2. The inadequacy of the ordinary conceptions in their

theoretical aspect, is made evident by shaking the faith in sense-perception (the aloθησις of the Theætetus and the Parmenides), and by showing that its object is continually changing, and that hence it cannot afford any firm certainty, but at the most probability (the elkaria of the Republic). The case is not much better when the memory of several perceptions (Phædrus) produces that which Plato sometimes includes with sense-perception under the common name of δόξα, but again, distinguishes as higher or true conception, from the latter, and sometimes calls δόξα simply. Its certainty is indeed greater than that of perception, but none the less it is not certain, because it lacks the consciousness of the reason, and hence can only admit a thing as a fact. We are the more entitled to regard this  $\pi i \sigma \tau i s$  ( $\tilde{R}ep. 534$  A), or higher form of δόξα, as what we call experience, that Plato himself (Gorg. 465 A. cf. Phædr. 62) opposes it as an εμπειρία καὶ τριβή to the τέχνη which knows the reasons, and denies, just as Aristotle did later, that the man who has merely δόξα is capable of teaching others, and at the most admits that he can persuade them The aim of all these discussions is to produce a feeling of perplexity with regard to one's former conceptions, the "wonder" of the Theætetus, without which no one begins to philosophize, and which coincides with the consciousness of ignorance (Alcib. I.). Plato aims also at producing a precisely similar distrust of the practical content of the ordinary The ordinary virtue, the ordinary judgments conception. that a thing is good or bad, are the result of custom, and diametrically opposed to philosophic or self-conscious virtue (Meno, Phædo). The instinctive attachment to ancestral custom, and the statecraft of a genius like Pericles, are, like the sacred frenzy which overpowers the poet, the result of a happy accident. There is no security that one guided by such rules of thumb will remain virtuous or propagate his statecraft (Protag., Meno). Such a training, further, is lacking in that which alone constitutes the value of an action, viz., the insight that it is good, and its execution because it is good. In common parlance, men are called brave even if they fight from fear (Phædo). Genuine virtue, on the other hand, coincides with the consciousness of its reasons to such an extent that such knowledge, as Socrates had already taught, ennobles even wickedness, while its absence spoils the highest virtue (Hipp. min.). Hence, just as the theoretical opinions of the

ordinary consciousness are devoid of truth, so its practical principles are without value; and to the theoretic wonder there corresponds the practical perplexity which contains the admis-

sion that it is not known what is good.

3. Up to this point of perplexity with regard to the traditions hitherto considered valid on theoretical and practical matters, Plato's course differs so little from that of the Sophists, that he not only frequently makes use of their weapons, but expressly ascribes (Soph.) a purifying force to sophistry. But beyond this point he opposes it, because it inferred from this negative result that complete subjectivism was the only tenable opinion. It is not, as Protagoras maintains, the natural and individual element (the pig) in man, but the universal (the god) within him, the reason, that is the measure of all things. And he upholds this objectivism, as against the Sophists, in the theoretical as well as in the practical sphere. For in the first place, he always emphasizes the antithesis of opinion and knowledge, and the reality of the latter. He shows that, according to Protagoras, there is no truth, and no knowledge; and that by this assertion the latter involves himself in a conflict with reason, because contrary assertions can be made concerning one and the same thing, and with himself, because he now asserted the impossibility of getting hold of things, whereas before he had undertaken to lead on to the mastery of things (Theæt.). Similarly, in the second place, he attacks the practical errors of the Sophists, especially in the persons of Gorgias and Hippias. He urges the difference between desire and rational will. and shows that wherever pleasure is made the sole principle of action, there results the self-contradiction, that it is really pain that is chosen: the true art of life, therefore, must aim at something else (Gorg.). In the same way, if the State is based, not on justice but on violence and injustice, the principle of separation is made into a principle of union (Rep.). This twofold aspect of Plato's attitude towards the Sophists. due to the fact that, like them, he perplexes his hearers, but with a different purpose, induces him repeatedly to designate sophistry as the caricature of true science (Gorg., Soph.).

4. Up to this point Socrates and his adherents would have had to agree with Plato, and this entitles him to put the doctrines he has so far developed into the mouth of Socrates. Nevertheless the fact that in some of the Dialogues Socrates

does not guide the discussion, and that these do not treat of ethical questions, must be esteemed as a gentle censure of his master for having confined himself so completely to ethics. And if in this case he was prevented by a disciple's reverence from criticizing more openly, such consideration was not at all, or only in a less degree, shown towards the other disciples of Socrates. The Theætetus, which was perhaps written in Cyrene, is a polemical attack upon Aristippus as well as upon Protagoras. It is proved against him that he falls short of his master, who after all assumed a knowledge superior to δόξα, which was accompanied by a concept and an explanation, and hence could give reasons for and an account of itself (Cf. Symp). But on this same occasion a hint is given that there exists a knowledge still higher than that of Socrates. This is evidently intended for the knowledge by Ideas which is "dreamt of" in the contemporaneous Cratylus. And just as the Theatetus criticizes the Cyrenaic point of view, so the Parmenides contains fairly intelligible indications, that the Megarians, by regarding abstract universal concepts as alone containing truth, and to an equal degree also the Cynics, approximated too closely to the pre-Socratic point of view. So the practical doctrines also of the Socratic schools are attacked as inadequate and one-sided. This is done especially in the Philebus, in which Plato represents Socrates in conflict with Cynics and Cyrenaics. The existence of an inner contradiction is exhibited both in pleasure without insight and in insight without pleasure. The Good, which is the object of true philosophy, lies above both these one-sided views in a higher sphere.

5. The negative result of Plato's inquiries, so far, is that neither the generally current conceptions, nor the Sophists, nor even Socrates in theoretical matters, nor his disciples either in the theoretical or the practical sphere, have grasped the truth. It is completed by positive instructions as to how it is possible to rise to the true point of view. The subjective condition required is the philosophic impulse, the desire to enjoy knowledge oneself and to produce it in others, which is therefore called Eros. This neither an omniscient  $(\sigma \circ \phi \circ s)$  nor an entirely ignorant being  $(\partial \mu a \theta \circ s)$  feels, but only the  $\phi \iota \lambda \circ \sigma \circ s$ , who is midway between having and not having knowledge. Hence Eros, the conception of which it is attempted to determine in the *Phedrus*, while the *Symposium* is chiefly devoted

to its glorification, is the son of Poverty and Wealth. lowest stage may already be recognised in the pleasure taken in beauty of bodily form, a higher form in the desire of the true erotic to generate in fair souls the thirst for truth, and finally its highest form in the desire which aims at attaining for oneself immortality, the image of divine changelessness, by grasping the Beautiful-in-itself in its eternal self-generation. because this impulse is a knowledge that knows not, it is also thought of as forgetfulness; and it is difficult to decide how far the splendid myth of the Phadrus is Plato's only way of attaining to clearness in his own mind, and how far a conscious Thus justice is done to the dictum caricatured by the Sophists (e.g. Euthydemus), that one can learn only what one already knows. The philosophic impulse is the innate germ from which there issue art, morality, and science. But it can and must be nourished. And since all learning nourishes the mind, the philosopher must needs be desirous of learning, not however desirous of seeing and hearing; for sense-perception was not found to instruct, but only to persuade. desire of learning is directed towards the beautiful. And every concern about the beautiful nourishes the impulse, and hence also music, which is the preparation for the true music, i.e., philosophy (Rep., Phado). Mathematics also must be added, because it teaches us to abstract from the sensible, although its subject-matter is still only intermediate between Thus, though it is already the sensible and the Ideas. knowledge, it is not yet the highest knowledge, but rather reflective thought based upon hypotheses of which διάνοια is the faculty (Rep.). But above all, the perfection of the inborn impulse towards knowledge is formed by the art of Dialectic, the nature of which, together with its antithesis to the methods of other philosophers and to other sciences, is described at length, especially in the seventh book of the Republic.

6. Dialectic, as the art of conducting a conversation, is opposed to the rhetoric of the Sophists, which only teaches how to represent persuasively the individual opinion of the speaker. In the dialogue, on the other hand, which consists in thinking in common and in mutual conviction, universally valid conceptions are attained. And as dialectic has to bring out the universal conception, the dialectician must be able to combine the particulars and thus show his synoptic powers

(Rep., Phædr.). And the procedure by antinomies is the means alike of forming and of correcting concepts, in that it tests the concept when determined by the consequences which result from its hypothetical acceptance, or of that of its opposite. Hence not only is the more subjective irony of Socrates put forward as an example worthy of imitation, but also, in the Parmenides and the Sophist, the procedure of At the same time, continual attacks are Zeno the Eleatic. made on the Sophists and Eristics, who regarded this method not as a means but as an end, and who moreover do not discover the contradictions in the concepts themselves, but apply them, and indeed only to phenomenal things, by adscititious points of view. But the ascent to the right determination of the concept, as embodied in the definition, is not yet the final Rather it is necessary, when the definition has been found, to divide the sphere which has been constituted by the concept, up into the species which exhaust it, according to reasons contained in the concept itself. Division, therefore, according to the concept, and by preference by dichotomy, is just as much the function of the dialectician, as the discovery of the universal conception. But while the eristic jumps from one thing to another, the dialectician descends gradually, through all the intermediate stages from the One to the Many. Finally, as regards the relation of Dialectic to mathematics, it is the aim of the former to do away with all assumptions in order to attain its principle, whereas the latter never gets rid of unproved assumptions.

7. It is only when it has been trained in dialectic that the philosophic instinct becomes true philosophy; and hence to philosophize dialectically is also to philosophize truly and rightly (Soph.). It is not therefore the Eros alone that produces the result. If, then, we remember, that in the Symposium Socrates is extolled as the very incarnation of the Eros, this must be considered a proof that Plato regarded the continuation and justification of Socratism by means of Dialectic as the essential advance he had to make. This also explains how Plato could come to regard the dialectical method as equivalent to true knowledge, to use dialectic and philosophy sometimes as synonymous terms, and again employ the word Dialectic to designate that portion of his doctrine which contained the logical basis of the rest. The last is the sense we shall henceforth give to the word.

### \$ 77.

### PLATO'S DIALECTIC.

1. Plato must have been impelled towards the acceptance of the identity of Knowledge and Being which Parmenides had asserted so energetically (v. § 36, 2), and of the consequent necessity of ontological inquiries, by the study of the Megarian and Eleatic doctrines, to which he devoted himself more seriously after the death of Socrates. And he must have been all the more induced to do so by the example of the Cyrenaics, which showed that with every approximation to the Heraclitean denial of Being even Socratics ran the risk of converting all knowledge into opinion, and of falling a prey to sophistry generally. We can therefore understand that Plato, in the Theætetus, the programme of his dialectical researches, opposed the Eleatic view to that of the Sophists and Cyrenaics, and derived their sensualism from the Heraclitean "flux of all things." Not, however, as though the Eleatics possessed the whole truth. Even in the fact that these opponents of the "Flux" philosophers are likewise characterized with a nickname, that of the "All-consolidators," later adopted by Aristotle (v. Sext. adv. math. x. 46), we have an intimation of what he afterwards expressly asserts, in agreement with the Cratylus (written at the same time or soon after), viz. that unmoved Being does not exist, but that everything partakes of change and spatial motion, and, therefore, of plurality. Hence, just as every sentence is a combination of an ὅνομα and a ῥημα, and contains a movable and an immovable element, so also true knowledge must neglect neither of these factors. It is true, however, that both in the Theætetus and in the Cratylus this higher point of view is only hinted at; he says, he "dreams" of it.

2. In order to find it, it was necessary to subject the point of view of the Eleatics and Megarians to as severe a criticism as that so far passed on the Heracliteans and Cyrenaics, and further to compare them with each other more precisely. This is done by discussing the thought-determinations on which their antithesis rests, by the method of antinomies peculiar to Zeno; and in so doing it is natural that not Socrates but Eleatics should appear as guiding the conversation; and for this same reason the Socratic manner of furthering the matter in hand by a real conversation disappears, and

makes way for lecturing on the one hand, and mere assent on the other. These inquiries are, moreover, distinguished from those in the Theætetus by the fact that the ontological aspect is more prominent in them than the epistemological and psycho-In the Parmenides (against the genuineness of which many arguments have, it is true, been brought, and most recently by Ueberweg, amongst others), Plato tries to show that if Zeno's method of disproving assumptions by the contradictions to which they lead be admitted, Eleaticism (and therefore the Megarian doctrines also) may be defeated by its own weapons. For its assumption that the One which excludes all plurality is real, leads to just as many contradictions as the contrary assumption of the various Physiologers, that not such a One, but only its contrary, exists. Nor is the fact that the introduction and the first part of the dialogue promises to seek for the Ideas, really forgotten in the discussion of these antinomies; for the question of the relation of the One to the Many, i.e. of the highest Idea to the many subordinated to it, and of every Idea to the concrete individual, is really the cardinal problem of the theory of Ideas. Besides, the first part gives reasons to explain why the Ideas must not be regarded as universal conceptions entirely separated from the individual beings; while the second hints, it is true only very superficially, that the point of union of the One and the Many, which coincides with that of rest and motion, is to be conceived as timeless or "momentary." The Sophist treats of the same subject as the Parmenides. The fact that the course of the dialogue is guided by an unknown Eleatic, i.e. no real personage, but a Platonically-idealized type, seems to indicate that this dialogue makes an advance upon the Parmenides, and to tell in favour rather of the order of Steinhart than of that of Zeller. The expressions are slightly modified. Besides those employed in the Parmenides, there occur also Rest and Motion, and especially the Same and the Other, indicating correlation rather than contradictory opposition. And the result also confirms that their relation is such, that neither must be sought without the other, and that therefore the One must be sought in the Many, and the Same and the Permanent in that of which it is the nature to be always "Other," i.e. in the Changeable and Moving. With this result of the method of antinomies there is connected an attempt, not, it is true, altogether in earnest, at division into kinds

by dichotomy, which, as we saw (v. § 76, 6), supplemented the

former in the complete dialectic. 3. Thus the Megarian and Eleatic doctrines, though they had not satisfied him, had impelled Plato to look for a point of union of the One and the Many; but he was enabled to find it only by a more thorough acquaintance with the Pythagoreans. It is only after his return from Italy that his doctrine appears fully established and rounded off into a complete system. This is the case already in the Phadrus, where he gives us to understand that literary activity no longer satisfied him, thus making one think of the purely oral tradition of the Pythagoreans, but also declares that only he should come forward to teach who had explored the whole And wherever we can trace distinct indications of Pythagoreanism in Plato, we find him in possession not only of a system of physics, but also of his theory of Ideas. is to say, in the Symposium, and especially in the Phado, in addition to the Phædrus. But none of his dialogues displays the grounds of his doctrine and its connection with his earlier inquiries more clearly than the Philebus. In the discussion whether the Good consists in pleasure or insight, Socrates, who here conducts the conversation because the question is an ethical one, at first sides with those who declare in favour of insight; afterwards, however, he proceeds to show that the doctrine of the Cynics, making insight the opposite of pleasure, is just as one-sided as that of their opponents, when they overlook the fact that pleasure is impossible without consciousness, and hence without insight. Thus the ethical antithesis of pleasure and insight is reduced to the same logical antitheses which had been discussed in the Parmenides and in the Sophist—that of the One and the Many, of Becoming (γένεσις) and Being (ovoia). But Plato does not rest content with this Eleatic formula, but reduces it to the Pythagorean one of the unlimited and the limit. For as both are combined in the definite number, so Plato asserts that in spite of the preference he shows for the limit, the truth lies only in their combination, the μικτὸν or μικτὴ οὐσία. This in its turn has for its principle (altrov) the vovs, the fourth and highest form of existence. Thus not only is the result of these propositions, as bearing on the ethical and main question, that the vovs is the highest in the series of good things, and that the insight which is more akin to it receives a higher place than pleasure,

but, apart from this, its importance for the subject of Dialectic is, that in a fairly explicit form it contains the sum-total of the Platonic doctrine of Ideas.

4. For it is this One in and above the Many, the Being in and above Becoming, the identical in and above the changing, that which is one as being definite, and which, just because definite, cannot be thought without an "other," a "many," or a "not-being"-it is this that Plato designates by the most various names; at one time by the ovrws ov, at another by the λόγος and οὐσία, or as the αὐτὸ καθ' αὐτό, or the αὐτὸ τὸ completed by the Idea in question, or again by the αἰθ' ἔκαστον, or the ő τί ἐστιν or ὅ ἐστιν ἕκαστον, or lastly as the γένος or είδος, or είδος νοητόν or ίδέα. The last of these names, though it occurs most rarely in the plural (Rep. vi. 507 B, etc.), is the one which in later times came in vogue most of all. where we speak of Ideas, Plato generally speaks of elon. saying, that there were as many Ideas as universal names, already gives a clue to his meaning. If we combine with this the fact that he calls an Idea that which is arrived at by abstracting from individual differences, we may say that the Platonic Ideas are, as the name already indicates, species or genera, in short, universals. Considering further that the name is applied to that which makes the table a table and a man a man, we can appreciate also Herbart's expression, that the Platonic Ideas were pure qualities. And pure (είλικρινές) they may be called all the more justly that each describes a single quality only, whereas in the concrete things it appears mixed and polluted with others. But this essence, which is common to all things bearing a common name, must not be conceived as merely produced by the understanding in the formation of abstractions, and as being therefore a mere conception, but it subsists and possesses reality, nay, the individual being, e.g., the animals, pass away, while the uni versal, the animal, persists. Thus, though the Idea is not here or there, or to be perceived by the senses, but νοητόν, and beyond the world of change, εν τόπω ὑπερουρανίω (cf. § 32, 4), it is nevertheless the truly (οντως) real, the only substantial existence, by participation in which alone individual things exist. But the description of the Idea as the universal in a class of individuals does not yet exhaust its nature. It must at the same time include the teleology of Anaxagoras and Socrates, since the Idea not only states as what, but also for what, a thing exists. Hence Plato calls the Ideas  $\pi \alpha \rho \alpha \delta \epsilon l \gamma \mu \alpha \tau \alpha$ , and makes the  $\nu o \hat{\nu} s$ , the power that posits ends, their principle; they determine things both as their essence and their end. When therefore Herbart sets up his mathematical formula for Platonism, as being the Eleatic doctrine divided by the Heraclitean, he forgot to multiply by the chief factor, viz., the Socratic.

5. But if every Idea is not only the common essence and true being of the individual existences comprised under it, but also their end, the different expressions Plato uses in order to unify the whole complex of ideas, the  $\tau \circ \pi \circ s \nu \circ \eta \tau \circ s$  as he calls it, are cleared up. Thus in the Phædo a warning is given, with an express reference to Anaxagoras, against regarding the conditions of a thing's existence as its cause (altrov), on the ground that this was found only in its purpose. The purposes of the individual things are there described as the better and the best, i.e. as the relatively good; the ultimate purpose, on the other hand, which concentrates all the rest, is called the ἀγαθόν, not the comparatively, but the absolutely good. It follows from what has been said, that this is the altrior, the ground and principle of all ends. And bearing in mind that the Ideas are ends, they are all subordinated to the highest end as their principle, i.e., to the Good. Accordingly, the Good, or the Idea of the Good, is everywhere represented by Plato as the Idea of Ideas, and the absolute Idea. (Especially in the Republic.) And it is the first principle of the universe because it is its final purpose. It moves all things because all strive after it, the unmoved. In the *Philebus* it is not mentioned; but vous and also σοφία and Zevs are found instead. For, like Socrates and the Megarians, Plato also treats νοῦς and ἀγαθόν as perfectly equivalent terms. Or if stress is laid on the fact that in the Philebus, the vovs is called the ruler (βασιλεύς) of heaven and earth, it should be remembered that in the Republic also Plato says of the Idea of the Good, that it rules in the heavenly region (βασιλεύει). If then the Ideas were the ὄντως ὄντα, the Good or the Idea of the Good must be the outwo ov; if they were οὐσίαι, it must be ἐπέκεινα τῆς οὐσίας as standing above them. And that Plato called this supreme Idea also the ev, we need not doubt, when we consider the example of the Megarians. For, just as the individual beings subordinated to an Idea partake of true Being by this participation, so the Ideas do so by partaking in the Idea of the Good, so that it can be called

the sun, whereby all things are endowed with growth and Being.

