CHAPTER XV

ARISTOTLE'S PLACE IN HISTORY

THE name of Aristotle suggests impersonality, timelessness, intellectual sovereignty over the whole world of abstract thought throughout long stretches of history, and scholastic idolatry In order to assimilate him entirely to their own world the Middle Ages erased his individual characteristics and made him *the* representative of philosophy The greatness of such an attitude towards the matter that he represents is undeniable, and he himself aimed at the matter and not at the person, at eternal truth and not at historical learning, but the days when he was identified with truth itself have passed His historical importance as the intellectual leader of the West is certainly not lessened by the fact that the evolution of independent philosophical achievement in European culture has taken the form of a five-hundred-years' struggle against him Seen from the modern point of view, however, he is now merely the representative of the tradition, and not a symbol of our own problems or of the free and creative advance of knowledge We attain a fruitful relation to him only by a detour, by historical knowledge of what he meant to Greek culture and philosophy, and of the special task that he fulfilled in his century This fate befalls every great spirit who obtains historical survival He must be detached from his historical roots and neutralized before he can become accessible to posterity Only history can then answer the further question when the point has been reached where this 'living' influence changes to the opposite, so that nothing but a return from the tradition to the sources and to the real historical meaning of his life can save him from intellectual death Even to-day we cannot easily agree whether Aristotle has reached this point, since the scholastic philosophy lives on among us as a world in itself The present book, at any rate, arises out of an historical attitude towards him—which, however, does not necessarily make it useless to those who think fundamentally otherwise, for without deepening our understanding of Aristotle as an historical person we cannot even get

a full grasp of the special nature and depth of his influence on posterity

I propose therefore to conclude my discussions by applying the historical results of this book to the place of Aristotle in the intellectual movement of his century Up to the present the inner connexion between his philosophical form and the great problem that Plato propounded to the scholarship of Greece has been made evident mainly in his criticism of the Ideas and in the evolution of particular conceptions This examination of particular conceptions is the special task of the philosophical interpretation of Plato and Aristotle The philological history of development, on the other hand, while requiring and furthering this philosophical interpretation, does not find its ultimate aim in the history of problems as such, but sees therein only the special form taken by the whole intellectual progress of the nation in the philosophical sphere To ask how far philosophy led or was led in this progress is idle The question can hardly be decided even if one takes the whole culture of a period into account, because one erroneously supposes that only the content of consciousness really matters, and fails to see the significance of the formulation given to this content by philosophy What follows attempts to understand the organic significance of Aristotle's philosophy within Greek culture purely through itself and its historical circumstances, abstracting from the material content of the particular disciplines and concentrating attention solely on the historical nature of his problem and its intellectual forms

1 ANALYTICAL THINKING

Aristotle's huge achievement in logical inquiry shall be touched on here only so far as it characterizes the whole spirit of his philosophy In it the analytical power of his thought obtained classical expression The way was prepared for it by certain discoveries in elementary logic contained in the theory of Ideas, and by the epistemological and methodical trait in Plato, but the *Analytics* and *Categories* sprang from another root than Plato's invariably concrete and objective thought. Modern research has successfully attempted to show that a large number of logical propositions occurring in undoubtedly early works such as the *Topics* and the *Categories* (above, p 46)

arose in the Academy and were simply taken over by Aristotle, and a comparative analysis of the elementary logic of Plato's dialogues, carried into the smallest details, would confirm and enlarge this result, as our examination of the *Eudemus* has shown, but Aristotle is the first person in whom we find real abstraction It took possession of all his thinking Here is not the place to examine the first appearance of the abstract and its gradual emergence in Greek thought, nor to show how it unfolded itself more and more clearly out of Plato's Idea It was reserved for Aristotle's powers of observation to grasp it wholly in itself, with its own peculiar laws In his untiring research into the logical properties and relations of the categories and of the forms and presuppositions of scientific inference we can detect the investigator of later years, seeking to span in its entirety the whole realm of logical fact He constructs his new discipline as a purely formal act, and expressly tells us that for him logic, like rhetoric, is not a theory of objects and so not a science (φιλοσοφία), but a faculty (δύναμις) and a technique He separates it rigorously from the question of the origin of conceptions and thoughts in the soul, and thus from psychology, and regards it purely as an instrument of knowledge, but for this very reason he joins his doctrine of the syllogism to his theory of objects to make a self-supporting theory of knowledge, the basis of which is the inquiry into the so-called axioms This does not justify us in speaking of a metaphysical logic He had broken up the old ontologic—the only form of logic known to Pre-Aristotelian philosophy—once and for all into the elements Word (λόγος) and Thing (ὄν) The bond between them had to be restored somehow, and this was done by means of the conception of formal cause, which was at once conception and thing, ground of knowing and ground of being This may not seem a satisfactory solution—it was historically conditioned by Aristotle's realism—but it is very far from the projection of logical conception, judgement, and inference, into the real as Hegel teaches it