- 6. Plato's Dialectic, by regarding the one Idea (the final purpose) as manifesting itself in a plurality of Ideas (ends), combined all the achievements of previous metaphysics, and thereby also transcended them. For like the Pythagoreans and Eleatics he seeks the One and true Being, and succeeds in finding it. At the same time, he identified this conception with the vovs of Anaxagoras and the Good of Socrates. far he would not have achieved more than the Megarians, and would have arrived at an absolute end in the shape of a Being completely at one with itself. But as a matter of fact the investigations of the Parmenides, the Sophist, and the Philebus justified the claims also of plurality; thus by including this Heraclitean and Atomistic factor, the Monad is transformed into μονάδες, the mere εν into ενάδες, a name Plato actually uses in speaking of the Ideas, and this of course without losing their ethical (End-) character. All these Ideas (unities) form, by their subordination to the highest Idea including them all, a system, a Chov or organism; and for this reason it is possible to distinguish as the aspects of this whole truth, beauty and symmetry (Phileb.). By the Good, therefore, we must understand the principle of the order of the universe, both in nature and in morality. And this single purpose of the world is as the ον οντως the object of Dialectic, which enables us to rise from the Ideas, these essences and ends of things, to the Good, the essence of all essences, and essence and end of the All.
- 7. But according to Plato's own declaration, the dialectician is required not only to ascend from the particular to the universal, but also conversely to derive the particular from the universal. Hence an answer must be given to the question of how the single νοητόν, the Good, becomes the whole τόπος νοητός οτ κόσμος, as he called it in later times, the whole complex of relative ends. And if even to us, when in such derivations we speak of first and second order, number seems to be an indispensable factor, this must have been so to a far greater extent in Plato's case, seeing that he had arrived at his doctrine of Ideas with the help of the Pythagoreans, and in the *Philebus* had actually mentioned definite number as intermediate in this way between the indefinite and the limit. It appears from the accounts in Aristotle, which have been

carefully collected by Trendelenburg, Zeller, Brandis, and Susemihl, that Plato, especially in his later days, was fond of designating the Ideas by numbers. We can understand too. that these numbers were distinguished from the ordinary ones as Ideal Numbers, that he asserted that they could not be added together, that they stood in order of rank and in the relation of different powers, etc. The further accounts show great agreement with the Pythagoreans; for when we remember the infinitely small and the infinitely great, we can hardly call it a difference that the ἄπειρον of the Pythagoreans is in Plato called the μικρον καὶ μέγα. The geometrical significance of the first four numbers is also quite Pythagorean, and his conception of the point, at the most, can be considered peculiar to himself. The same applies to the connection of the four first numbers with the degrees of knowledge (cf. § 32, 4, 5). But Plato, like the more sober Pythagoreans, probably did not go beyond the number ten in his deductions. It is, however, evident that a modification of view corresponds to the change of terminology. His greater desire to fill up the chasm between unity and plurality, and, in connection with this, that between the Ideas and sensible things, is in itself a proof that the latter have risen in his estimation, and proves therefore a greater estrangement from Eleaticism. indeed this should be effected by a continuously increasing Pythagorizing, bears a resemblance, at least, to retrogression. But however this may be, we shall hardly be entitled to assert that everything that Aristotle reports concerning the Platonic doctrine of number, agrees wholly with what is found in his Dialogues.

8. In view of the identity of existence and knowledge mentioned above (§ 77, 1), the certainty of knowledge also must be rendered possible by the Ideas, as being the ὅντως ὅντα. For the objects of perception did not provide certainty; for, being themselves intermediate between Being and Non-Being, they could produce only appearances, and at the most belief in the latter (cf. § 76 2). Hence the knowledge of the Ideas and of their concentrated form, the Good, can alone give full certainty. And since they were the νοητά, such knowledge is called νοῦς οτ νόησις. Its object, therefore, is only that which has part in the Good, and in so far as it so partakes, and hence too the Idea of the Good is called the sun which makes things visible, i.e., knowable. It follows as

a matter of course, that philosophical contemplation must be teleological. Between this knowledge and the two degrees of δόξα, lies what is sometimes coupled with the higher νους under the common name of ἐπιστήμη, and then distinguished from it as διάνοια, and sometimes called ἐπιστήμη in opposition to the vous, viz., discursive thought, as it shows itself especially in mathematical knowledge, but also in cases where a theory makes it possible to give a reason for phenomena. the Gorgias, Plato, like Aristotle later on, calls it τέχνη. object, the permanent, stands midway between the eternal and the changeable, with which the νόησις and the δόξα are respectively concerned. In the famous allegory in the 7th book of the Republic, which however may contain other references besides, this gradation is illustrated by the seeing of the shadows of the statues cast by the sun, of the statues illumined by the sun, of the illumined originals of the statues, and

finally by the view of the all-illumining sun itself.

9. But the Good is to be regarded not only as the highest and all-inclusive Being and object of knowledge, but also as that by the participation in which the thinking human mind can alone perceive it and all else. The sun is said to produce, not only the growth and visibility of things, but also the eye's power of sight, which being called the highest or, the highest νοητόν, and lastly also the νοητικόν, and in the Philebus the vovs comes very near to the well-known Aristotelian definition. That the same name (vovs) should designate the object of our knowledge and our knowledge itself, is intelligible, because Plato regards our knowledge as partaking in the object of all knowledge, precisely as our soul is part of the world-soul and our body of the world-body (Phileb.). And as the One is the crown and essence of the Ideas, it goes without saying that our recognition of the Ideas is derived from ourselves. Hence it is not necessary to explain this fact, as the Phadrus does, by the pre-existence of the soul and its contemplation of the Ideas previously to its earth-life, of which it is again reminded by every sight of beauty. But for this very reason, and because pre-existence is very often brought into causal connection with the postexistence which Plato regarded as indubitable, and finally because, in a passage which does not at all deal with the doctrine of reminiscence, he asserts decidedly that the number of souls existing neither increases nor decreases, it is hardly

possible to assert that the whole content of that splendid myth of the *Phædrus* is merely ornamental setting. A great deal of it may be proved to be Pythagorean. What Egyptian, Phœnician, and perhaps even Indian elements have been intermingled with it, it would be difficult to decide. The substance of the Platonic Dialectic may thus be briefly stated by saying, that the Ideas give a support to the changing phenomena, and certainty to knowledge. They are arrived at by the balancing of fundamental antitheses. They culminate and are also rooted in the highest Idea, the Good, which is the true principle of all being and all knowledge, from which they can be systematically derived only by means of numbers. They live in the spirit of man; and his true attainment of knowledge consists in his becoming conscious of them.

# § 78.

#### PLATO'S PHYSICS.

Böckh: De Platonica corporis mundani fabrica. Heidelb., 1809. The same: Ueber die Bildung der Weltseele, in Daub and Creuzer's Studien iii., 1 ff H. Martin: Études sur le Timée de Platon. Paris, 1841. 2 vols.

I. When Dialectic has shown that the Good is the only object of knowledge, the only task left to Physics must be to consider the Good in its sensible manifestations. But since phenomena are known by perception, we cannot expect as strict a deduction as in the case of Dialectic. express declaration that we must often content ourselves with probabilities, and admit myths instead of proofs. The first question then is, What must be added to the Good, or the body of Ideas, in order that it may become Nature, i.e., the Good manifested to sense? Of course it must acquire predicates which are opposed to those of the Good, and therefore it is described as the mere means, as the many which never is, as devoid of order and restlessly moving, as utterly empty of Ideas, and capable only of being imagined, not of being known: and as standing towards the Idea, as the êv, in the relation of the μικρον καὶ μέγα, and opposed to the always Identical as that which is always "other." This principle has been quite generally called, since Aristotle's time,  $\partial \lambda \eta$ , or matter; and to judge by the use Plato himself makes of this word in the VOL. I.

Philebus, it may be conjectured that this was also the name given to it by Plato in his lectures. It is called the συναίτιον of the world, but must not be understood as a definite substance, as is proved by the negative predicates, of the void of quality, and form, and visibility which are ascribed to it. What then was it? According to Aristotle's assertion, which agrees with Plato's own explanation in the Timæus, it was Space. Or perhaps it may be still more accurately described as the form of outwardness; so that it would denote not only the form of co-existence but also of sequence, but not by any means time or measured sequence. Thus, if one bears in mind that the co-existence and sequence must not be conceived as ordered, one can understand how the Ideas which are pure unities can be transformed by the Nn into a thing, i.e. into a chaotic congeries of many ideas. But the chief point is, that we must not by any means understand by this ἐκμαγεῖον, which takes real shape when the Idea enters into it, in any way a definite substance, but only a mere form awaiting a content. Hence it is nothing taken in itself, and only a forcible abstraction from reality ( $\nu \dot{\phi} \theta \omega \lambda_0 \gamma_1 \sigma \mu \hat{\omega} \dot{\alpha} \pi \tau \dot{\phi} \nu$ ). Although, therefore, the dualism of Plato is not as crude as that of Anaxagoras, he is nevertheless unable to transcend dualism for lack of the conception of concrete creation. He remains a dualist because he cannot show why the Ideas enter into the world of sensible appearance. That, however, he assumes a connection between the reason which divides the one Idea (of the Good) into a plurality of Ideas, and that which causes each Idea to manifest itself in its turn in a plurality of things, is clearly shown by the fact that in both cases he uses the expressions ἄπειρον, μικρου και μέγα, πληθος, μέθεξις, μίμησις, etc., and is also quite intelligible. For if there were not many Ideas, sensible things participating in many Ideas would be impossible. it cannot be admitted without question, that together with the plurality of Ideas the plurality also of the copies of each Idea has been deduced, and that hence the sensible world has already been constructed in the Parmenides, Sophist, and Philebus, although important authorities assert this with reference to the two former, and almost all with regard to the Philebus. The more correct view perhaps would be to regard the ἄπειρον of the Philebus as the ideal basis merely of the ev  $\hat{\psi}$  of the Timæus, i.e., as extension as such, into which there must enter a more precise determination ( $\pi \epsilon \rho as$ ), if it is

intended to state in what extension a quality is intensified, a concept enlarged, or a space increased.

Cf. Siebeck, op. cit. § 64, 1. Pt. 2, Plato's doctrine of matter.

2. It is the point we have just brought out that displays the defect of the Platonic doctrine, which in the Phadrus removed the Ideas into a supra-cosmic place (ὑπερουράνιος, cf. For because of this transcendence they cannot of themselves interfere in our world; they are devoid of energy, mere objects of contemplation that do not realize themselves. And what they cannot in themselves do can only be effected, if at all, by an extraneous power, i.e. the Deity, who is thus the artificer of things. The assertion, therefore, that in Plato the Idea of the Good coincides with the Deity, is only in so far correct, that in his Dialectic he really does not require a deity beside that Idea. The ultimate end of the universe is a sufficient reason for the existence of the Ideas, even though it was not shown why there should be any particular number of Ideas, since the end was found to be a reason. the same reason the altrior also of the Philebus is not distinguished from the Idea of the Good, and its description by the term vovs is adopted from Socrates and the Megarians. But an entirely different face is put upon the matter when Plato passes over into physics. The more glaring the antithesis between the Good as the ov ovtws, and matter as the  $\tilde{\epsilon}\tau\epsilon\rho\sigma\nu$  and therefore  $\mu\dot{\eta}$   $\delta\nu$ , the more requisite, the less pronounced the antithesis, the less requisite, is a third factor, in order to explain the infusion of the Idea into matter. Hence Aristotle (v. § 87, 9), and also the Neo-Platonic doctrine of emanation, no longer requires a Deus ex machina, whereas Plato's physics does. The difference, moreover, between saying that the Deity in Plato is a being different from the Good, and that he is only another aspect of the Idea of the Good, is important only to those who approach Plato with questions like that e.g. of the personality of God, the understanding and still more the answering of which required the lapse of centuries. God contemplates the Ideas, the eternal archetypes of things, but contemplates them as a poet does his ideals, i.e. generating them himself (Rep.), and then implants them into matter. Thus we can understand the appellation of God as the ὅθεν φύεται, and of matter as the ἐν ῷ γίγνεται τὸ myνόμενον, and that the part of the father is ascribed to the

former, that of the mother or the maternal nurse to the latter, and that God is the reason, matter the συναίτιον or condition of the world. For, according to Plato, the beginning of the world, both in time and in thought, takes place when the mediation of the Deity, itself good and free from envy, and desirous of making all things as like as possible to itself, implants or generates the Good in matter, and thus produces the world. Hence the world is the υίδς μονογένης of the Deity and εἰκὼν τοῦ θεοῦ, because, like the former, it is good: before its genesis it may be called the future, after its genesis the visible and created second God; but in any case a blessed deity. just as the whole system of Ideas had been called a Coor atolor or νοητόν, an eternal or "intelligible" organism, so now that rational adaptation (vovs) has been implanted into matter, which is as such void of order and hence alagon, dominated only by external necessity, and as it were incorporated in it, the world, as the image of the former organism, must be called a Everywhere therefore in this organism we must distinguish two factors: the divine element of adaptation on the one hand, and the merely necessary on the other, which serves the former as an indispensable condition.

3. To explain the first entering in of purposive connection into the disorder, Plato required a deity who should establish that order. But even the maintenance of this connection seems to him to require, not indeed the continuous intervention of the Deity, for this he denies, but an intermediate link. addition to the fact that the similarity of the two problems, indicated in the identity of the terminology, suggested the thought of appealing to the aid of number, in order to explain how each of the many Ideas in its turn existed in plurality, just as in the former case it had served to deduce the plurality of the Ideas themselves, and moreover that numbers had been repeatedly declared intermediate between the vontov and the  $ai\sigma\theta\eta\tau\delta\nu$ , Plato was probably determined also by the fact that, like all men, he took pleasure in mathematical regularity, which is closely akin to that produced by purposive order. he made harmony, swayed by number, the mediating bond which connects the vovs, or purposive order, with the  $\sigma \tilde{\omega} \mu a$ , or We can understand too how the name given external world. to that which holds this intermediate position is the same as that which combines body and reason in the human individual, viz. "soul," and can hardly understand anything else by the

"world-soul," than the mathematical order that sways the All, or the harmonic relations prevailing in it. Thus it becomes quite intelligible why Plato describes the world-soul as combined out of a twofold nature, and represents it as a numerical series, formed when the powers of the first even (2) and uneven (3) numbers are put together into a series, to which the root of all numbers (1) is prefixed. This series, as explained by Böckh, presents a diatonic scale of a little more than four octaves, when the intercalations supplied by Plato himself have been effected.

4. The further account also, that the world-soul thus created received the form of two circles with a common centre, bec not in the same plane, of which the inner one, divided into seven circles, moves in the opposite direction to the outer and undivided one, is also quite intelligible, if one refers it to the heaven of the fixed stars, the seven circles of the planets, and the earth fastened to the axis of the world. (Gruppe's attempt to vindicate Plato's far more developed astronomical conceptions, has been successfully combated by Böckh.) By means. of this mathematical order it is possible that the sensible world is a manifestation of the absolute conformity to end, i.e. of the Good, and thereby similar to the Deity; and hence, in virtue of this similarity to God, that it partakes of the divine attributes, as far as its nature permits. Thus, though the world cannot partake of true eternity, it yet acquires the moving copy of eternity, i.e. time, in which the motionless "is," of eternity is drawn out into "was" and "shall be." But in order that time may exist, the heavenly bodies are attached to the circles of the planets, especially the sun and the moon, which for this reason are called the organs of time par excellence. But the world has other attributes also in virtue of its kinship to the divine. Its unity and the perfection of its form and motion For the spherical form is the highest of all. the all-embracing universe feeds upon itself by the circular motion of all things, and breathing in nothing foreign from without, maintains itself in a beautiful self-sufficiency. Lastly, the circular motion returning upon itself is the most perfect, because an image of thought in its identity with itself.

5. And just as these last assertions display Plato's accord with the Eleatics, so, when he treats no longer of the whole world but only one side thereof, the  $\sigma\hat{\omega}\mu\alpha$ , his treatment shows his dependence not only on the Pythagoreans, but also on the

Physiologers. In fact, there is hardly any important point of doctrine in the earlier philosophies that Plato does not include in his own system. But what distinguishes him from them, and at the same time keeps him in harmony with his own attacks on the fundamental conceptions of the earlier philosophers of nature (e.g. in the Parmenides), is the thoroughly teleological foundation of his whole physics. And of that teleology man is the aim, as being the bearer of the moral Thus, though in form the Timæus is a continuation of the Republic, the real relation is, as Plato himself explains, that the Timæus shows how man is called into existence, and the Republic, how he is fully developed. The Timeus tries to show how the world, or the unconscious manifestation of the Good, finally arrives at man who consciously accomplishes it. At the very outset the derivation of the elements is teleo-Fire and Earth are necessary as means to visibility and tangibility; but two require a third to mediate between them, indeed two more, since Three forms only a plane, and it is Four alone that has complete corporeality (cf. § 32, 4). The best and most harmonious relation of the elements possible, is a continuous proportion, such that in the all-embracing world Fire is to Air as Air is to Water, and as Water is to Earth. And since Plato's primitive matter is nothing more than the form of spatiality, he must derive the differences of the elements from the configurations of spaces. Like the Pythagoreans, he ascribes to each of the elements its own atomic form; but he differs from them in regarding ether as being merely a finer kind of air, and hence has the dodecahedron remaining over, which is sometimes stated to be the form of the stars, but above all, by introducing his three-dimensional construction of the elements by one in two dimensions upon which it is founded. For since the side surfaces of the regular solids either are triangles or may be divided into them, he regards space as being primarily divisible into nothing but This two-dimensional atomism reduces the atoms of the Pythagoreans to molecules of secondary rank, and makes it possible not only to assume the transition of one element into another, in opposition to Empedocles, but even to make it clear to perception. On the other hand, he agrees with Empedocles in his denial of the void; and he so often uses its impossibility in order to explain certain phenomena, that he may be called the author of the theory of the horror

vacui. It reminds us too of Empedocles, that friendship is said to combine the smallest particles, while it seems a reminiscence of Anaxagoras and the Atomists that the parts so united are of the same nature. This attraction of like to like serves at the same time for deducing the properties of weight and lightness, which he identifies with density and rareness; for since the heavens envelop the earth, they are just as much below as above it, so that this distinction of the earlier Physiologers becomes to him unmeaning. The various substances arise out of the combination of the four elements, and are considered especially with reference to the effects

they produce on the organs of sense.

6. What has just been said is in itself a proof that Plato takes less interest in the inorganic than in the living. And just as the world, in order to be as like as possible to that which lives by its own power, had itself to be alive, so it must also include all kinds of living beings. And first of all, immortal beings, such as the constellations, the created deities which the people worship as gods, then the fixed stars, perfectly satisfied with themselves, and hence motionless, next the restlessly circling planets, and lastly the the most venerable of the divinities generated within the heavens, of which the children are the Olympian gods, and further the dæmons. All these gods, as having come into being, are not indeed eternal or in themselves immortal, but they will never cease to be. To their activity is committed the production of the mortal beings that inhabit the air, the water, and the earth, with this single exception: that in man the germ of immortality is derived from the primary Maker, who created a definite number of souls, and then, setting himself at rest, abandoned them to the younger gods, in order that they might clothe them in a coarser soul and a body. This body then, with regard to its component particles, is as it were an extract of what the whole world is, with regard to its form, at least in its noblest organ a copy of the universe; and since the same holds true of his reason and his soul, man is thus the world in miniature. To serve him is the destiny of all else, that of the plants to supply his food, that of the animals to serve as the habitation of unworthy human souls after death. In this, man is treated as teleologically as everything else. The purely physical explanations are not rejected but declared insufficient; they inform us only of the

conditions under which an organ acts, but not of the true reason why it does so. Thus Plato lays far greater stress on the fact that sight opens the way to knowledge, the highest

of goods, than upon the way in which it is produced.

7. And just as in the universe rational adaptation was combined with rigid necessity, so in man the reason attached to the head is connected with the desire which aims at the satisfaction of necessary wants, and has its organ in the abdomen, to which, however, the grace of God has given in the liver also an organ of knowledge, although of knowledge of the lowest kind, in the shape of prophetic presentiment akin And just as the chest is situated between these two organs, so the rational and the desiring parts of the soul are connected by the θυμός, the vigorous and manly part of the mortal soul prepared by the secondary deities, the destiny of which it is to be the instrument of the immortal part of man, the reason derived from the Supreme Maker, and at its command to bridle the desires, although indeed it often becomes subject to them. That this threefold division of the soul,—which from the nature of its problem the Timæus only considers from its practical side, --corresponds perfectly to the theoretical triad of perception, conception, and knowledge, has been expressly stated by Plato, very frequently with regard to the first and third, more rarely and indirectly with regard to the second. Further, since the soul is the true principle of life, it is a logical contradiction that it should not Hence Plato most emphatically asserts the continual existence of the soul, as post-existence as well as pre-existence. The chief reasons for this are collected in the Phado and the Republic, from the law of the universe that all things issue from their opposites, and hence life from death, and the impossibility that a simple substance should be dissolved, down to the argument that the possession of eternal truth is a pledge of the eternity of that which possesses it.

# \$ 79. Plato's Ethics.

Krohn: Der platonische Staat. Halle, 1876

1. Like the whole of philosophy, Ethics also must of course treat solely of the Good. But in ethics it is considered, as it

forms the content of human volition, and that gives what is generally called the highest good. In determining this also, Plato rises above the one-sided conceptions of his predecessors. In the *Theætetus* indeed he attacks the Hedonists so severely that he comes very near recommending the avoidance of plea-But this exaggeration he opposes in the *Philebus*, where he maintains, as against both extremes, that only that which is beautiful and moderated can be good. As regards this, therefore, he considers everything immoderate and exaggerated as a disease of the soul, the health of which he finds in pleasure limited by insight, in a happiness which coincides with virtue because virtue is sought for its own sake. normal condition, the true virtue, is neither a gift of nature, for "no one is good by nature," nor the product of arbitrary willing, for then all would be virtuous, since no one is voluntarily evil; rather, as has been shown in respect of philosophy generally, so in the case of true, i.e. philosophic virtue, cultivation must come to the aid of moral instincts. Virtue must be taught; and education is one of the most important points in Plato's ethics.

2. Socrates had exhibited this virtue, regulated by the μέτρον ἄριστον, without harshness and exaggerations in his life, but at the same time laid stress on the fact that virtue being insight was only one. But Plato attempts to eliminate the abstract character from the definition also of the conception of virtue, and hence interprets this unity as concrete, i.e. as the conception of a sum-total and system of virtues. These are the famous cardinal virtues. The *Protagoras* still enumerates five principal virtues, and it is possible that these were really first brought forward by Protagoras, so that he led the way The Euthyphro, however, reduces one of these virtues, δσιότης, to justice, and this explains how the Symposium is able to speak of four only. These four are then, in the Republic, connected with the Platonic psychology, so that σοφία arises from the rational regulation of the λογιστικόν, as opposed to μωρία, ανδρία from that of the θυμοειδές, as opposed to δειλία, and lastly σωφροσύνη from that of the επιθυμητικόν, as opposed to ἀκολασία. The fourth virtue, δικαιοσύνη, consists in the right relation between these constituents, and may therefore be called the formal and also the all-inclusive virtue. Hence, in the Republic, Justice is called the health of the soul, and ethics are described as the inquiry into justice.

view of the identification of Justice and Holiness, it is no contradiction that elsewhere, e.g. in the Theætetus, and the Phædrus and even in the Republic itself, in the discussion of education, and most of all in the Laws, the greatest stress is laid on holiness and the likeness to God which coincides with it. And as, according to Plato, virtue consists in putting into activity man's own nature, or the functions which a man is alone or best fitted to exercise, it is the activity of that which constitutes humanity, viz. the  $\lambda o \gamma \iota \sigma \tau \iota \kappa \acute{o} \nu$ , which produces virtue. Hence virtue is  $\phi p \acute{o} \nu \eta \sigma \iota s$ . In its full development it is Justice, in its highest stage it is Wisdom, which manifests itself in philosophy, i.e. in the rationality of the entire man.

3. Plato, however, does not remain satisfied with this result, of representing the system of virtues in isolated individuals, but considers them also in the State, where they may be seen on a larger scale. The State he regards as an enlargement of man, and the parallelism between his account of man and his natural history of the State appears everywhere. Thus, the legislative and judicial activity in the State is exactly the same as hygiene and therapeutics in the treatment of the individual; for in both cases the protection of health (justice) is aimed at. If, moreover, man is the world on a small scale, the parallels between political and cosmic laws follow at once. and political problems are so connected that, on the one hand, the good is rendered possible only by the virtues of the individual, and on the other hand, only the good State has room for and makes possible complete virtue. The moral life in a good State is the highest morality conceivable. Plato begins his inquiries with the question why (not how) the State comes into being at all, even in the form of the necessary State. reason of this he discovers in the various wants which lead to the division of labour, and thus, though to a minimum extent. to an arrangement whereby every one has a position to fill and a function to perform, which is just that in which justice con-But this justice is realized to a far higher degree than in the necessary State, in the organic or rational State, which appears as a single just man, since there correspond to the three faculties of the soul the three classes of χρηματισταί, ἐπίκουροι (sometimes called also φύλακες), and ἄρχοντες, the labourers, defenders, and leaders or teachers; and their justice is shown in that they especially represent, the first temperance, the second courage, and the third wisdom. Or, as he points

out in passing, these three orders may be detected in the national characteristics of the Phenicians, Scythians, and Hellenes respectively. Plato was impelled towards an anti-democratic view of politics, not only by his personal circumstances and experiences, but no less by his metaphysics, the substance of which was, that the individual was without value. Accordingly he decides in favour of aristocracy as the only reasonable constitution of the State; but regards it as an unessential difference whether or no it culminates in a monarch.

4. The more Plato perceived that Athens was perishing through the egotism of particular interests, the more necessary it appeared to him to cut this off at its source, and to devise institutions that should accustom men to forget themselves in the thought of the whole of which they were members; and it seemed to him an excellent means for effecting the latter part of his purpose, that the citizens should grow up in fixed orders, a proposal not perhaps uninfluenced by the caste systems of non-Hellenic peoples, although in Plato the position of the child is not so much determined by its birth as by the government, which takes talent also into account. The former object, on the other hand, seemed to be attained most surely by abolishing all distinctions of meum and tuum, i.e., private property and private households, exclusive property in wives and children, etc., in the case of the active citizens, the defenders and guardians of the State. These are the leading points of view in his proposals, which were already in his day derided by many, but which nevertheless were in no case quite baseless imaginings. On the contrary, he found approximations to them in the constitution which, without ignoring its defects, he always esteemed as the highest, viz., that of Sparta. At Sparta there were Helots and Periœci, like his labouring classes, mess-companionships, and lax marriage-customs; at Sparta the children became the property of the State at an early age, and the possession of money had originally been forbidden, etc. All these principles are now carried out with a consistency that borders on exaggeration; and in opposition to the encroachments of egotism, the demand is made that man should be a citizen pure and simple. And as this will take place only where the rulers at the head of the State are penetrated by the love of truth and of the Good, the education of these, i.e., of the guardians, is one of the principal topics of Plato's political philosophy. This

education commences with music, is followed afterwards by gymnastic, then by mathematics in all its branches. Finally, in his thirtieth year, the citizen is initiated into Dialectic. Thus trained, he takes part in the government of the State in his 50th year, not because he desires it, but because it is required by the welfare of the State. Everything that in any way excites the desires and passions must be kept at a distance in education, including dramatic representations and the repetition of the fables about the gods, which form the subject matter of the drama. So surprising a phenomenon as this at first sight is, that one who is the poet among philosophers should prefer mere useful handicraft to art (the τέχνη χρησομένη and ποιήσουσα to the μιμησομένη), is to be explained by the wild demoralization Plato noticed among the frequenters of the theatre. He had shown in the Republic how a State in which the philosophers rule, flourishes in times of peace, and combines justice and happiness; the fragmentary Critias was intended to show how it approved itself also in war, by an example taken from the history of Athens in an imaginary antiquity, when it conquered the far larger State of Atlantis, dominated by Oriental magnificence and sensuousness.

5. Plato very well perceives that aristocracy is possible only when the extent of the State is small. Hence he requires that the guardians, by their superintendence of the conclusions of marriage, should regulate not only the excellence of the births, but their numbers also, by prohibitions of marriage and in other ways. And apart from mathematical reasons indicated by the Platonic numbers, the difficulties of which have become proverbial (cf. Fries in his earlier treatise: Platon's Zahl., Heidelb., 1823, and his Geschichte der Philosophie, i. 375 ff.), he regards (in the Laws) 5040 as the best number of households. Thirty-five of these would form a φρατρία, and twelve φρατρίαι a φυλή; and the whole State would consist of twelve φύλαι, or tribes. The neglect of necessary precautions with regard to the normal growth of the State, etc., causes the degeneracy even of the best States; and hence Plato adds a brief pathology of the State to his explicit physiology. The corruptions of the State accurately correspond to immoral conditions of the individual. Oligarchy, in which the rich rule, corresponds to the passionately ambitious character; democracy, with its equality and mere semblance of liberty, to the man distracted by conflicting

desires. Finally, just as in the ἀκόλαστος a single desire at last overpowers the man, so democracy everywhere ends in the tyranny, which is the worst form of State, just as the aristocratic monarchy is the best.

6. And yet this despotism, the worst of the corruptions of the State, contained features which were not displeasing to For although he does not admit that his State is absolutely impracticable, he vet perceived that the existing State of Athens did not afford the conditions of its realization. A new generation, educated apart from that then living, would alone be capable to submit itself voluntarily to a constitution such as Plato has in mind. But since the existing generation would already have to be reasonable in order to assent to such an education of their children, the only escape out of this circle would seem to be, that a despot who was also a lover of wisdom should introduce all these institutions by force. Perhaps, too, Plato had in his mind the attitude of Pisistratus towards the Solonian constitution, when he made an attempt to win over the younger Dionysius to philosophy. The failure of this attempt did not lead him to despair of the feasibility of his proposals. And that they might be adapted to the given conditions without the tyrant as the deus ex machina, was probably what the works which were either written or sketched after the Republic attempted to show. Thus the Hermocrates, which is connected with the Critias, was perhaps intended to show that, at least in the States of Doric organization, like the Sicilian cities combined by Hermocrates, this aim might be realized by wise reforms. And, just as though the older he became, the more he wished to see the germs of better things, which he could no longer hope to plant in Sicily, spring up nearer home, he finally makes an attempt to show, in the Laws, that, even in his own corrupt times, if in founding a Doric colony, regard is shown also for Attic culture, a State might come into being which would not indeed be the rational State described in the Republic, but the second best—a State based upon laws, in which good laws would take the place of the philosophic rulers that could dispense with laws. This attitude of concession to the evil of reality, displayed in the description of the State in the Laws, involving as its necessary consequence popular reflections in a style condescending to the level of the ordinary consciousness, must not be regarded as due merely to Plato's ex-

periences in the field of politics and hence as confined to this sphere. Rather it goes hand in hand with an increasing perception of the impossibility of attaining to the individual Ideas in a purely dialectical way, and of descending from them The desire of filling up the gulf between the ideal and the real which had induced him (§ 77, 2) to obtain assistance from a science, mathematics, rooted only in διάνοια, causes him here also to lower his demands. The chief characteristic of the Laws, as compared with the Republic, is a gloomy view of the world that often borders upon bitterness, and finally goes astray even to the extent of supposing, although in brief hints, the existence of an evil World-soul, a principle of disorder by the side of the order that sways the world, confusing all things. This tone is generated by the distrust of the possibility of realizing the ideal which the Athenian lawgiver (Plato) produces in the Cretan and the And yet many things had already been Lacedemonian. given up which had still been required in the Republic. community of property and wives is absent in the Laws, as is the caste-like separation of the orders, for which there is substituted a division into four classes based upon property. Other matters which, on a higher estimate of mankind, he might have expected as a matter of course, such as the participation of the higher classes in the elections, he finds it necessary to secure to his supposed State by the threat of In fact, so large a number of laws is enacted, that it is evident how little he thinks may be left to the native genius of the rulers. When one compares the Laws with the Republic, one can hardly be surprised that denials of the Platonic origin of the latter continue to be heard.

7. But even in moods like that in which the interpolated passage in the 9th book of the *Republic*, in which he resigns himself to the impracticability of his ideal, or like that in which the *Laws* were written, Plato does not attain to the same pitch of despairing renunciation with which Glaucus, in the second book of the *Republic*, lays down the principle that injustice leads to welfare, and that the wholly just man must be prepared to suffer ill-treatment of all sorts, and finally death on the cross. On the contrary, the disharmony between what is and what ought to be, is, to Plato, resolved by retribution after death. The possibility of this was established by his belief in immortality. And conversely Plato, like Cicero, and

later, Kant, regards the necessity of retribution hereafter as a fresh proof in favour of immortality. In the Republic this doctrine is chiefly established by the argument, that if even its own illness and corruption, viz., evil, does not destroy the soul, the illness and corruption of something else, i.e. the body, can do so still less. Hence, in addition to the reward which lies in virtue itself, and makes it impossible that the virtuous should ever be entirely miserable, it also involves the consequence hat when the circle of life begins afresh, the truly virtuous man will choose such a lot as will really promote his progress. And the fact that it is not the fault of the gods but of the man himself, which dooms him to this or that lot, serves both as a consolation for and as an explanation of many a disproportion. Man's present lot is the result of his own choice, made in accordance with the nature he had acquired in a previous The second half of the 10th book of the Republic may be called the first attempt at a theodicy, in which the Deity is secured against all appearance either of injustice or of an arbitrary interference with the sphere of human liberty, by means of the assertion of the pre-existence and future existence of the soul. The parallelism between the natural and the moral, which often comes into prominence in Plato. here rises to a real harmony.

# § 80.

## PLATO'S SCHOOL.

Plato's school, called the Academy after the locality in which it was first established, and the older Academy in opposition to later modifications of Platonism, was by his own wish handed over to the guidance of Speusippus, his sister's son. After seven years it passed to Xenocrates, who presided over it for fifteen years. The prominence of the doctrine of number and of a certain learned tendency common to both of these men, would perhaps appear less of a deviation from Plato, if more were known about his verbal lectures, especially in his later days, than it does while one thinks only of his dialogues. The greater stress laid upon the mathematical element compels the retirement of the teleological element into the background. Hence the reproach made against Speusippus at an early time, that he was a mere physicist. The division of philosophy into Dialectic, Physics, and Fthics, ascribed to Xenocrates, is

so clearly implied in the Platonic system, that it is hard to believe that it should not have been expressly stated by Plato. Even if it was not, we shall hardly be able to regard it as a great discovery. His assumption of a neutral intermediary between good and evil indicates a cautious man not to be satisfied by hap-hazard classification, as might have been expected from the disciple "who required the spur." Besides these there may be mentioned as personal disciples of Plato, Heraclides from Pontus, Philippus of Opus, the editor of the *Platonic Laws* and the author of the *Epinomis*, Hestiæus of Perinthus, and Eudoxus of Knidus: Polemo, the successor of Xenocrates, Crates and Crantor already belong to the following generation, which had been educated by Xenocrates. The disciple of Crantor was Arcesilaus, who founded the new Academy (v. § 101).

Diog. Laert. IV. c. 1-5. Ritter and Preller, § 281-292.

## § 81.

The legacy of Greece to mankind for all time, the sense for beauty and for knowledge, is nowhere felt in a more concentrated form than in Plato. Platonism appears as the most Greek of all philosophies, since it does not, like the Ionian and Eleatic doctrines that preceded it, reflect merely a single peculiarity of a single stock, but has included within itself all previous philosophy, and reflects the Greek spirit as a whole. For this same reason it cannot arise until not only in the colonies of Ionia and Magna Græcia, but in Greece generally, the freshness of life is fading and dying away. And no regretful longing for the glories of the past, of which the plaintive elegy reaches our ears in the writings of Plato, can arrest the The era of Greece has come to an end. wheel of fate. wrest from her hands the sceptre of the world, and thus to play the intermediary in its transition to Rome, was the destiny of the ephemeral supremacy of a people which was Greek and yet so unlike the Greeks, and which as in a dream anticipated the approaching universal empire of Rome. Philip, who deprived the Greeks of their reputation for invincibility, and his still greater son, who, by delivering the treasures of Greek culture to the East, robbed the Greeks of their true palladium, the consciousness of being the intellectual elite of mankind, both of these dealt a mortal blow to Hellenism.

But a time in which this new principle obtains acceptance can no longer content itself with the world-formula of a philosopher who dreams of a State great by its smallness. thinker is required capable of educating a king who subjects three continents, and who, just as his pupil does not hold the East in too great contempt to reside in it, himself does not consider anything too bad to be investigated, nor regards the conquest and amassing of all the treasures of knowledge as a robbery committed on the genius of philosophy. cal creativeness of Plato must be superseded by the collecting industry of Aristotle.

## § 82.

But here also it must be shown, that in addition to the necessity of a new philosophic system in the history of the world, Platonism itself required to be transcended, and that in the direction of an advance towards Aristotelianism. first requirement is satisfied as soon as it is shown that his system cannot fulfil the demands Plato himself makes upon the true system: the second, if it should appear that Aristotle fulfils them to a greater extent. In the programme of his dialectical investigations Plato had promised to go beyond all onesided oppositions, especially that of physiologers and metaphysicians, whom he calls the adherents of the Many and of the One. Accordingly, when he attempts to mediate, not between the Eleatics as the representatives of the one extreme, and those of the other, such as Anaximenes, but between them and Heraclitus, to whom, in agreement with Plato's own example (v. § 41, supra), there had been assigned the position of a metaphysica physiologer, it is evident that even if this undertaking had proved successful, the metaphysical element would have been favoured, and the physiological neglected. Besides this, however, it cannot be denied that in combining the doctrines of the Eleatics and Heracliteans by far the greater stress is laid upon the Eleatic element, so that matter is the non-existent. just as with the Eleatics; and thus physics also, thoughnot called a doctrine of false appearances outright, remains only a probable myth. Hence it is not surprising that Aristotle, who dislikes the Eleatics, whose favourite science is physics, and who in it makes so much use of Anaximander and Heraclitus that Schleiermacher might have extended the reproach he

brings against Aristotle, of plagiarism from Heraclitus, also to Anaximander, should look down upon the Platonic doctrine of transcendent Ideas as a one-sided exaggeration, and should condemn it with the same words Plato had uttered concerning the ultra-Eleatic Megarians.

#### SIXTH DIVISION.

#### Aristotle.

Diog. Laert., v. 4. Ritter and Preller: § 293-355.

§ 83.

#### LIFE OF ARISTOTLE.

\*Αριστοτέλους βίος κατ' 'Αμμόνιον (Ammonii vita Aristotelis) 'Αριστοτέλους βίος καὶ συγγράματα αὐτοῦ (Anonymi vita Aristotelis). (Both in Didot's ed. of Diogenes Laert.). Franc. Patritius: Discussionum peripatetica rum tomi IV. Basil. 1581, fol. A. Stahr: Aristotelia. 2 vols. Halle, 1830-32.

Aristotle, the son of Nicomachus, was born in Ol. 99, I (385 B.C.), at Stagirus, afterwards called Stagira, a city of Thrace, and later of Macedonia. His father, and also his grandfather, Machaon, were physicians; and this profession, as is made probable by the legend of his descent from Asclepius, may long have been hereditary in the family. as this explains his early inclination to natural science, so the fact that Nicomachus had been physician to Philip's father explains his later connection with the royal house of Macedon. Having early lost his father, Aristotle, at the age of seventeen, became the pupil of Plato, his senior by forty-five years, whose lectures at that time were probably strongly Pythagorean in tone. Aristotle's later attacks on the Platonic doctrine were a continuation of a tendency he displayed at an early age, of going beyond his master (who hence thought he required the "rein"), and gave occasion to the accusation of ingratitude frequently made against him. They refer, how ever, chiefly to the Platonic doctrine as it was developed in these lectures, and not as it exists in his writings. In Plato's lifetime Aristotle was a teacher only of rhetoric, in opposition to Isocrates. After Plato's death he went, together with Xenocrates, to Hermeias the tyrant of Atarneus, and afterwards married the daughter of the latter's brother. At Mytilene, whither he had retired after the death of Hermeias, he received Philip's request that he should undertake the education of Alexander, then thirteen years old. For four years Aristotle was something more than the tutor to a prince ordinarily is, and then remained in Macedonia for four years longer, as he was on very good terms with his pupil, although his Natural History does not exactly confirm the story that the latter sent him rare beasts from the East. This harmony seems to have been interrupted only when Callisthenes, the nephew of Aristotle, had fallen a victim to the king's distrust in Bactra, as an adherent of the old Greek party; but by this time Aristotle had exchanged his residence in Macedonia for Athens. There he presided over the Lyceum, or Peripatetic school, which received the former name from the temple of Apollo Lyceus, in front of which,—the latter from the colonnades in which,—he is said to have delivered his lectures; although it was formerly generally supposed that the name of the Peripatetics arose from Aristotle's habit of teaching while walking up and down. This, however, did not last for more than thirteen years. For when Eurymedon, to the delight of the enemies of Macedon, came forward with an accusation against Aristotle, the latter deprived Athens of the opportunity of "sinning for the second time against philosophy," by withdrawing from the city. died at Chalcis not long after, in Ol. 114, 2 (322 B.C.).

# § 84.

## THE WRITINGS OF ARISTOTLE.

Brandis: De perditis Aristotelis de ideis libris. Bonnæ, 1823. The same: Ueber das Schicksal der Arist. Schriften, in the Rhein. Mus., 1827, I., pp. 236 ff. E. Heitz: Die verlorenen Schriften des Aristoteles. Leipz. 1865.

The antithesis between Plato and Aristotle, which announced itself in their external appearance, is visible no less in their mode of feeling and thinking, and also in their style and their treatment of scientific problems. And it is shown also in the fact that while all Plato's writings are exoteric, *i.e.* works of art intended for a more extended public, Aristotle's are all esoteric, *i.e.*, intended for the school. Aristotle indeed wrote other works also, to which he frequently refers as "exoteric discussions"; but in spite of the laudatory testimony of Cicero

to the dialogues of Aristotle, and their masterly defence by Bernays (Die Dialoge des Aristoteles, Berlin, 1853), it was not perhaps an injustice of fortune that just these should have been lost. A great deal of what has been preserved was probably written down in brief during the lectures, and afterwards used to guide a new course, which would explain the cross references. Nevertheless, although the condition in which the Aristotelian writings have come down to us, is in some cases bad enough, it is better than might be expected, if the story told by Strabo of the fortunes of the manuscripts of Aristotle were true of the original from which our editions are copied. Even the Metaphysics, in the case of which Glaser is ready to admit the truth of the story, would, if it were so, probably present a still more melancholy spectacle than now. Brandis has shown by reference to ancient lists, and by other indications, how great a part of Aristotle's writings has been lost. Those that have been preserved cannot be arranged chronologically, but only with reference to their place in the system. The incorrect place assigned to the Metaphysics in all editions is past remedy, as it has given its name to the book. Of editions there may be mentioned the Aldine, the editio princeps (Venet. 1495-89, 5 vols. fol.), the Basel of 1531, the Paris Greek and Latin of 1629 (2 vols. fol.), that of Buhle (Zweibrücken, 8vo), which however came to a stand-still, and above all the one undertaken by J. Bekker and Brandis \* at the request of

<sup>\*</sup> As the first two volumes of the Berlin edition, which contain the Greek text (the third contains a Latin version, the fourth extracts from the older commentators) are paged continuously, the quotation of references may be abbreviated by following the example of Waitz and others, and giving only the page. Hence, by supplying first the following list of all the writings of Aristotle, it becomes easy to see at once from the number of the page, from what writing a quotation is made.

<sup>(1)</sup> The so-called Organon of later times contains (p. 1–184): κατηγορίαι α΄ (Categoriæ), p. 1–15; περὶ ἐρμηνείας ά (de interpretatione), p. 17–24; ᾿Αναλυτικά δ΄ (Analytica priora et posteriora); πρότερα β΄, p. 24–70; εστερα β΄, p. 71–100, Τοπικά θ΄ (Topica VIII.), p. 100–164; περί σοφιστικῶν ἐλέγχων α΄ (de Sophisticis elenchis), p. 164–184. The physical writings come next (2), and contain: ψυσική ἀκρόασις θ΄ (Physica auscultatio, or Physica VIII.), p. 184–267; περὶ οὐρανοῦ δ΄ (de cælo IV.), p. 268–313; περὶ γενέσεως καὶ φθορᾶς β΄ (de gener. et corrupt. II.), p. 314–338; Μετεωρολογικά δ΄ (Meteorologica IV.), p. 338–390, περὶ κοσμοῦ (de mundo), p. 391–401; περὶ ψυχῆς γ΄ (de anima III.), p. 402–435; περὶ αἰσθήσεως καὶ αἰσθητῶν, περὶ μνήμης καὶ ἀναμνήσεως, περὶ νῶνου καὶ ἐγρηγόρσεως, περὶ ἐνυπνίων, περὶ μακροβιότητος καὶ βραχυβιότητος, περὶ νέστητος καὶ γήρως, περὶ ζωῆς καὶ θανάτου, περὶ ἀναπνοῆς (Parva naturalia), p. 436–486; περὶ τὰ

the Berlin Academy (1831-35, 4 vols. 4to). The value of the last has been doubled by the excellent *Index Aristotelicus* of Bonitz (Berl. 1870).

### ARISTOTLE'S DOCTRINES.

F. Biese: Die Philosophie des Aristoteles. Berlin, 1835-43. 2 vols. H. Bonitz. Aristotelische Studien, i.-v. Wien., 1862-66.

§ 85.

INTRODUCTORY. THE ARTICULATION OF THE SYSTEM.

I. Although those who reduce the difference between the doctrines of Plato and Aristotle to a merely formal one, and thus regard the latter as a mere re-modelling of the former, go much too far, this one-sided view must not be neglected in opposition to the contrary extreme, which sets them over against each other as the representatives of Idealism and Realism, of Rationalism and Empiricism. And it does not impair the respect due to Aristotle, while it facilitates the understanding of his doctrines, if it is shown in a greater number of points than is commonly done, that the philosopher, not the least of whose glory consists in having learnt much, should have learnt much from none other than Plato. Hence it will be necessary at the outset to refer to Plato's delimitation of philosophy (§ 76, 1), in order to appreciate

ζφα ιστορίαι ι' (Historia animalium X.), p. 486-638; περὶ ξώων μορίων δ' (de partibus animalium IV.), p. 639-697; περὶ ξώων κινήσεως (de motu animalium), p. 698-704; περὶ πορείας ζώων (de incessu animalium), p. 704-714; περὶ ζώων γενέσεως ε' (de generatione animalium V.), p. 715-789. In the second volume there follow first some smaller physical treatises (περὶ χρωμάτων, περὶ ἀκουστῶν, φυσιογνωμικά, περὶ φυτῶν β', περὶ θαυμασίων ἀκουσμάτων, μηχανικά), p. 791-858; προβλήματα λή (Problemata 38), p. 869-967; περὶ ἀτόμων γραμμῶν (de insecabilibus lineis), p. 968-972; ἀνέμων θέσεις καὶ προστρορίαι (ventorum situs et appellationes), p. 973. Then after περὶ Ἐενοφάνους, Ζήνωνος καὶ Γοργίου (de Xenophane Zenone et Gorgia), p. 974-980, there come (3) Τὰ μετὰ τὰ φυσικὰ ν΄ (Metaphysica XIV.), p. 980-1093. Then follow (4) his ethical writings, p. 1094-1353, i.e., Ἡθικὰ Νικομάχεια κ (Ethica ad Nicomachum X.), p. 1094-1181; Ἡθικὰ μεγάλα β' (Magna moralia II.), p. 1181-1213; Ἡθικὰ Ευδήμια ή (Ethica ad Eudemum VII.), p. 1214-1249 (the 4th, 5th, and 6th books are wanting); περὶ ἀρετῶν καὶ κακιῶν (de virtutibus et vitiis), p. 1249-1251; Πολιτικὰ θ' (Politica VIII.), p. 1252-1342; Οἰκονομικά β' (Œconomica II.), p. 1343-1353. Finally (5) the writings on rhetoric and poetics; τέχνη ῥητορικὴ γ' (Rhetorica III.), p. 1354-1420; Ὑητορικὴ πρὸς λλέξανδρον (Rhetorica ad Alexandrum), p. 1420-1447; περὶ ποιητικῆς (Poetica), p. 1447-1462.

properly the procedure of Aristotle in this matter. In connection with the fact that the instinct to know is naturally inherent in man, Aristotle shows (p. 980 f.) that perception (alothous) is the first grade of knowledge, and that it is concerned with the particular (καθ' έκαστον, the τοῦτο or τόδε of Plato). In consequence of repeated perceptions, and the re-cognition based on memory, this becomes experience (¿μπειρία, a term already found in Plato). Experience is already concerned with the universal (καθόλου, p. 100), although the object of experience may in its turn be called particular, in comparison with the higher universal of knowledge proper. of experience, which it shares with perception, is, that it deals only with the actual fact ( $\delta\tau\iota$ ), not with its reasons ( $\delta\iota\dot{a}$   $\tau\dot{\iota}$ ). Hence both are surpassed by theoretical understanding (\(\tau\ellay\text{v}\eta\)), which includes a knowledge of the reason, and hence already the possibility of instruction. (In dealing with this third degree of knowledge, Plato had always thought of the mathematician, whereas Aristotle thinks rather of the theoretically trained physician; in other respects his τέχνη corresponds pretty well to Plato's διάνοια.) If, however, one does not rest content with the first reasons reached, but seeks and finds the principles (àpxai) underlying them, there arises knowledge proper, or philosophy. For Aristotle does not, like Plato, distinguish between σοφία and φιλοσοφία. Since, then, the principle is above all the universal, by which he means not only that which is common to all  $(\kappa \alpha \tau \hat{\alpha} \pi \alpha \nu \tau \delta s)$ , but also the thing as such, or the conception that creates it (the καθ' αὐτό), and since knowing a thing by its reasons, is equivalent to knowing that it cannot be otherwise, universality and necessity are the proper marks of philosophic cognition (p. 88). And, as in Plato, wonder, the feeling of not knowing and not understanding is to Aristotle also the beginning of philosophy, and philosophy that which puts an end to this feeling. And whereas wonder is an attitude of dependence, philosophic knowledge is free and independent, in which that which knows, knows only itself. Thus in a way cognition is identical with its object, and the νοῦς itself with the νοητά (pp. 429-431). Philosophy is, however, independent also in this sense, that it serves nothing, and therefore no practical purpose. And it arises, as Plato had remarked of the writing of history, only when men attain to leisure. Philosophy inquires for the sake of knowing alone, and hence, though there may be arts more useful, there is none

more excellent. Indeed, it may even be called divine, in the two senses that it is practised by the Deity, and that it is concerned about God.

2. And Aristotle, like Plato, not only defines philosophy as against the unphilosophic point of view, but also defines true philosophy as against other philosophic views. But in so doing he pays little attention to the sophistic position, as having been long ago refuted by Plato. He treats it contemptuously, regards the Sophists as mere money-makers, their fallacies as mere deceptions, etc. Similarly, the smaller Socratic schools are already sufficiently remote to be referred to but rarely. But the real opponent to be combated is the Platonic dialectician. He regards dialectic, not indeed as a false, but as a subordinate art, since it only attempts what sophistry pretends to be able to do, and what philosophy possesses and knows (p. 1004). Almost with the same words with which Plato had opposed the extravagant claims of mathematics, Aristotle reproaches dialectic with dependence on assump-Philosophy, on the other hand, made no assumptions; and thus dialectic could only make things probable, and persuade, whereas philosophy proved and convinced. Hence philosophy deals with knowledge and truth, dialectic with opinion and probability (p. 104). It is, however, indispensable in preliminary investigations, in which alone it finds a proper place. Thus, while in Plato to philosophize dialectically had been equivalent to philosophizing rightly, Aristotle used διαλεκτικώς and κενώς as synonyms. Thus Aristotle, adopting towards dialectic almost the same attitude that Plato had adopted towards the Sophists, or at least towards the Socratists, regards philosophy as the science of first principles, i.e. of universals, proceeding, not by the way of hypotheses, but by that of proof.

3. With respect to the articulation of his system, both the tradition that he divided his doctrines into theoretical and practical, and also the one that he divided them into logic, physics, and ethics, can claim the support of dicta of his own. The two, however, are reconciled by extending the first, so as to include a third science, that of production  $(\pi o i \eta \sigma \iota s)$  (pp. 145, 1025), and by supposing that in the case of the theoretic science, which perhaps was alone called philosophy, and which was to include  $\Theta \epsilon o \lambda o \gamma \iota \kappa \dot{\eta}$  (in later times called  $\Lambda o \gamma \iota \kappa \dot{\eta}$ ) as the  $\pi \rho \dot{\omega} \tau \dot{\eta}$ , and  $\phi \nu \sigma \iota \kappa \dot{\eta}$  as the  $\delta \epsilon v \tau \dot{\epsilon} \rho a \phi \iota \lambda o \sigma o \phi \dot{\iota} a$ , and  $\mu a \theta \eta \mu a \tau \iota \kappa \dot{\eta}$ 

as the third (p. 1026), Aristotle left the last practically untouched, and that the same holds good of the third main division of the system which was to consider the moieiv. this way his actual doctrines would all be reduced either to logic, or to physics, or to ethics (cf. p. 105). His "analytical" investigations, however, do not fit into any of these three divisions. They do not, however, lose the great importance Aristotle attached to them, if one follows a hint given by himself, and the example of his successors, and regards them as the indispensable instrument (ὄργανον) of the scientific investigations proper. And they are connected in the following manner with the above-mentioned distinction of sophistic, dialectic, and apodeictic thought, viz. that the treatise on the Fallacies, shows how the Sophists are to be dealt with, the Topics how argumentation and discussion are to be managed, and finally the Hermeneutic and the two Analytics, what is the shape taken by scientific proof. The treatise on the Categories thereupon prepares the transition to the Fundamental Science, i.e., to the sciences which Aristotle already includes in philosophy proper, and which for this same reason he no longer calls "analytical," but designates by other names, among which that of logical also occurs.

§ 86.

## THE ANALYTICAL INVESTIGATIONS OF ARISTOTLE.

Trendelenburg: Elementa logices Aristoteleæ. Berol. 1836 (5th ed. 1862). Erläuterungen to this, Berl. 1842. T. Waitz: Aristotelis Organon, 2 vols. Leipz. 1844-46. C. Prantl: Geschichte der Logik im Abendlande. 1st vol. Leipz. 1855 (2nd 1861, 3rd 1867) [Vol. IV., 1870.—Ed.].

1. As Aristotle does not distinguish thought and speech in the way now done, but includes both thought and language under λόγος, and moreover regards thoughts, and consequently also words, as ὁμοι ὁματα τῶν πραγμάτων (as Plato had called them the δηλώματα), we can understand that the rules discovered by the analysis of the sentence at once acquire a logical in addition to their grammatical meaning, viz, that of being the forms of correct thought, and finally, more or less consistently, that of being r garded as the laws of real existence. This last aspect does not indeed altogether disappear, but is very much obscured, in the treatise περὶ ερμηνείας, which would have been better rendered by de enunciatione, rather than by de interpretatione (pp. 16–24). In it, after defining a word as

a φωνή σημαντική κατά συνθήκην, and thus distinguishing it from sounds merely expressive of feeling, Aristotle defines the sentence (λόγος), in verbal agreement with Plato, as a combination of words (συμπλοκή φωνών). He proceeds however at once to distinguish sentences which contain no assertion, such as requests, from those that do, and in which, consequently, the question of truth and falseness can arise. The latter he calls judgments (λόγοι ἀποφαντικοί, or ἀποφάνσεις, or in the Analytics προτάσεις, judicia) and proves of them, as Plato had done before him, that they necessarily consist of a name ("ovoµa) and a verb (δημα), of which the former expresses the υποκείμενον (substans, subjectum) the latter the κατηγορούμενον (prædicatum). It is shown at the same time, that a real connection between them only takes place when the verb has a  $\pi \tau \hat{\omega} \sigma i s$ , i.e. is inflected; but that which is indicated by the inflexion may be effected also by a separate word (cival), which in that case indicates merely that the subject and predicate belong together (συγκείσθαι, hence afterwards συνδέν εν and ultimately copula), and hence belongs equally to the ovoma and to the ρῆμα (hence, afterwards, verbum substantivum). If, then, the judgment consists of three words by the separation of the copula, the predicate may either include the subject as a part of itself, and is then asserted of the subject as something it embraces (καθ' ὑποκειμένου), or conversely it may state some thing which is found in the subject, and inheres in it as its substratum (ἐν ὑποκειμένω). It is clear that in the former class of subsuming judgments, Aristotle is thinking of cases where the predicate is a substantive, in the latter, indicating inherence, of cases where it is an adjective. And according as in a judgment the predicate is asserted or denied of the subject, and a κατηγόρημα κατά or από τινος takes place, it is a κατάφασις or ἀπόφασις. The former is also called πρότασις κατηγορική (judicium positivum), the latter στερητική (j. negativum). fact that Aristotle noticed that the place of the subject might be taken also by an ὅνομα ἀόριστον, such as ὀυκ-ἄνθρωπος, and the place of the predicate by a ρημα αόριστον, as οὐ-τρέχειν, and, that the first translators rendered aoριστον by infinitum instead of indefinitum, brought about the assertion of a third case (and why not a fourth?), in addition to the only two possible, which was called the judicium infinitum. Besides the distinction between affirmative and negative judgments, Aristotle also considers that between those that assert something universally (αὶ καθόλου ἀποφάσεις καὶ καταφάσεις) and those that do so only in part (called εν μέρει in the Analytics, καθ' εκαστον in the de interp.). By combining what is said about the quality and the quantity of judgments, the rules as to the opposition of two judgments are obtained. An affirmative and a negative judgment are αντικείμενα (opposita): this however they may be, either ἀντιφατικῶς (contradictorie), when one merely destroys the other, or evarious (contrarie), when it further substitutes another assertion. This latter opposition is also called ek diametrow, and takes place between the universal affirmative and the universal negative. At this point, too, Aristotle introduces the laws of Contradiction and Excluded Middle, which he generally justifies by the argument (always used by Plato), that otherwise the meaning of a word would not be fixed. Connected with the investigation of the opposition of judgments, and combined with it, is that of their modality. Stress is justly laid on the fact that modal judgments are really compound (συμπλεκόμεναι), and the question is thoroughly discussed, how the possible can have opposed to it, not only the impossible but also the necessary, etc. The fact that the word ενδεχόμενον is here used in opposition to δύνατον and αναγκαΐον, while it is used in the Analytics to designate the possible, has induced some to assume that Aristotle made a distinction between logical and real possibility. Others, however, dispute this.

2. With regard to the doctrine of the Syllogism, or inference, Aristotle was induced to lay such great stress upon it, not only by the fact that he was the first to work it out (p. 184), but also because his theory of demonstration is based upon it, and demonstration, as we saw, is the chief object of analytical inquiries. Hence the work in which he treats of the syllogism is called par excellence τὰ ἀναλυτικά. We shall consider, to begin with, only the 'Αναλυτικά πρότερα (p. 24-70). They are the most elaborated part of the whole Organon. The syllogism (συλλογισμός) having been first defined as a proposition in which a new result follows necessarily from certain presuppositions, inquiries are undertaken to determine what judgments may be converted, and how. Thereupon the essential elements of the syllogism are considered. προτάσεις (præmissæ) contain the ἄκρα (extrema) and the όρος μέσος (terminus medius). The former, the όρος πρώτος or ἄκρον μείζον (terminus major), and the ὅρος ἔσχατος οτ ἄκρον ἔλατ-Tov (terminus minor), form the predicate and subject, respect-

ively, in the συμπέρασμα (conclusio); the middle term, on the other hand, which contains the ground of their combination, disappears. It is the middle term, however, the soul of the syllogism, that determines the true nature of the process. According as it occupies the middle, the highest, and the lowest place in respect of comprehension and is θέσει μέσος,  $\pi \rho \hat{\omega} \tau \circ s$  or  $\tilde{\epsilon} \sigma \chi a \tau \circ s$  (i.e., positione medius, supremus, or infi[r]mus), there result the three different σχήματα (figura), of the syllogism, the only three possible. The first of these has the greatest scientific value, because it can produce universal affirmative conclusions, while the second can give only negative, and the third only particular conclusions, inasmuch as science is concerned with the universal, and the positive and direct proof has greater force than the negative and indirect. Hence Aristotle already strives to reduce the inferences of the other figures to the first. Reduction is effected by him in the case of all the four moods of the second and the six of the third figure by αντιστρέφειν (conversio) and απαγωγή είς αδύνατον (reductio ad impossibile); thus the fourteen possible moods of the later logicians and the reductions of the ten later ones to one of the first four, are already found in Aristotle. A very thorough inquiry into the way the matter is affected by the varying modality of the premisses, shows how little he shrank from dry inquiries, if they went to the bottom of the matter. Connected with these are hints as to how to discover the right middle terms, and as to the way of discovering flaws in syllogisms, by resolving them, etc. They continue to the end of the first book, and in the second follow inquiries which belong no longer to elementary, but to applied logic. He there investigates whether a true conclusion can be derived from false premisses, why from a false conclusion the falsity of one at least of the premisses may be inferred, what are the cases in which, and the limits within which a conclusion may, in a circular proof, be made into a premiss, in order to prove a premiss, or its contrary be made into a premiss in order to disprove it. The error of the εν ἀρχη αἰτεισθαι (petitio principii; it should be called conclusionis or in principio) is also considered, and a transition is then made to the inferences which, without being strict demonstrations, nevertheless produce belief. The chief of these is ἐπαγωγή (inductio), which he compares with the third figure, as it infers the universal by means of the particular. Still less cogency

is conceded to the example  $(\pi a \rho d \delta e i \gamma \mu a)$ , which he does not distinguish stringently from the procedure by analogy, and which in his view belongs especially to the domain of rhetoric, where it takes the place of induction, in a manner precisely similar to the substitution of the  $\dot{e}\nu\theta\dot{\nu}\mu\eta\mu a$ , or probable inference, for the strict syllogism.

Cf. Heyder: Kritische Darstellung und Vergleichung der Aristotelischen und Hegelschen Dialektik. Erlangen, 1845.

3. The 'Αναλυτικά ὕστερα (pp. 71-100) display a degree of finish far inferior to that of the investigations so far mentioned, and were probably collected after Aristotle's death from his literary remains. They contain what has been aptly called his contributions to the methodology of science. Thus, since all scientific knowledge is demonstrative, i.e., as we have seen, proved by syllogism, it must be preceded by one which is of acknowledged certainty, and on which it is based. In order to arrive at such knowledge, two methods are possible; one, when the starting-point is a datum of perception, from which an universal is inferred, which is the essence of inductive procedure, the other when the universal is the starting-point, from which a descent is made to the particular, which is what Aristotle designates as the syllogistic The two are opposed, in that the one starts from procedure. the προς ήμας πρώτον, that which is the first and most certain thing for the subject, and passes on to that which is the first in itself (φύσει or λόγω or άπλως πρότερον), whereas in the other, the reverse order is adopted. (Where πρότερον and υστερον are found without qualification, the προς ήμας, not the φύσει, should be understood. Besides, Aristotle also formulates the antithesis of the 'first for us,' and the 'first as such,' so that what comes last in the analysis, comes first in its genesis [p. 1112].) But although the inductive procedure is more persuasive, the deductive is more scientific. It can moreover aim either at determining that a thing is, and then it produces a demonstration, or at determining what it is, when it leads on to its ὁρισμός (definitio). He considers first the demonstration, and shows that it is an inference from true and necessary premisses, and for this same reason is applicable only to things universal and eternal, and in every science rests upon certain principles and axioms which that science cannot demonstrate; and further that the universal and affirmative, and the direct, demonstrations deserve preference, and also the reason why this should be the case, etc. Then he passes to definition, and justifies its inclusion in the syllogistic method by showing that true definition contains the ground of the thing defined, *i.e.* a middle term. Thus the definition of an eclipse of the moon, "darkness due to the interposition of the earth," may easily be brought into the form of a syllogism. To this requirement of definition is added the formal requirement which Aristotle does not seem to have attempted to connect with the former, viz. that the definition must contain the specific difference in addition to the genus. This presupposes division, which, though very important, cannot be substituted for deduction, as in Plato. There follow positive and negative rules respecting definition.

Cf. Kühn: D: notionis definitione qualem Aristoteles constituerit, Halle. 1844. Rassow: Aristotelis de notionis definitione doctrina. Berol. 1845.

4. But there are limits to the process of demonstrating and defining, for no knowledge would be possible, either if it moved in a circle, or also if it continued ad infinitum, without end, purpose, or aim. These limits are twofold, since there exists that which stands above all demonstration and definition, and also that which lies beneath it. Thus, the object of sense-perception lies beneath both, for it cannot be demonstrated as being contingent, nor defined as containing innumerable characteristics (p. 1039). On the other hand, the most universal genera and principles, the simplicity of which does not admit of definition, and the indubitable axioms, possessing immediate certitude, transcend both definition and demonstration. And every science contains such immediate judgments, superior to demonstration; and this is the case also in the science of the ultimate grounds, which transcends all the rest and demonstrates the principles that could not be proved within the limits of the subordinate sciences. And just as perception was the organ for the particular and contingent, so it is the vovs that attains to these immediately certain judgments, and thereby transcends ἐπιστήμη, or mediate cognition. It grasps its object by an intuition which is not sensible, but rather comparable with that by which the mathematician masters his fundamental conceptions (p. 1142). And just as each sense is limited to the sensations peculiar to it; so the reason is limited to the  $\alpha\pi\lambda\hat{a}$ , which are incapable of further derivation. Moreover, there is

not in this sphere, in which the known is grasped immediately, a distinction between knowing truly and knowing falsely, as in the case of mediate cognition, but only a question of knowing or not knowing. Similarly, too, the distinction between the *that* and the *what*, the existence of a thing and its nature, here disappears, for in the moment that this highest knowledge is grasped its reality also is immediately certain (p. 1051, p. 203).

5. Although then the demand for proof of these first principles of all proof is irrational, they are nevertheless not altogether in the air, like innate conceptions and axioms; for these immediate judgments lie potentially in the knowing mind and are developed by means of sense-perception, out of which the mind selects the universal element, so that the inductive method cannot indeed prove, but can bring out clearly the principles of all demonstrative knowledge. Similarly to Plato, whom he commends for this reason (p. Aristotle also, maintains that science ascends to the universal, just as much as it descends from it to the particular. tion, which starts from what is perceptible by the senses, as being the more certain for us, and passes on to the more certain in itself, would have to be complete, in order to have complete cogency. If indeed it were this, if we were acquainted with every particular thing, we should not require any demonstrative knowledge; and induction, which, as it is, resembles an inference in the third figure, would then be like one in the first. But as the case stands, probability only, and not certitude,-that which is common rather than that which is truly universal,—can be attained by the inductive method. And Aristotle shows in his practice, how it is possible to proceed from the former to the latter, in all cases where he brings what has been found by induction nearer to the level of scientific knowledge, by means of general argumentation. The Topics (pp. 100-164) give the theoretic instructions for this process, and contain rules for the guidance of the dialectical procedure and, in close connection with these, hints as to how sophistic plays upon words may be met (pp. 164–284). Accordingly, the proper sphere of dialectical, i.e. of argumentative reasoning, is the κοινόν and the ένδοξον. And just as it starts from this, so it aims also at finding ever more general and more probable truth. But it thereby approximates to philosophic knowledge, for that which is probable to all, is certain (p. 1172). The rules of dialectical procedure will therefore

have to bear this chiefly in mind, that an universal agreement has to be reached, and that accordingly they are rules for persuasion (rhetorical rules), and for balancing different views (rules for discussion). Hence it is intelligible that Aristotle calls rhetoric the complement of dialectic (p. 1354). at showing, in the service of science, how agreement may be attained as to the first principles of science. This however presupposes a desire to arrive at such agreement. Since, however, this would be impossible if the means of arriving at an agreement, viz., words, did not maintain their meaning, the principle of identity is the supreme canon in discussion, and the proof of its infraction a proof that the opponent must abandon his position (cf. p. 996). Conversely, it will be possible to show that in most of the cases in which the Sophists think they can prove contradictions, they failed to notice the different meanings of words. Hence he repeatedly insists on logical accuracy, i.e. such as respects the expressions of the language. mentation should start with something considered certain on the ground of authority. Hence Aristotle's industrious inquiries into the conclusions embodied in the writings of earlier philosophers, still more into what the spirit of the nation has embodied in proverbs and above all in language. inquiries into the meaning of words, -which regard their etymological origin much more rarely than their present meaning from the point of view of a lexicographer,—are intended to determine how and what people think. The next point, how ever, is, that not only do the authorities contradict one another. but that reasoning which treats the subject from all points of view, discovers contradictions in that which appears quite certain. Hence there reappears in Aristotle that procedure by antinomies, representing the eristic procedure of the Sophists, the irony of Socrates, and the negative side of the Platonic Dialectic (cf. § 76. 6), which aims merely at producing àπορία, because without it there is no adequate possible (cf. p. 995).

6. Now, in order to appreciate properly the perplexity thus generated, and in order to escape from it, it is necessary that the questions should be rightly put; this however requires above all that there should be no delusion as to which class of categories the subject-matter of the sciences, and of the supreme architectonic science, belongs to. The different classes of categories are treated partly in the Topics, partly in the

writing on the Karnyopiai (pp. 1-15), the Aristotelian origin of which is however denied, wholly or in part, by weighty authorities. We can easily understand, in view of his opinion of the relation of language to thought, that Aristotle should discover these classes by analyzing thought, as expressed in the sentence, into its component parts. From this there results in the first place, that everything thought is thought either as a subject or as a predicate. The thorough investigations of Trendelenburg further render it very probable that reflection upon the attributive qualifications which the subject of a sentence admits of, and upon the various main grammatical forms of the verb, which, as we saw, occupied the place of the predicate, and lastly the possibility of determining it more closely by adverbs, was the reason why Aristotle assumed the ten yévn Ths κατηγορίας, or κατηγορίαι, which he did. Thus οὐσία or the τί ἐστι would correspond to the substantive, ποιόν to the adjective attribute, ποσόν to a word of quantity, πρός τι to the words that require a supplementary case, further ποιείν, πάσχειν, κείσθαι and έχειν to the active, passive, middle, and preterit, while finally ποῦ and πότε would represent adverbs. true, however, that authorities like Ritter, Prantl, Zeller, and Bonitz have declared against this interpretation.) This is easy to reconcile with the fact, that after it had appeared that the other categories only denoted conditions or activities occurring in the ovola, other conditions than those at first enumerated are sometimes called categories. For we must always remember, that since things are reflected in the thought of all men in the same way, and since language also reveals the thought common to all, the main classes, though primarily grammatical, and perhaps different from what they would have become if Aristotle had found a fully-developed theory of the parts of speech, and which moreover he also sometimes reduces (v. p. 83), at once acquire logical and also real import. Hence, because we must think everything either as ovola or as one of its  $\pi d\theta \eta$ , all reality must be subject to the distinction of the substantial and accidental; or rather, conversely, we think so because it is the case. The ovoia, or substance, therefore has primarily a grammatical meaning, and denotes the possible subject of a sentence. For this same reason, that which can only be subject and never a predicate, the individual thing, e.g. something denoted by a proper name, is substance in the first place and par excellence. The genera denoted by general

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names can occupy the place of predicate, as well as that of subject, e.g. in subsuming judgments: hence they are called, substances indeed, but second substances. Whatever, on the other hand, occupies the place of predicate in a judgment asserting inherence, is only a quality of a substratum, and hence not a substance at all, but a mere how. All science however is concerned with substance, or the what of a thing, and the different sciences have different substances for their object: geometry, e.g., that of space, the οὐσία θετή (p. 87). And since substance and true existence are identical, the problem of each science may be defined as the consideration of a single kind of the existent, with a view to discovering what it includes. For this same reason also each science has its own axioms and theorems, which are of no importance for the rest. But there will stand above them all the science which treats not of any particular kind of substance, but of substance as such, nor of a being determined in any way, but of the Existent as such, the  $\partial \nu$ ,  $\hat{\eta}$   $\mathring{\sigma}\nu$ , and will enunciate the laws which hold good concerning it, as universally binding upon all kinds of the existent, and therefore upon all sciences (p. 1003). This science is therefore called the πρώτη φιλοσοφία, the science of First Principles; and while this name corresponds best to its relation to the other sciences, its content is best described by the term And in consequence of the importance which Aristotle attributes to this part of philosophy, he often calls it simply philosophy, which is just as intelligible as that Plato should often have applied the term to the dialectical part of his system.

Trendelenburg: Geschichte der Kategorienlehre. Berlin, 1846. Bonitz: Die Kategorien des Aristoteles in the Wiener Akad. Schr. 1853.

# § 87.

## Aristotle's Fundamental Science.

- A. Schwegler: Die Metaphysik des Aristoteles. 4 vols. Tübingen, 1847-48. (T.xt, translation, and commentary.) H. Bonitz: Aristotelis metaphysica. Bonn, 1838-49.
- 1. The writing of Aristotle, which received the name of Tà (βίβλια) μετὰ τὰ φυσικά (p. 980–1093), because it was put after his physical treatises in the first edition of his works, and thus brought it about that the science of first principles it discussed was afterwards called metaphysics, contains in the VOL. I.

first book (A. pp. 980–993) a critical historical introduction. The second book (A έλαττον) is apparently interpolated; the third (B. pp. 995-1003) proceeds to enumerate the perplexities in which thought finds itself involved in thinking on this subject. Among them is the question, whether it can be the task of one and the same science to state the more formal principles of demonstration, of which every science must admit the validity, and, more materially, to determine what holds good of This question is answered in the affirmeverything existent. ative in the fourth book ( $\Gamma$ . pp. 1004-1012), and there is established as the supreme principle of all demonstration, and hence as the formal principle of all science, the axiom that contrary things must not be predicated of the same thing, because this would destroy all definite substance. For this axiom holds good only of such substance, i.e. of everything that is really existent, as does similarly, that of excluded This does not however involve a denial of the fact that the determinations of being and non-being are combined in the possible: it was by applying to actuality what is true of possibility that Heraclitus was led to assert the continual flux of all reality. The fifth book ( $\Delta$ . pp. 1012–1025) contains a discussion of synonyms which interrupts the course of the inquiry, and may be put aside for the present if one wishes to get a view of Aristotle's metaphysic, together with the eleventh (K. pp. 1059-1069), which seems to belong to a different version of the whole metaphysics, as may the two last books (M. pp. 1076-1087, and N. pp. 1087-1093), which contain a criticism of the Platonic doctrine of Ideas. With the sixth book the inquiry reaches ontology proper, inasmuch as it attempts to solve the question as to what the really existent is, quite in the same manner in which Plato had considered this problem in his Dialectic.

- F. N. Titze: De Aristotelis operum serie et distinctione. Leipz, 1826.

  Brandis: Ueber des Aristoteles Metaphysik. Akad. Abh., 1834.

  Michelet: Examen critique de l'ouvrage d'Aristote intitulé Métaphysique. Paris, 1836. Krische: Die theologischen Lehren der griechischen Denker. Gött., 1840, pp. 246 ff. J. C. Glaser: Die Metaphysik des Aristoteles nach Composition, Inhalt und Methode. Berlin, 1841.
- 2. If ontology is to be a scientific inquiry, it must derive the existent as such from principles (cf. supra, § 85, 1). Accordingly the first, and one may say, initiatory, question is, as to what is meant by a principle. The answer which the usage

of language gives in the fourfold significance of the word airia and aρχή (causa), Aristotle finds confirmed in history. For the Physiologers attempted to explain Being by means of matter, the Pythagoreans by form, Empedocles by the efficient cause, and Anaxagoras by the end or final cause (pp. 984, 985). Aristotle understands by  $i\lambda\eta$  (materia) or matter every  $\xi\xi$   $\delta\delta$ , or that out of which a thing becomes, while in Plato it had only been that in which it becomes. Hence not only is the bronze the matter of the statue, but the seed of the tree, the premises of the conclusion, the natural impulses of virtue, the tones of the octave, the lyre, even, of the tones it produces, the letters which compose and the sounds which generate it of the word. For the same reason matter in Aristotle coincides with the intermediate (ἄπειρον, ἀόριστον) capable of being determined, and hence in definition the genus, which, has to be defined more closely, is the ύλη. Similarly, matteris identical with that out of which purposive order is still to. come, but which does not yet display it. It follows that mere matter cannot be an object of knowledge, that it does not lie above but beneath the knowable, so that it can be understood only by means of analogy (p. 207). And just as the last of these assertions reminds us of Plato's νόθος λογισμός (p. 78, 1), so we are reminded of other Platonic utterances when Aristotle calls matter the ground of all plurality, the concomitant cause, and the feminine principle. And also when, exactly like Plato, he distinguishes between the ground or reason and the indispensable condition, he uses the same expression to denote the latter: αἰτιᾶσθαι ὡς δὶ ὕλην (p. 200). On the other hand, it is peculiar to Aristotle and contrary to the Platonic conception, that he always assumes matter as the δύναμις (potentia), i.e. as the possibility and capacity of becoming formed, and points out the difference between it and mere στέρησις, the Platonic μηόν, inasmuch as it is that which only relatively is not (p. 192), i.e. that which is not yet, which is incomplete. Hence there is conceded to it far more reality than in Plato, and unlike Plato's treatment it has assigned to it a place among the principles of true being, in the science of first principles.

3. But if in his treatment of matter the divergence from Plato is especially prominent, the same may be said of his agreement with Plato, when Aristotle passes to the second principle. This agreement extends even to the phraseology, for instead of μορφή (forma, causa formalis), he as often uses

λόγος and είδος (pp. 198, 335), and even παράδειγμα is found. The Form is related to the Matter, the principle of passivity, as that which determines it. The shape of the statue which the metal receives, the ratio 1:2 into which the tones of an octave are fitted, the dominating mean to which the impulses are subjected, the whole into which the parts are combined, the law which regulates the arrangement, the specific difference which supplements the genus in definition, are all instanced by Aristotle as examples of the principle of form. Thus it bears towards the matter the relation of the πέρας to the  $\tilde{a}\pi\epsilon\iota\rho\sigma\nu$ , of the  $\epsilon$ is  $\tilde{o}$  to the  $\epsilon$  $\xi$   $\sigma$  $\tilde{v}$  (p. 1070). The fact, moreover, that the form which is imposed upon the metal, previously existed in the sculptor, perhaps led to the expression  $\tau \hat{o} \tau i \hat{\eta}_{\nu}$ elvat, which Aristotle uses by preference to denote this principle, and which was not perhaps invented by him. (It was at first translated by essentia, afterwards always by quod quid And just as the conception of the indeterminate and of matter coincided with that of divapus, that of the form coincides with that of everyeia (actus). Hence we can understand that, during the supremacy of Aristotelianism in the Middle Ages, not only were the words formalis and actualis equivalent in meaning, but that upon the Aristotelian maxim that an ἄπειρον ενεργεία ον was a contradictio in adjecto (p. 207 et al.), was based the unquestioned axiom, that infinitum actu non datur, which frequently is actually called as inviolable as principium identitatis.

4. The phrase το όθεν ή κίνησις, which Aristotle uses ininstead of the Platonic ἀρχη κινήσεως, to designate the third principle, is sometimes varied by τὸ αἴτιον τῆς μεταβολῆς, as his attempts to distinguish strictly between κίνησις and μεταβολή It is also called more briefly ἀρχή or αἰτία κινοῦσα (p. 1044), and κινοῦν, also ἀρχὴ τῆς γενέσεως οτ ἀρχὴ κινητικὴ καί γεννητική (p. 742) and ἀρχή της ποιήσεως (§192): ποιούν αίτιον also occurs and explains the well-known translation of causa efficiens. In the case where the figure of a Hermes is imparted to a mass of metal, the sculptor is the cause of this transformation. But as he received the impulse to do so from the form he had beheld in his mind's eye, the latter is the true κινητικόν, and thus the causa efficiens coincides with the causa formalis. This is the case especially in living organisms; for that which impels the plant to grow is its λόγος. We can moreover, already at this point, understand why Aristotle called the soul,

the principle of motion in the living, its form (p. 414), and why he says of it that it is κατὰ τρόπους τρεῖς αἰτιά (p. 415).

5. For the fourth cause also, the οῦ ἔνεκα or τέλος, the causa finalis, may be seen to coincide with the last two, when one considers that the sculptor aims at nothing else than the figure of the Hermes. For this reason, chopping may be defined as the  $\tau i \hat{\eta} \nu \epsilon i \nu a \iota$  of the axe, so that the form and the end or aim become one, just as we also still consider aim and motive as synonymous. Hence also the conceptions of the indeterminate and the aimless coincide, and ἄπειρον and ἀτελès become synonyms; while similarly it becomes self-evident that everything perfect is determinate and limited. the four original principles reduce themselves to two, burams and ενέργεια, the last of which is henceforth called εντελέχεια, on the ground of the element of determination by an end which has entered into it (p. 1115), and the antithesis of faculty and exercise of activity, of potentiality and actuality, of presupposition and perfection is the true result of the preliminary inquiries into the principles. But inasmuch as they are correlative, these conceptions acquire a certain amount of fluidity: thus one and the same thing may be an actuality in one respect, as e.g. the tree of the seed, and again a potentiality in another, as e.g. of a statue. Hence the distinction of first and second actualities is introduced, and the soul, e.g. is called the entelechy of the body, because it is the body in activity; but also the first entelechy, because its own activity is thought-Accordingly, first or pure matter would be something entirely devoid of form, something not yet at all actualized; and again, ultimate matter would be something to such a degree identical with form as no longer to afford the matter of a fresh actualization (pp. 1015, 1045). And just as the distinction is here made between primary and secondary matter, there is elsewhere found a parallel distinction between immediate and ulterior possibility (p. 735).

6. The foregoing explanations supply the data for an answer to the question of ontology; in the first place, in the negative result that neither mere matter nor mere form is substance or true being. This is maintained most decidedly with regard to the  $i\lambda\eta$ , and the position of the physiologers is thus rejected. Mere matter is intermediate between Being and Non-Being, is merely susceptible of actuality, merely its germ. If it happens once that it is called substance (p. 192),

a limiting ἐγγύs is added. But the form also possesses no substantial being, and a great part of Aristotle's polemics against Plato hinge on the point that the latter assumed the reality of mere eion, and placed them beyond and outside of the many individual existences, separated from everything material, whereby it became inconceivable how the gulf between them and matter could be bridged, inasmuch they were unable to acquire sensible existence for themselves (pp. 990, ff. Met. M. and N.). In spite of these polemics. however, it happens far more frequently than in the case of matter that he himself calls the mere form ovoia, a fact to be explained partly by the higher position he also concedes to the form; partly by the circumstance that ovoic means essentia as well as substantia, and that this, as was shown, really appeared identical with the form (p. 1032). If, however, the conception of ovola as real substance be strictly adhered to, it must be conceived as the union of matter and form, and as it were composed of them, as being materialized form or formed matter. Hence too the definition which is to express the whole essence of a thing, is equally composed of two factors, the genus and the differentia, corresponding to matter and form. But this union (σύνθεσις) must not be conceived as tranquil being, but rather as a transition, a word which may be the rather used to translate κίνησις, that Aristotle himself calls it a βαδίζου, and that our term "motion," properly speaking corresponds only to the single kind of κίνησις, which Aristotle calls φορά. Aristotle, there is nothing real but that which is passing into actuality, and in opposition alike to the flux of Heraclitus and the unprogressive rest of the Eleatics, he regards development alone as real; for this is the conception which in Aristotle takes the place of an absolute Becoming. There is no transition from nothingness into Being, but only from that which is not yet, the matter or potentiality. (Cf. our phrase, "There's the making of a poet in him.") Thus he substitutes for the mere forms and genera of Plato the entelechies, i.e., forms which no longer exist unchangeably beyond the sensible world, but active forces, universals which particu-And in this exercise of its inherent larize themselves. activities, which thus constitutes the essential nature of reality, it is possible to distinguish the two factors of the moving and the moved, the active and the passive. The latter is matter/ which moves towards its end like the iron towards the magnet;

the former, the end or form, moves it by attraction. Hence the real principle of all motion is always the end and the form; it posits the motion which the matter undergoes (p. 202).

7. And what is true of every real substance, of course holds also of the sum total of all things real, the universe. also there is no cessation, there are κινούμενα and κινοῦντα, i.e. purposive activity. But inasmuch as everything moved in its turn imparts its motion, there must be inferred a principle which only moves without being itself moved, a πρῶτον κινοῦν, which, being itself ἀκίνητον, naturally excludes all matter or passivity, and hence is pure evépyeia (purus actus), ลังยง ชักกร: for otherwise it would be necessary to commit the absurdity of assuming the reality of an endless regress (p. 256). Hence in the last resort the reason of a transition into actuality always resides in something formed or actually The objection that something unmoved cannot cause motion, overlooks the fact that this is refuted by every case of an end aimed at, and that the first Mover of the world is just the final end of the world, the Best (pp. 1072, 292). This does not however mean that Aristotle denies the causality of the end, for it had turned out to be the real efficient cause (p. 198). The dictum that the end is above all the Principle, is one that occurs more than once in Aristotle. Thus all reality is intermediate between the first matter after which nothing, and the first Mover after whom everything, strives. latter on his part is free from all striving and all movement, and excludes all mere potentiality, and thus represents that which cannot be otherwise, is devoid of plurality and imperishable, one and eternal (pp. 1072, 1074, 258). For, after all, it is only because it is all this, that it can become the object of scientific cognition. But if this aim of all striving is eternal, the activity of the endeavour must be the same: the motion of the world is as eternal as the world itself.

8. But from the position hitherto developed, it further follows, that if the principle of motion in everything real was the  $\lambda \delta \gamma \sigma s$ , the one source of all motion must include all the  $\lambda \delta \gamma \sigma s$  and ends; and the  $\nu \sigma \delta s$  had been defined as such an all-including End from the time of Anaxagoras, and also Plato in the *Philebus* had adopted it, instead of what he elsewhere calls the  $\partial \gamma \sigma \theta \delta v$ . Aristotle uses both these expressions (p. 1075) to denote the purpose of the universe and the object

of knowledge, and especially the expression of Anaxagoras, whom he accordingly praises very highly for having made the voûs the principle of motion, and having thereby shown himself superior to the "dreamers" before him (pp. 256, 984); and he hints further how much Plato was indebted to Anaxagoras. The question next arises as to how the vovs, the real Deity in Aristotle's system, must be conceived if He is to be really immaterial and devoid of all passivity. If He were conceived as engaged in moral action or artistic creation, He would be determined by an end outside himself (p. 1177). There remains, therefore, only the glorious leisure of theoretic activity in which the bliss, the immortality, and the eternal life of the Deity consists (p. 1072). But even this must be determined more closely. If the vovs were engaged upon anything else than itself, it would be limited thereby; hence, just as He cannot love, but only be loved, so He cannot think anything else than Himself without destroying the delight of being concerned with the most perfect thing. Hence the thought of the Deity, nay, its essential nature, consists in thinking upon thought; its pure and eternal pleasure consists in immutable self-contemplation (p. 1074). For this reason too the moments of speculative contemplation, in which our spirit re-discovers itself in the object of its thought, are the ones in which we attain to a feeble conception of the bliss which the Deity enjoys eternally. And since his inquiries into the existent have led to the result that the most real of things, the pure actuality and the principle of everything real, is the single eternal and absolutely necessary Deity, we can understand why Aristotle called his science of first principles theology. Similarly these latter determinations of the nature of the Deity are a confirmation of what was said above (§ 85, 9), that the Deity is the object and the subject of philosophic contemplation.

9. The determination of vovs as thinking upon thought, to which Plato had only approximated (cf. § 77, 9), is in Aristotle brought out with full consciousness and emphasized. Connected with this is the further advance, that the highest conception which the science of first principles arrives at, suffices for the understanding of the world that exists, and does not require the aid of an active principle in order to introduce the Good into the form of externality, nor an intermediate world-soul in order to maintain the connection (v. § 78, 2 and 3). Both these advances follow from the difference between

Aristotle's conception of  $\sqrt[n]{\lambda}\eta$  and Plato's. By becoming that which is not yet, instead of that which is not, and by thus having attributed to it a tendency towards being, matter supplies a metaphysical justification to plurality and sensible existence, and the form, which exercises this attraction upon it, is brought down from its supra-celestial sphere, and nearer to it. According to Aristotle, the είδος is not a εν παρά τὰ πολλά, but a έν κατὰ τῶν πολλῶν, or even ἐν τοῖς πολλοῖς. Hence not only the classes of individual beings, but these themselves possess actual reality. Thus while Plato, with an exaggerated preference for the Eleatic Monism, regards the sensible world as, at least half, a delusion, and only takes to physics unwillingly, and even then is glad to cling to mathematics, Aristotle recognises the claims of plurality almost to the extent of atomism, and his favourite study is natural science, as the science of the qualitative, and thus emancipated from mathematics. But though in all these points his advance upon Plato is indisputable, he nevertheless in one respect remains too close to him to be able to free himself from inconsistencies. it was only in virtue of the material element he included in the Platonic Ideas, that these became effective forces. And yet this element is excluded from that which is intended to be the most real of real things, viz., the Deity. This was unavoidable. for the time had not yet come for the Deity to be conceived as taking moves upon himself, without which God lives in heartless enjoyment, troubled about nothing, and through which alone He is love and the Creator. What Plato in the Parmenides had beheld only in a passing flash (ἐξαίφνης; cf. § 77, 2), viz. the union of rest and motion, enjoyment and labour, is a conception grasped only by the Christian spirit. In common with the whole of antiquity, Aristotle also fails to transcend dualism, because he excludes matter from the Deity, to which it therefore remains opposed, even though reduced to a mere potentiality.

§ 88.

# Aristotle's Physics.

G. H. Lewes: Aristotle, a Chapter from the History of Science. Lond., 1864.

1. The metaphysical first principles of natural science, as Aristotle's inquiries in his  $\phi v \sigma \iota \kappa \dot{\eta} \dot{\alpha} \kappa \rho \delta \alpha \sigma \iota s$  have been aptly called, begin with an enumeration of difficulties, and attempts

at their solution. Then he passes on to determine the ideas of nature and the natural. This is effected by its antithesis to that which is produced artificially or forcibly, and leads to the result that only that is natural which takes place of itself, or contains the principle of change in itself; and similarly, the principle of στάσις or ηρεμείν, as well as that of κίνησις or κινείσθαι Since, however, the end which coincides (p. 192 b, 1025 b). with the form had been recognised in the Metaphysics as the true principle of change, the true nature of a thing will lie less in its matter than in its conception and aim, for which the matter forms the material and the presupposition (pp. 194-200): agreeably to the practice of naming things after their form and aim. And like the nature of the individual beings, so nature as a whole is above all a system of ends, of which the efficient causes serve as conditions. This at once excludes the possibility that there can exist in nature anything without a purpose, and hence whatever is aimless is also unnatural. Nature acts not, indeed, with a consciousness of purpose, but in accordance with purpose,—not like a god, but nevertheless divinely, like the instinctive genius of an artist (p. 463). And as the end in its operation has been found to be motion, both the Eleatics, who deny motion, and the Pythagoreans, who, as mathematicians, ignore the conception of an end, are incapable of establishing a true science of nature. true mode of contemplating nature is teleological, but does not in any way exclude consideration of causal connections; only it does not regard them as the chief thing, but as contributory causes and a conditio sine quâ non. Although Aristotle's agreement with Plato in this extends even to the words he uses, it is diminished by the facts that in Plato the purpose of things is outside them, either in the transcendent archetypes, or even in the advantage of man; whereas Aristotle searches for the purpose immanent in them, and tries to conceive them as entelechies, and directly censures their reference to human purposes. This internal justification of sensible things which he concedes to them, is connected with the higher position he concedes to the  $\tilde{v}\lambda\eta$ , and as the  $\tilde{v}\lambda\eta$  coincides with the  $\tilde{a}va\gamma\kappa a\hat{i}o\nu$ , and the with the purpose, just as in Plato, it is self-evident that Aristotle must pay much more regard to the efficient causes, and approximate much more to the Physiologers than his predecessor. To the ύλη accordingly, as the mere συναίτιον, he refers all the phenomena in which the natural purpose

failed of attainment, such as monstrous births and miracles. which are irrational phenomena displaying the power of chance. When, therefore, he requires that the physicist should pass over such things and hold fast to cases in which nature attains her intentions, he anticipates the contempt which, two thousand years later, Bacon expressed for the freaks of nature (cf. § 249, 7). Aristotle, however, so often joins the conceptions of τύχη and τὸ αὐτόματον, the contraries of purposive order, with that of human will, that it is impossible not to suppose that the resistance of material would have supplied him with the basis of an answer, if the question of the origin of evil had been put to him. As purpose and form were found to be identical. nature of course avoids everything formless and indeterminate. Hence the more a thing is determinate, the better it The axiom already laid down in the ontology, that infinity does not exist actually, is continually utilized in his physics, and it is everywhere maintained, e.g., when infinite divisibility causes difficulties, that infinity is only possible and not actual (p. 204). And because of this impossibility of anything devoid of aim and measure, nature nowhere exhibits extremes without intermediaries: wherever anything tends to become immoderate, it is opposed by its contrary (p. 652). The inquiries which follow that into the infinite, are concerned with Space, the Void, and Time. The impossibility of a void is inferred from the most various reasons, while it is shown with respect to space and time that they are utterly unthinkable without motion. For every space must be conceived as the unmoved enclosing limit of something moving; and space itself, therefore, as the unmoved limit of all things in motion, Time, on the other hand, is the number *i.e.*, of the universe. and measure of motion, and thus mediately also of rest. concludes from this that there would be no time without a mind to count it, and that the circular motions of the planets supply the best unit for such counting of time, because of their constancy; and moreover, that everything unaffected by motion and rest, the absolutely immovable, cannot be in time. This forms the transition to the books on physics, which Aristotle himself, and also his earlier commentators, used to oppose to the four books on the principles of science, under the name of the books on motion. If one ignores, as Aristotle himself often does, the distinction between change and transition (μεταβολή and κίνησις), there must be assumed four kinds of

motion, i.e., (relative) generation and corruption, γένεσις and φθορά, which affect the substance; change, ἀλλοίωσις, which affects the quality; increase and decrease, an  $\theta$  and  $\theta$  increase and decrease, which affect the quantity; and lastly motion proper, φορά, affecting the  $\pi \circ \hat{v}$ . The remaining categories are not regarded as applicable to change, nor the first category to kingois in the more restricted sense, on the ground that there cannot be any opposition of substances. All the different forms of change presuppose motion in space (p. 260), which for this reason must be considered the chief and primary kind in This motion is eternal, and hence precedes all generation and passing away. But this eternal character can be ascribed only to circular motion, which returns into itself, for rectilineal motion is either endless, and hence imperfect, or proceeds up and down, and would therefore be interrupted by resting points. The transition is thereby made to the distinction between phenomena which display the imperishable constituents of the world, and those displaying its perishable The former are not included in the general physical discussions, but treated in :-

Cf. C. Prantl: Aristoteles acht Bücher Physik. Leipz., 1854.

2. The treatise on the heavens, περὶ οὐρανοῦ (pp. 268-313), the first two books of which contain Aristotle's cosmological inquiries. Aristotle understands by oupavos, not a part of the world, like the Pythagoreans, but the whole, or sometimes, it is true, only the outer circumference of the All, and sets before himself the task of describing the system of all the spatial movements of the universe. To begin with, he reduces them to subjects of circular motion round a centre, and of rectilinear motion to or from a centre. The former is proper to the heavens, a divine body consisting not of fire, which has a rectilinear upward motion, but of the eternally circling ether. There are reasons of all sorts in favour of the supposition that the all is one, uncreated and imperishable, unchangeable in its eternal youth. It is limited, moreover, and spherical in form. Not, however, as though there existed anything outside it in space; on the contrary all that falls beyond the outermost sphere partakes neither of Space nor of Time, and lives a life free from all suffering: it is the immortal and divine principle, which every point of the universe aims at. Hence it is unnecessary to assume a special indwelling soul of the world to set it in motion. The inner border of the unmoved is space, which is not therefore in the world so much as the world is in it. The world, which is the highest thing after the Deity, and hence divine, has, like everything that naturally moves itself, not only an upper and a lower part, but also a right and a left And as we live on the lower half of the earth, and hence in the lower half of the universe, seeing that the polar star indicates the lower end of the world's axis, the motion of the universe, which to us appears to go from left to right, really goes from right to left. It is most rapid in the outer circle, the sphere of the fixed stars, and hence they are the most serviceable for the measure of the movements. Within this there are the spheres of the planets, which are firmly fixed in them and do not rotate: in addition to the westward movement of the universe, they share also in a contrary one, and thereby are apparently left behind by the fixed stars. But, as Eudoxus has shown, a third movement also must be ascribed to the planets, and in some cases even a fourth, in order to explain the constellations as given by experience. Even this, however, was found insufficient: according to Callippus, the assumption of four spheres sufficed to explain the motions of only two planets, while the rest required more. Aristotle adds fourteen others to these thirty-three spheres, in order to save the concentric character of the planetary spheres. Each of the planets, moreover, possesses an unmoved mover, for which the expression of a soul of the planet is sometimes substituted. Perhaps these spirits of the stars enabled him, much as they had done Plato, to come to terms with popular religion. spherical earth in the centre of the universe is stationary: forms the centre without which circular motion is unthinkable. Thus the centre of the earth is at the same time the centre of the universe. This posits in the universe an antithesis between the centre and the circumference, which forms the basis of the strictly physical doctrines which Aristotle develops in the two following books of the περὶ οὐρανοῦ, and of which the περί γενέσεως καὶ φθοράς (pp. 313-338) almost forms a continuation, so that the whole would have for its subject the world of change. The discussions begin with a refutation of the geometrical atomism of Plato and the physical atomism of Democritus, and also of the doctrines of Empedocles and Anaxagoras: then they pass on to connect with that problem

the antithesis of/centripetal and centrifugal motion, i.e., of gravity and lightness, which these atomistic theories are said to be just as little able to explain as the other physicists. All attempts at explanation either lead to the contradictory assumption of void space, or are at least unable to explain why the larger mass of fire tends upwards more intensely than the smaller. As a matter of fact a thing is absolutely light when it tends upwards as such, and relatively light when it does so more than another by its own nature. Of the former, fire is an example, just as the earth is of the absolutely heavy; and hence the antithesis of the two coincides with that of the warm and the cold. They are related as Form and Matter. since the form is the enveloping and the light tends to the circumference. And since there is added to the antithesis of the two active principles, the Warm and the Cold, that of two passive ones, the Dry and the Moist, there arises four possible combinations, which are the four apparently simple bodies. These, which held the first place in Empedocles, in Aristotle come only third, as the antitheses must be regarded as prior to them, and to these again the wholly indeterminate Matter, which never actually occurs in itself, and only exists in a way. The resemblance to Anaximander (§ 24) is here evident. Besides these four "elements," which, as derived from an antithesis, are subordinated, each to the antithesis predominating in it, there is assumed an Ether as the "fifth substance," which is not opposed by any antithesis, and the motion of which also does not coincide with rectilinear but with circular and hence perpetual motion. This most volatile of substances plays an important part in generation, etc., and, as was shown above, also in the construction of the heavens. There is an especially sharp antithesis between fire and water on the one hand, and air and earth on the other, although this does not render the transition of each element into every other im-Thus fire is generated out of smoke, a mixture of air and earth, by the addition of warmth, etc. When the elements not only interpenetrate one another (σύνθεσις), but mix with true ulkis so intimately that they no longer exist actually but only potentially, there arise the more complex substances and things. This process of generation, to which there corresponds a similar process of dissolution, is eternal like the universe. Its continuous course is however changed into a periodical one by the inclination of the ecliptic, in such

a way that everything recurs from time to time, not indeed numerically the same, but the same in kind.

Cf. C. Prantl: Aristoteles vier Bücher über das Himmelsgewölbe. Leipz., 1857.

3. The Merewpohoyiká form in a way a connecting link between the general physical doctrines and physics in particular, in their first three books (p. 338-378). As they consider the phenomena which take place between the region of the constellations and the earth, it is evident that the two elements intermediate between fire and earth must play the most important part, especially in the shape of the atmosphere and the ocean. The two kinds of evaporation, moist and dry, ατμίς and αναθυμίασις, serve to explain not only all watery precipitations, but also the winds, electrical phenomena, earthquakes, etc., in short everything included in the atmosphere impregnated with vapours, among which Aristotle reckons not only shooting stars but also comets. Schleiermacher has reason to be astonished that in this portion of his work Aristotle does not quote Heraclitus as an authority. the atmosphere, in the direction of the constellations, that which is assumed to fill space is neither fire nor air, but something purer than either. The fourth book of the Μετεωρολογικά, which was hardly intended to form part of the same whole as the others, contains inquiries that form the transition to organic nature. They concern the changes produced by heat and cold in moist and dry substances, which are supposed to show themselves in melting, boiling, and drying, and also in begetting, digesting, ripening, and decaying; then they pass on to the substances Aristotle calls ὁμοιομερῆ, homogeneous, meaning thereby mixtures so intimate that their parts are always like the whole, however far the process of mechanical division is carried. Substances like wood and bone are to be thought of; for though water also is sometimes called δμοιομερές, yet it generally means something which is on the one hand a mixture, primary or secondary, etc., of the elements, and especially of water and earth, and on the other is not yet articulated like a countenance, which when cut up does not Thus all the metals are homoconsist of countenances. geneous. This kind of substances, then, forms the matter and the material out of which the avoyotopepes, the organic existence composed of different members, is formed.

4. Aristotle's biology is developed especially in the two first books of his work,  $\pi \epsilon \rho i \psi \nu \chi \hat{\eta} s$  (pp. 402-424). The material condition of life is a body not homogeneous but organic, i.e., composed of members, and differing from a machine in being organic by nature and not by art. But such a body by itself is not yet alive, for a corpse is only improperly called man or animal. Rather there must be added to it the end immanent in this organism, which makes a body which is potentially alive, actually so. Hence the soul or principle of life is the entelechy or function of a naturally organic body. The condition further of its combination with the body is warmth, which is akin to the ether. The soul, therefore, being the form and the immanent end of the body, is neither itself body, nor conceivable without the body; it is to the body what sight is to the eye, and a separation of the two, and still more a combination with another body, is just as impossible as that the art of flute-playing should become active in anvils, or the smith's art in flutes. But the soul itself in its turn enters into activity; and as these activities, like sensation, etc., again stand in the relation of "energies" and "entelechies" to it, it is called the first entelechy of the body. Its functions form a gradation, the lower being the presupposition of the higher, and contained in it like the triangle in the polygon. lowest manifestation of a soul, which is therefore found also in the lowest forms of life, is the θρεπτικόν, i.e., nourishment, growth, and the propagation of the species. lacking even in the plants, which are also animate and alive, but rank far below the animals; among other reasons, also because they show only the difference of upper and lower, of mouth, i.e., the root, and excretory and propagatory organ, i.e., the flower, which is necessary for their nourishment; but not that of front and back and right and left. Aristotle did not, however, write a special work on plants, or, if so, it has been lost, for the περί φυτών is not genuine: there are only isolated remarks about them in the discussion of their distinction from the animals. To this lowest grade of life, which is also sometimes called the first soul, there is added, in the case of animals, sense-perception; and together with this, since feeling, which forms the foundation of all perception, produces sensations of pleasure and pain, an instinct to get rid of the latter; so that the αίσθητικόν and ορεκτικόν must be found in all, and the κινητικον κατά τόπον in most, animals

the first of these factors, the distinction of the front, i.e., the perceiving side, and the back; with the second, that of the right and chief, and the left, side, acquires a meaning. case of man, who is the most perfect of beings, his upper and lower coincides with that of the world, in virtue of his upright posture. The single senses are thereupon discussed in great detail, and the finer development of the sense of touch in man is connected with his greater reasonableness. For this, the περὶ αἰσθήσεως καὶ αἰσθητῶν (pp. 436-449) should be compared; according to which there is this common to all senseperceptions, that the form of the object is therein perceived without its matter; that motion is involved, and that the organs of sense are affected by means of a medium. senses "of taste also and of touch form no exception to the last of these requirements," for their proper organ is to be found in the region of the heart. Further, we perceive by means of the general sense that we feel, and we are able to refer the sensations of several senses to the same object. The periodical cessation of all sensations is sleep, which accordingly occurs in all animals. The traces of past perceptions are presentations, their retention produces memory, μνήμη. This, which is shared also by the animals, must be distinguished from the greater combining power of recollection, ανάμνησις, which is possessed by man alone. Thus this growth in intensity corresponds to that of impulse, which in the lower animals was mere desire, in the more perfect also temper, and in man in addition also will.

Cf. Trendelenburg: Aristotelis de anima libri tres. Jena, 1833.

5. Connected with the researches in the second and in the beginning of the third book of the work on the soul, are Aristotle's achievements in zoology. The nine books of his History of Animals (περὶ τὰ ζῷα ἰστορίαι, pp. 486-638), for the tenth does not belong to him, are intended to arrange and to give a general view of the historical material; but contain also numerous remarks of permanent value for a philosophic observation of nature. (Schneider's edition, Leips., 1811, contains a very valuable commentary.) Above all, there should be noticed the idea, destined to form the foundation of all subsequent comparative anatomy, that the organs proper to a type occur, at least in a rudimentary form, even where external

circumstances render them useless; further, that the structure of the most perfect, i.e. of the human, body should always be kept in mind, to guide the inquiry into that of animals, etc. The division of animals into mammals, birds, fish, and amphibia, insects, crustacea, shell-fish, and molluscs, of which the first four are grouped together as sanguineous, and the last four as bloodless, has marked an epoch in the history of zoology. The writing  $\pi \epsilon \rho i \zeta \omega \omega \nu \mu o \rho i \omega \nu$  (pp. 639-697), not only contains preliminary researches for a philosophy of living nature, but such a philosophy itself. The first book treats of the method, the following ones give an account of the organs of animals, the tone of which is throughout teleological, without however neglecting a reference to efficient causes, especially in the explanation of more accidental differences. The distinction between the organs of sense, composed of homogeneous substances, and the remaining organs, formed of heterogeneous matter, an antithesis which does not apply to the heart, because of its function, and the importance ascribed to the blood as being that out of which the whole organism is at first formed, and by which it is afterwards nourished, deserve especial mention. There follow upon this work the smaller treatises on the motions of animals, on their gait, and the larger writing, περὶ ζώων γενέσεως, (pp. 715-789), as well as a few other treatises in the Parva naturalia. creation is regarded as the means whereby plants and animals, which individually are subject to death, partake of immortality at least in their kind. There is also assumed a gradation in the means of generation, in which the univocal form is preferred to the equivocal, and the highest place assigned to generation by means of separate sexes. In this, the altogether more imperfect female supplies the matter in the menses and the male the form in the seed, which contains an ether-like breath. And as in the act of generation, so in its product also, the corporeal element is to be derived from the maternal, and the psychical from the paternal element. In connection with this doctrine of generation, which is different according to the different classes of animals, there follow inquiries into the development of the fetus and the growth and maturing of The treatises on the length and brevity of life, on youth and old age, on life and death, are so closely sonnected with these, that one need not be surprised that Aristotle should describe these small treatises in the Parva

naturalia as completing what was to be said about animals (p. 467).

- Cf. F. N. Titze: Aristoteles über die wissensch. Behandlung der Naturkunde. Prague, 1819. Wiegmann: Observationes zoologicæ criticæ in Aristot. histor. anim. Berol., 1826. J. Bona Meyer: De principiis Aristotelis in distributione animalium adhibitis. Berol., 1854. Also: Aristoteles Thierkunde. Berl., 1855.
- 6. Anthropology proper, i.e. the specific difference between men and all animals, is treated in the third book of the De Anima (pp. 424-435). The difference consists in the  $No\hat{v}_s$ , which is not merely an intensified form of the vital principle, which is combined with the bodily organs, but which may be called a divine principle, because it is superadded to the mere activities of the soul and initiates an entirely new series of phenomena. Hence the expression  $\theta i \rho \alpha \theta \epsilon \nu$  (p. 736). It modifies everything in man which he has in common with the animals, in a peculiar manner. Thus its movements are prompted by purpose and rational deliberation, its perceptions and conceptions are accompanied by judgments as to their truth and certainty, etc. The vovs alone, being something more than a function of the body, is separable from it  $(\chi \omega \rho \iota \sigma \tau \delta s)$ , imperishable and eternal. This remark, however, requires qualification. For there must be distinguished in the spirit also, as in everything else, the potentiality and the activity; and as the former has been found to be the principle of passivity, it is accordingly necessary to distinguish between a passive and an active vovs, the latter being exempt from suffering anything. The former, the νοῦς παθητικός, which includes also that portion of thought which is dependent upon presentations and hence ultimately upon perceptions, i.e. empirical thought, is not independent of its organs; hence it and its memories, etc., are as perishable as the organs. The νοῦς ποιητικός stands related to it like a kingly master who, as he is in a way what he knows, is determined by nothing, but is perfectly free, immortal and eternal. Nor can we doubt that it is this active spirit that is called into play in the moments of man's absorption in speculative thought. But there is room for much doubt as to the limits between the active and the passive vovs, and still more as to the relation of the former to the divine. For the view that only the divine spirit is quite free from all suffering, and hence the only pure exercise of activity and immortal, that it is combined with a single individual only

for the space of the latter's earthly life, and on his death combines with another, and that hence there can only be a question of its immortality, not of that of the individual personality—for all this it is possible to appeal to the older Aristotelians. On the other hand, many authorities in recent times, e.g. Schelling, Brandis, etc., have laid stress on the expressions of Aristotle which seem to conceive the active spirit as personally determinate, from which personal immortality would follow as a matter of course. And if one compares the point of view of Aristotle with that of Plato, and reflects that the latter was certainly in earnest in maintaining personal immortality, the presumption in favour of this view must be still greater in Aristotle, in proportion as he conceded more to the claims of the individual than Plato did. To decide, indeed, how he conceived of immortality is impossible, seeing that he expressly declares memories, presentations, etc., to be dependent on the body and perishable: we can only assert that he conceived the theoretic and speculative nature of the spirit as its proper and therefore inalienable character.

Cf. L. Schneider: Unsterblichkeitslehre des Aristoteles. Passau, 1867. Fr. Brentano: Die Psychologie des Aristoteles. Mainz, 1867.

7. That Aristotle, if he had given a detailed account of Mathematics, would have placed it after his ontology, goes without saying. But physics also, as is indicated in the name of the second, and not third, philosophy, has been put before mathematics, of which it would form the natural presupposi-For not only is the fundamental idea of mathematics, viz., space, fully treated in his Physics, but all mathematical ideas are not, according to Aristotle, generated by an a priori construction, as the modern view holds, but by abstraction from the sensible, έξ ἀφαιρέσεως, so that in his view they do not, like the conceptions of ontology, denote anything really distinct from the corporeal, but only something which the mathema ticians regard as such. Of course, therefore, Aristotle combats those who would substitute mathematics for metaphysics. The object of mathematics is the quantitative, which is number or magnitude according as it is to be counted or to be measured, and in this consists the distinction of arithmetic and geo The former is concerned with that which is not, the latter with that which is, in space. For this reason, too, the first element of each, the point and unity, are respectively defined

as  $\mu o \nu a s$   $\theta \epsilon \sigma i \nu$  exovo a, and as  $\sigma \tau i \gamma \mu n$  aberos, definitions suggested by the connection of geometrical and arithmetical methods so habitual in antiquity. Among the many differences between  $\pi \lambda n \theta o s$  and  $\mu \epsilon \gamma \epsilon \theta o s$ , he mentions together with others, that in numbers there is no greatest number, but only a smallest, viz., unity, while among magnitudes, there is no minimum or atom, but only a maximum, viz., space. Thorough researches into continuous and discrete quantities, undertaken it is true in the interest of physics rather than of mathematics, are found in the seventh book of the Physics. In addition to the passages concerning pure mathematics, his writings also contain hints about its applied parts, e.g., optics, mechanics, the art of overcoming natural difficulties, etc.

### § 89.

#### Aristotle's Ethics.

- C. Garve: Die Ethik des Aristoteles übersetzt und erläutert. 2 vols. Breslau, 1798–1801. Michelet: Die Ethik des Aristoteles in ihrem Verhältniss zum System der Moral. Berlin, 1827. J. Walter: Die Lehre von der praktischen Vernunft in der griechischen Philosophie. Jena, 1874.
- r. Like Plato, who for this reason had treated of ethics under the names of the Statesman and the State, Aristotle also is convinced that man can realize his moral destiny only in the State, which he cannot dispense with because he is not a god, and in separation from which he becomes the most malignant and dangerous of beasts. Hence he often calls all inquiries into virtue political (p. 1094). This however does not prevent him from beginning by inquiries into the destiny of individual men, which cannot indeed be fully realized except in the State, and into the subjective conditions required for such realization. These are laid down in the ten books which he himself repeatedly quotes as his 'H  $\theta \iota \kappa \dot{a}$ (pp. 1094-1181). Their relation to politics in the narrowersense is that of the general to the applied portion. In the first book, he begins by determining the problem in such a way, that it is not so much a question of setting up the idea of an absolute good, as of giving an account of the good which is attainable, and that hence regard should be paid to casual circumstances and changeable elements, involving a renunciation of scientific precision. And as ethics, regarded as a science, aims only at discovering the reason for a fact, it goes without

saying, that the subjective experience that this or that is good, forms a precondition of its proper understanding. It is necessary in the first place to answer the question as to what is the highest good attainable by action. Universal agreement, together with the ambiguity of the expression of πράττων, induces Aristotle to admit without further doubt, that happiness, evolution, is this good. The further difficulty, that some understand thereby pleasure, others practical political activity, and yet others wisdom, is put aside for the moment by the remark that these alternatives do not exclude one another. The second book investigates what activity leads to this end, i.e., in what Virtue consists. And as this end is an end for man, it can consist only in a specifically human activity, and therefore not in mere vegetating or living, but in the exercise of the activity of a rational being as such. however, it is necessary to distinguish in man two elements, that of the  $\pi \dot{a}\theta \eta$ , akin to the nature of the beasts, i.e., the practical affections which are accompanied by pleasure and pain, and that of the reason, there result two classes of virtues; first the ethical or practical virtues, which consist in the supremacy of the reason over the sensual impulses, and secondly those which consist in the vivifying and intensifying of the reason. latter, the dianoetic, or logical virtues, are put aside for the time being, and it is shown, in agreement with Plato, who had conceived the good as σύμμετρον, that if virtue is produced by applying to the material of the natural impulses an ορθός λόγος, as the form to determine them, a mean between two extremes This mean is not given by nature, but issues must result. from deliberate purpose, nor yet is it one that occurs only once, but one that has by repetition become a permanent condition and habit. In short, virtue is έξις προαιρετική εν μεσότητί τινι οὖσα, with the addition, intended to preserve individual differences,  $\tau \hat{\eta}$   $\pi \rho \hat{o}_S$   $\hat{\eta} \mu \hat{a}_S$   $\hat{\omega} \rho \iota \sigma \mu \hat{e} \nu \eta$ . The conception of purpose involved in this explanation leads on, in the third book (pp. 1109-1119), to the more detailed discussion of it, together with the cognate conceptions of the voluntary and involuntary, of inadvertence and intention, in which connection Aristotle directly attacks Socrates for having denied freedom, and indirectly also Plato, for not having asserted it with sufficient decision. Then therefollows in the fourth book (pp. 1119-1128), the table of the ethical virtues. The psychological basis tacitly assumed for them seems to be the various forms of self-love and

affection. There are added to the two Platonic virtues of courage and temperance, liberality, magnanimity, sense of honour, gentleness, frankness, and courtesy, and they are each opposed, not to one extreme as in Plato, but to two, as the mean, moreover, not between but above them. The reason why justice is treated by itself in the fifth book (pp. 1122-1138) is, partly that Aristotle cannot entirely free himself from the Platonic conception of justice as the basis of all ethical virtues, and partly that the formal determination assigned to it, seems to make it the connecting link with the second class of virtues, and finally, in part that by its reference to the legislator it extends altogether beyond the doctrine of virtues. The mathematical formula for the conception of justice, however, in which distributive and equalizing justice form kinds corresponding to geometrical and arithmetical proportion, is a proof how unable Aristotle is, in spite of his polemics against the Pythagoreans on this very point, to repress, even with respect to them, the nature of an all-comprehensive philosopher. the conception of justice, and indeed to a greater extent, the idea of equity also, as supplementing legally defined duties, involves a reference to political conditions. The sixth book (pp. 1138-1143) is devoted to the dianoetic virtues. gives not so much an account of separate forms based upon an explicit principle of division, as a gradation of the conceptions of truth, in which the preference is given to the voos with its immediate grasp of the truth. Wisdom, which combines what is taught by the vovs and demonstrative science, is true happiness and the proper aim of human effort. For the practical life, however, reasonableness and right counsel (φρόνησις and εὐβουλία), both of which are concerned with the particular, are of more immediate importance. By their means art itself becomes a virtue (the art of a virtuoso?), and it is possible to compare the three stages of dianoetic virtues, τέχνη, φρόνησις, and σοφία, with the ποιείν, πράττειν, and θεωρείν, and ascribe them to the artist, statesman, and philosopher respectively. All these forms, which the Sophists had not got beyond recommending, are however only preliminary steps, and the road to wisdom, as the goal which is attained only by individuals in isolated moments, leads through them. seventh book (pp. 1145-1154) investigates conditions under which the ordinary human virtues cease, as in brutalization, in which no law is any longer recognised, and as in heroic

virtue, in which the law,—which is valid only where there is injustice,—is transcended and a man becomes a law to Besides, the conditions of endurance and continence, together with their opposites, are discussed in such a way that it appears doubtful whether they are really virtues or only similar to them. There follows an inquiry into pleasure, which has been suspected by the critics, both on account of the position it occupies and of its contents. eighth and ninth books (pp. 1155-1172) contain a treatise on friendship, both in its intimate and its more external and social forms, which presents much excellent matter, although to some it appears to be but slightly connected with what precedes and follows, so that doubts have been raised whether it belonged to Aristotle at all, or whether it had been intended for insertion in the Ethics. In addition to a man's relation to his friends, that to himself is here discussed, and it is pointed out that the σπουδαίος όμογνωμονεί έαυτώ, while the φαύλος lives in contradiction with himself and is his own enemy, a formula which agrees perfectly with that of the Stoics in later times. The tenth book (pp. 1172-1181) returns again to the question as to happiness. The first five chapters contain a treatment of the pleasure into which every moral mode of action must be transformed, and which must accompany every virtue. Then Aristotle returns to the highest dianoetic virtue, and once more extols contemplative virtue as the highest happiness, of which it is true only the pure spirit can partake, and not the soul, which is bound to the body by its sensual instincts. And if Aristotle's Ethics discuss many subjects that do not fit in with the ethical virtues into which Plato's courage and temperance had been developed, nor yet with the dianoetic virtues (the "wisdom" of Plato), this may once more be regarded as a confirmation of the view, that he took up into his system everything his predecessors had achieved. Thus the quality of being steeled against pain and delight, which the Cynics esteemed so highly, is found in Aristotle's continence and endurance; again, one must recognise resemblances Aristippus in his remarks on pleasure, and on friendship in so far as it aims at gratification and profit. Aristotle's negative determination, that all these did not belong to the ethical and dianoetic virtues, any more than the more physical state of shame, found a positive complement in later times in the addition of a third class of virtues, the physical or bodily, in

a way very nearly suggested by him, Aristotle having indeed

himself mentioned health as such a one (p. 408).

2. The conclusion of the Ethics clearly shows that the  $\Pi \circ \lambda \iota \tau \iota \kappa \alpha$  (pp. 1252-1342) are intended to consider not so much a different subject, but the same subject from another point of view; for the problem is, to find, by means of a critical comparison of different forms of State, the one in which man can be most virtuous. In the first book (pp. 1252-1260), which Aristotle, referring back, calls περὶ οἰκονομίας καὶ δεσποτείας, he goes back to the simplest constituents of the State in the shape of the union of man and woman, who cannot live without each other, i.e., to the household. Among the household furniture, without which a household cannot exist, Aristotle counts also the slaves, who receive but their due when, in view of their internal lack of independence, they are treated as such. For the same reason he, like Plato, regards it as wrong to enslave Hellenes, and it is also a barbaric fashion to treat women like slaves. The household is completed by the children, and then contains, in the relation of its master to his wife, his children, and his slaves, an image of the life of a republican, a king, and a despot respectively. The household is preserved by earning and by administering what is earned. The hints Aristotle gives with regard to both these activities have been spun out by later authors in the Οἰκονομικοῖς, attributed to him. Agriculture, commerce, and the wage-labour of the artisan intermediate between them, belong to the art of acquiring; the rule of the slaves, the education of the children, and the guidance of the wife, to that of administering. As the village-commune arises out of the union of several households, so the State arises out of that of several communes. The State is, as man's capacity for speech shows, the end to which he is naturally destined; and though its origin was conditioned by necessity, it is yet no mere matter of necessity, as in that case animals also and slaves could form States. Nor again is it merely a device for security, like a defensive and offensive alliance. Its end and principle are the happy and virtuous life. Moreover it is prior to the household and the commune, just as a whole composed of members, is everywhere prior to them, because it is only the whole that makes them members at all. The whole of the second book (pp. 1260-1274) is devoted to a criticism, partly of political theories, partly of existing constitutions. Plato's

theory especially is discussed, and reproached with not paying sufficient attention to the independence of the members of the State, and hence by its communistic proposals making impossible a number of virtues which are based upon private property and separate households. Besides Plato, the Chalcedonian Phaleas, and the Milesian Hippodamus are considered, and also the Spartan, Cretan, and Carthaginian constitutions. In the third book (pp. 1274-1288) the State is defined as a body of citizens, and by a citizen is meant one who, unlike a slave, knows how to obey and to command with a view to the Good, and who accordingly has a share also in the activities of deliberating and judging. An intermediate position between the citizen and the slave is given to those who work for wages as the slaves of the public, the βάναυσοι. As the virtue of citizens consists in doing all things for the sake of the constitution, the question as to whether a good citizen is necessarily also a good man, leads on to that of the best constitution. And in the first place that constitution alone can lay claim to the name of good, which aims at the welfare of the citizens and in which the law rules. Both these requirements, however, may be fulfilled in the βασιλεία and in the αριστοκρατία, and lastly also in the πολιτεία, which are accordingly called good constitutions. According to the varying character of the members of a State, each of them may be the best and most suitable; each, moreover, can degenerate, when it aims at the benefit, not of the whole State, but of the dominant part, into the corresponding mapesβάσεις of the τυραννίς, the ολιγαρχία and the δημοκρατία. Aristotle proceeds to enumerate reasons and counter-reasons for the preference for one or other of the constitutions, but emphatically asserts that whenever there appears a god-like and heroic virtue raised far above the rest, the democratic expedient of ostracism is immoral, and submission to such a king is the best course. (The order of the eight books of the Politics in all the manuscripts, which is defended by scholars like Göttling, etc., should, according to the researches of Barthélemy St. Hilaire and Spengel, be exchanged for that proposed by them, viz., 1, 2, 3, 7, 8, 4, 6, 5; but Hildebrandt and Zeller have brought forward no contemptible reasons against the transposition of the 5th and 6th books, as has Bendixen repeatedly,-most recently in Der alte Staat des Aristoteles, 1868, -against the insertion of the 7th and 8th

between the 3rd and 4th. Leaving, however, the final decision to better qualified authorities, we may continue our sketch of the contents of the separate books.) In the fourth book (pp. 1288-1301) preparations are made to discover in the case of what constitutions the requirements just explained can be fulfilled; and it is here that the real principle of classification appears. For it is necessary to distinguish different functions in the life of the State, such as deliberation (βουλευόμενον), and judging (δίκαζον), above which stands the κύριον, or power of deciding peace or war. And according as this function (which it should be said is sometimes called δύναμις, sometimes τὸ περὶ τὰς ἀρχάς, and by various other names,) is exercised by one man, by the rich and noble, i.e. by several, or by all citizens, there results a monarchy, either in its sound form of kingship, or in its corruption of tyranny; an aristocracy, and its corruption an oligarchy; or a polity, together with its corruption of Aristotle is, however, so far from obliterating actual distinctions by this division, that just as he had enumerated five different forms of kingship in the third book, so he gives in the fourth the characteristics of as many more, or according to another interpretation, of four forms of democracy and of four forms of oligarchy, evidently with a continual reference to States actually in existence. The fifth book (pp. 1301-1315) engages in an inquiry closely connected with this, and makes remarks based on the closest observation of the grounds and occasions of revolutions, stating at the same time the means by which they may be met, especially in monarchies; and just as it has often been noted in recent times that the fame of Montesquieu has been partly acquired by what he borrowed from Aristotle, so, if we seek a predecessor for the expedients given by Machiavelli, reference might be made to the fifth book of Aristotle's Politics. the sixth book (pp. 1316-1323), Aristotle states the circumstances under which, and the means by which, the different kinds of democracy and oligarchy may be established, firmly holding fast in so doing to the principle that there are no worse crimes than those against the constitution of the State. seventh and eighth books (pp. 1323-1342) discuss the conditions under which the citizens of a State can partake of true happiness, by the complete coinciding of personal and civic virtue. The indispensable natural conditions for this are a certain character of the land, the proximity of the sea, the

population neither too dense nor too sparse, a certain natural temperament of the inhabitants, connected with the geographical situation—all of them circumstances combined in The other indispensable requirements must be provided by legislation. Thus, it has to regulate the holding of property; there should be public in addition to private lands, and both cultivated by slaves, as the citizens must have Similarly, the law must provide that good citizens issue from the younger generation. The conclusion of marriages is already regulated by the law, which, it is true, only interferes to prohibit certain marriages; and this should be still more the case with education. Education becomes a matter for State control from the eighth year onwards, and is at first mainly physical: gymnastic produces a continence and hardiness; music, good manners (modesty?). But, above all, it is necessary to aim at the development of justice and moderation, as courage finds a field for its exercise only in times of war, and theoretical wisdom only in times of peace, whereas the two former are always in demand. citizens are, according to their different ages, externally protectors of the State, and internally upholders of the law, hence there is no warrior caste, or caste of any sort. With regard to the final decision as to the best constitution, this can only be given with reference to a definite nation and a definite time, e.g. for the Greece of his day. In his political views Aristotle thus diverges decidedly from the Platonic aristocracy, and that in the direction of democracy, in so far as he is willing to concede the greatest share of power to the very middle class which Plato had condemned to the position of helots; and, again, in the direction of monarchy, when he remarks that the pre-eminent excellence, which is really the sole claim to rule, is more easily found in one man than in many. And when he desires to see the rule of the king limited by the rule of the middle classes, one cannot help thinking of the modern formula of a monarchy with democratic institutions. In other passages, however, he seems more in favour of a compromise between democracy and oligarchy; in short, the times do not seem to him to be ripe for a pure constitution, and hence it is necessary to content oneself with the best mixture possible. The permanent value of Aristotle's politica. philosophy consists in its adherence to certain principles found by philosophic reflection, combined with its respect for

actual conditions. Neither unreflecting routine nor Utopian projects of doctrinaires will find any support in Aristotle.

Cf. Hildenbrandt: Geschichte und System der Rechts- und Staatsphilosophie. Leipzig, 1860.

## § 90.

### ARISTOTLE'S PHILOSOPHY OF ART.

- G. Teichmüller: Aristotelische Forschungen. 3 vols. Halle, 1867, 69, 73 J. H. Reinkens: Aristoteles über die Kunst. Vienna, 1870.
- 1. The third main division of the Aristotelian system (cf. § 85, 3) is formed by his reflections upon artistic products and art itself. And since the Ποιητική (§ 1447-1462), which comes chiefly under consideration from this point of view, remained a fragment, it must be supplemented by the isolated remarks which are found chiefly in the Ethics and Politics, but also in the Metaphysics, Rhetoric, etc. Holeiv or productive activity (factio) is distinguished from action (the  $\pi \rho \acute{a}\tau \tau \epsilon \iota \nu$  or actio) by the fact that in the latter the act itself is the chief thing, and for this reason the "how" of the action, or the feeling that produced it, gives it its value, while in the former the work or the result  $(\tilde{\epsilon}\rho\gamma\sigma\nu)$  alone matters, so that it is indifferent with what feelings a house was built or a picture painted, so long as they turn out well and beautiful. And as rational action, become a habit, resulted in virtue, so rational production, become a εξις, results in art. Art therefore is distinguished from virtue as production from action. It is also distinguished from the action of natural forces, e.g., from that of generation, which it most resembles, by the fact that the end which the artist realizes lies in something other than himself. For the physician aims not at his own health but at that of some one else, and it is to the bronze that the sculptor gives its form, while the plant forms itself and man begets man. In spite of these differences, however, artistic production agrees with moral action and the working of nature in many points; especially, for instance, in their all aiming at the highest end, the ev. And this is the reason why art follows nature. But because this is possible in two ways, art is divided into two kinds. There are two kinds of art, as Plato already taught, and as Aristotle agrees, down to the very phraseology Plato had used. For art either aims at per-

fecting that which nature intends, but which it cannot without aid complete, e.g., making man healthy, protecting him from bad weather, etc. In such cases it becomes useful or necessary art, like the arts of healing, architecture, etc. Statesmanship also belongs to this class, since we saw that man is destined by nature for a community, and likewise the applied form of dialectic which belongs to statesmanship, and is called oratory. Or again, art aims at representing a world like nature itself, which, as it cannot create a real world, must become a world of appearances. The name Aristotle gives to this free art, that of imitative (μιμητική) art, is explained in the first place by the fact that he found it in Plato, and secondly that he does not regard imitation as the opposite of original activity, to nearly the same extent that we do, but is thinking rather of the fact that what is produced is no mere symbol (σημεῖον, σύμβολον), but a real image of what was to be portrayed. Thus it comes about, that whereas we are wont to instance music against the view that all art is imitation, Aristotle quotes it as being imitative above all others; for it produces in its matter, the tones, something quite analogous to the feelings it attempts to express, i.e., the most perfect ὁμοίωμα or μίμημα thereof. Although, then, the imitating arts are to be placed higher than the useful ones, because the latter produce only the means and conditions of happiness, and they, on the other hand, enjoyment and delight, i.e., essential constituents of the highest end, the useful arts must nevertheless not be degraded to the extent of being counted among the mechanical handicrafts. For the imitative arts also may be carried on as a trade and handicraft, while on the other hand the arts of healing and architecture are occupations that do not disgrace the free citizen.

istic marks of the beautiful, which may equally well be first perceived in nature and then represented by an artistic copy, and first exist in the subject and then be developed out from within, are given as order, symmetry, limitation, and magnitude. These objective determinations are completed by the subjective requirement that it should cause pleasure or please, as the beautiful is only perfect when it is enjoyed. Neither of these factors must be wanting; and Aristotle is clearly conscious that the beautiful coincides neither with the pleasant nor with the true, if it leaves us cold, nor with the good if it does not please us. Not only do his remarks lead to these definitions in spite of their fragmentary character, but they contain instructive hints on the subject of the most important æsthetical conceptions, many of which remained untouched for more than a thousand years after his time. Thus his remarks about the power of size to arouse wonder, about the tension and emotional perturbation it produces, about the κατάστασις following upon this έκστασις, really contain the whole of the later theory of the sublime, etc. Because the beautiful exhibits to us the highest aims in their completion, concern about the beautiful, either when it is produced or when it is enjoyed, i.e., both artistic activity and the enjoyment of art, is akin to theoretic activity; art occupies a position midway between theory and practice, between science and life. And as the former deal with the universal, the latter with the particular, the object of art must be the particular in the universal. Hence Aristotle opposes the representation of the artist to that of the historian, and places it above the latter. For the latter is said to stop at the particular, and to describe things merely as they are, while in the work of art the universal element is brought out, and things are described οία αν γένοιτο, i.e., idealized. And this assertion does not forget that art imitates, for what it imitates is the universal element in things, their παράδωγμα, their idea and essence. Hence too it is guided by right insight (λόγος ἀληθής), and leaves out what is a deformity and therefore accidental. But, on the other hand, Aristotle decidely disapproves of the representation of abstract universals, such as form the object of science, by the artist. A didactic poem like that of Empedocles, he does not regard as a poem, but as a scientific The καθόλου proper he regards as lying too high for artistic representation, and as the exclusive possession of

science, which stands above art. Art is concerned only with the ἐπὶ τὸ πολύ, the general rule, and for this very reason is liable to prefer the probable to the true. If therefore Aristotle calls the representation of the poet more philosophic than that of the historian, he does not at all imply thereby that one who represented philosophic doctrines would on that account be the greatest artist. As in his Politics, so in his philosophy of art, Aristotle is a mortal enemy of all doctrin-The close connection between art and science, rendered intelligible by its intermediate position indicated above, is displayed in the first place, in the fact that art is based on an inborn impulse towards imitation, which is nearly identical with the similar impulse to know, that forms the foundation of science; and there is added to it an original feeling for harmony and rhythm. Moreover, both art and science belong to the luxuries of life and are capable of causing the purest pleasure, which does not admit of excess. But, like Plato, Aristotle also demands that the enthusiasm which produces the work of art, should be distinguished from frenzy by its self-control; like Plato, he regards harmonious proportion as the essential character of beauty. His demand too, that every part should be organically combined with the whole, agrees with his own principles and those of Plato.

3. Of the individual arts, to the consideration of which Aristotle passes after his general remarks on artistic beauty, he has treated, within the limits of the fragments we possess, only of poetry, and in poetry, especially of the drama. Epic poetry is noticed rather by the way, and lyric poetry not The most important point in the drama, and as it were its soul, is the plot, which is said to be more important even than the delineation of character. It matters not whether it be historically true or invented, as it is not a question of correctness but of internal truth and probability. The unities of the action are the prime requisite: those of time and place, which alone limit the historian, are mentioned by Aristotle,—if indeed hereally speaks of them, as is very doubtful, —rather as an observance than a strict law. Tragedy and comedy transcend mere fact in different ways; the former describes its heroes as better, the latter as worse than they But only tragedy is discussed in the Poetics, although inquiries into comedy are promised. (Some of them have been discovered by Bernays in a later grammarian, and

published.) Pity and fear are stated to be the means by which the spectator identifies himself with the action; and the purification of (or perhaps, from) such passions is defined as the effect aimed at by the drama. This dictum, which has been generally referred to the effect on the spectator, was applied by Goethe, and after him by Stahr, to the passions represented, although not without being attacked on the ground of the meaning of the words. Their opponents, however, have fallen out among themselves ever since the view championed by Lessing, that it was a question of the moral effect, suffered contradiction. Weil was the first to lay stress on the medical meaning of the word κάθαρσις, and his conclusions were supported independently by Bernays. This view, though combated violently by Stahr, and energetically yet in moderate language by Spengel, has found more or less acceptance from Ueberweg, Susemihl, Döring, and Reinkens. According to it, the stirring up of fear and pity becomes the means of soothing them and draining them off, and therefore causes satisfaction. Stress is also continually laid on the fact that the satisfaction of tragedy is possible only when the sufferer is both guilty and innocent. Besides the plot and the characters, the diction is discussed, and grammatical inquiries are returned to with that view. be confessed that although the French classicists went astray in making the rules of the Aristotelian Poetics their standard in so slavish a fashion, an offence against their spirit has always brought with it its own punishment. Aristotle is the father also of the philosophy of art, as of so many other sciences.

Cf. F. v. Raumer: Ueber die Poetik des Aristoteles, 1828 (Abh. d. Berl. Akad.). A. Stahr, in the Notes to his Translation. Stuttgart, 1860. Spengel: Ueber Aristoteles Poetik, 1837 (Abh. der Münchener Akad.) J. Bernays: Grundzüge der verlornen Abhandlung des Aristoteles über die Wirkung der Tragödie. Breslau, 1857. Against this: Spengel, in the Abh. der Münchener Akad., 1859.

# § 91.

### THE ARISTOTELIANS.

Theophrastus, of Lesbos, born in Ol. 102, undertook the guidance of the Peripatetic school after Aristotle's death, and was followed by Eudemus of Rhodes; some of the works of both have been preserved. Those of Theophrastus, which have been edited by Schneider (Leips., 1818), and by VOL. I.

Wimmer (Leips., 1854), contain the characters extracted from an ethical writing, and also a work on sensations and the sensible. The Metaphysics which bears his name was not perhaps written by him; on the other hand, some of the writings attributed to Aristotle, as the De Melisso Zenone et Gorgia, on the colours, etc., may perhaps be by him. Eudemus we possess the Ethics called by his name in the collections of the Aristotelian works, and also some fragments collected by Spengel. Both of them show but little originality, and are akin in the learned tendency of their philosophizing. Their logical researches were perhaps the most important, as they examined the hypothetical and disjunctive syllogisms, and added to the four moods of the first figure five others, the indirect moods arising out of subalternation and conversion of the premisses and the conclusion; in later times, especially after Galen had transposed their premisses, they formed the fourth figure. Besides this, Theophrastus studied physics, and Eudemus economics and politics. The Peripatetics that followed seem to have laboured less at the whole system than at isolated portions, especially that part of physics that concerns the soul. At the same time, their doctrine becomes more and more naturalistic, which we can understand when we think of some of the sayings of Aristotle about nature, the life of the universe, etc. Thus Cicero testifies, that the Aristotelian Aristoxenus, called the musician, who had originally been impressed by Pythagoras, conceived the soul as the perfectio corporis, that Dicæarchus of Messene inferred from this conception its mortality, and that, finally, Strato of Lampsacus, in agreement with them as to the soul, substituted a blind force of nature for the Deity; and this development is confirmed also by other authorities. Critolaus, who belonged to the embassy which introduced the study of philosophy into Rome, seems, like his predecessors, Lycon, Aristo, and others, to have popularized the Ethics of Aristotle and to have treated it more rhetorically. His successor Diodorus of Tyre, the still later Staseas of Naples, Cratippus, and the unknown author of the pseudo-Aristotelian writing περὶ κόσμου, mix up the Aristotelian doctrines with other views, especially those of the Stoics. The later Peripatetics also devoted themselves to the task of expounding Aristotle's writings; e.c., Andronicus the Rhodian, his pupil Boëthus, and others...

Diog. Laert., v. 2-4. Ritter and Preller, l. c. § 336-344.

# THIRD PERIOD OF ANCIENT PHILOSOPHY.

THE DECAY OF GREEK PHILOSOPHY; OR

GRECO-ROMAN PHILOSOPHY.

§ 92.

ARISTOTLE by defining spirit as thought thinking itself, and making it at the same time the principle of all things, as being their final end, has substituted a complete definition for the vagueness of Anaxagoras, and the one-sided definitions of his successors. Thus the Hellenism manifested in the philosophizing of Anaxagoras, of the Sophists, etc., is comprehended in Aristotelianism. But the limitation of this system and the necessity of going beyond it, also lies in this same fact. The fact that Aristotelianism comprehends only Hellenism, indicates the necessity of such an advance in the history of the world; the fact that Hellenism recognises itself as having been understood, indicates its necessity in the history of philosophy (cf. § 11).

# § 93·

A philosophy like that of Aristotle cannot continue to be a formula for the world, when the sceptre of the world's history, which the Macedonian supremacy had wrenched from the hands of Greece, is transferred to the Romans, i.e., to a people that, alike in the myths which it invents in order to comprehend its own character, and in the jurisprudence by which it became the instructor of all future ages, alike in its solemn and prosaic character and in its lust of conquest, ever betrays this single characteristic; that it regards the individual person and his practical problems as having absolute value,

and the whole as arising out of the adding together of individuals. Hence, because the times have become Roman, there must be substituted for a philosophy which, in true Hellenic fashion, represents the whole as prior to its parts, and consists of speculative devotion to the universal reason, one in which the isolated subject receives absolute value, and never quite loses himself in any cause, but always considers also his own relation to it. The place of a philosophy which regarded contemplation as the highest activity, must be taken by another which subordinates it, as the means, to the realization of ends. Only a reflective philosophy which is mainly ethical can please the Roman spirit, for only such an one can be called the comprehension of the Roman character.

### § 94.

The same result is reached also when one considers without reference to the changes of the times, that the essence of Hellenism is the immediateness and naïveté with which the individual allows himself to be penetrated by the spirit of the universal, and that like everything naïve, it also must disappear as soon as it is understood. Hence there begins in Aristotle the separation of the greater and the smaller vovs (cf. § 53), which Anaxagoras had asserted to be the same, and which in Plato so interpenetrate each other, that he would have found it impossible either to have considered subjective thought by itself, as Aristotle does in his "analytical" researches, or to be intently occupied with mere reality, as is Aristotle in whole sections of his History of Animals, without inquiring whether they fulfilled also the requirements of our thought. frequent argumentative discussions, also, by means of which Aristotle in every inquiry reaches the point Plato starts from, are a practical proof of his assertion that the spirit enters man from without, i.e., that the subject is not immediately at one with it. The discrepancy between the subjective and objective elements continually increases after Aristotle's time, and leads, by reason of the separation of factors combined in Plato and continually re-united in Aristotle, to the generation of one-sided tendencies. And these must show great similarity to the lesser Socratic schools, since, as we saw, Plato and Aristotle only taught a glorified and perfected Socratism. And just as the lesser Socratic schools had exhibited