It is necessary to realize the tremendous influence of the analytical attitude on the intellectual form of Aristotle's philosophy, for it determines every step that he takes In his works everything is the most perfect, polished, logical art, not the

rough-and-ready style of modern thinkers or scholars, who frequently confound observation with inference and are very poor in conscious nuances of logical precision Because we no longer have feeling or time for this art, and because we are more or less innocent of the finer cultivation of thinking as ancient dialectic understood it, our modern interpreters of Aristotle do not display an excessive amount of it in their commentaries In this respect we could learn a good deal from the ancient expositors, who—at any rate those who do not belong to the decline—follow every step of the method with the conscious interest of the artist in thinking The fact is that the thinking of the fourth century is in the same case as its speech, both are closed worlds to the ordinary person of to-day, only the pale glimmer of a notion of them ever penetrates his consciousness Whatever attitude we take towards this conscious technical cultivation, we have in it a part of the essence of the fourth century, to which we always feel ourselves intellectually very close because the names of Plato and Aristotle have a direct significance for us From that to real understanding, however, is another long journey

The significance of this analytical habit of mind in the actual treatment of problems can be followed step by step, for example in the *Ethics*, where the fruitful but problematic equations into which conceptions were forced by the older speculation (such as 'virtue = knowledge') give way for the first time to a real analysis of the growth of ethical motives and of the forms of ethical action and will This is by no means simply 'psychologizing' ethics, the starting-point is always an exact logical inquiry into the meaning of particular words and conceptions, together with a sharp delineation of their applicability As an example we may take the analyses in *Nicomachean Ethics VI* of philosophic wisdom, *phronesis*, *Nus*, scientific knowledge, art, understanding, good deliberation, and cleverness The psychological delicacy with which he here takes apart the knotted mass of conceptions contained in Plato's *phronesis* is a very great advance along the path from the blank Idea of the Good to an ethics of will and intention, and it would never have been possible but for his conceptual analysis, which provided him with a theory of meaning, based on language, from which

his sympathetic psychological comprehension could take its start

The example also shows clearly that when so examined Plato's 'conceptions' at once dissolve into their component parts and are then irrevocably lost How much *phronesis* included according to him—the Idea as object and the contemplation of the Idea as the process of knowledge, theoretic recourse to the knowledge of the Good and the practical fulfilment of sentiment and action by means of this vision, in short, the whole 'philosophic life' Aristotle reduces it to the meaning corresponding to ordinary speech, it becomes 'ethical insight' and is then only one element among many in the analysis of the moral *ethos* In the same way Aristotle's thinking differentiates between Plato's theory of being and his theory of knowledge The Idea, the palpable intelligible unity of the manifold, which was at once ethical ideal, aesthetic form, logical conception, and essential being, in an as yet undivided unity, breaks up into 'universal', 'substance', 'shape', 'what-it-was-to-be-so-and-so', 'definition', and 'end', none of which conceptions comes anywhere near it in comprehensiveness Aristotle's 'form' (εἶδος) is the Idea (ἰδέα) intellectualized, and is related thereto just as his *phronesis* is to Plato's Everything that Plato's spirit touched has a certain plastic roundness, than which nothing more strenuously resists the analytical urge of Aristotle's thought, which is to Plato's as the anatomical diagram is to the plastic human form Perhaps this shocks the aesthetic and the religious man Anyhow it is characteristic of Aristotle

The execution of this principle was the birth of science in the modern sense We must not forget, of course, that the phenomenon not merely possesses this esoteric significance but is also a symptom of the whole intellectual development Within the history of Greek thought Aristotle stands decidedly at a point of transition After the tremendous achievement of Plato's philosophy, in which the antique power of myth-making was imbued with the fructifying logical intelligence to an unprecedented degree, the world-picturing creativeness of the old days began apparently to fail, and to succumb to the preponderance of the scientific and conceptual attitude The man who clinched this inevitable historical development was Aristotle, the founder

of scientific philosophy It is characteristic of philosophy, or at any rate of Greek philosophy, that this act did not become the start of a new and fruitful philosophical development, but was simply a high point through which it passed, and which remained attached to the name of Aristotle The mechanical outward form of his art of *Analytics* was indeed taken over by Hellenistic philosophy, and pursued right down to scholasticism, but his analytical spirit, far from descending upon it, found its food in positive science The foundation of scientific philosophy became the direct cause of the final separation of science from philosophy, because in the long run the Greeks could not endure the intrusion of the scientific spirit upon their efforts to picture the universe

The peculiar form through which the analytical thought of scientific philosophy mastered both the real world and its intellectual heritage was the method of division, inference, and dialectic Hypothesis played only a subordinate part, and was consistently used only in connexion with division Hellenistic science did not possess the practical prerequisites for making fruitful use of this method, especially experiment All division orders as well as distinguishes, it delimits the range and content of conceptions and the applicability of methods, and thereby leads indirectly to the general conceptual arrangement of things that we call system Aristotle has always been reckoned the systematizer *par excellence*, because under the influence of his thought philosophy was divided into a series of independent disciplines combined into a unity by their common intellectual purpose The first attempts, however, at making philosophy systematic in this way occur in the Academy in Plato's later view, when in the *Philebus* he distinguishes physics as 'second philosophy' from the study of the Ideas, which Aristotle afterwards called 'first philosophy' That ethics, too, had already asserted its independence within the Academy is shown by Xenocrates' celebrated trichotomy, logic, physics, ethics, which established an epoch in Hellenistic philosophy

Those very Stoic and Epicurean systems, however, clearly show that Aristotle's and Plato's 'systems' lacked the main feature of the type—they were not closed It is no accident that they were unfamiliar with the technical term σύστημα, which

aptly describes the constructive character of the Hellenistic pictures of the world, self-sufficient, emphasizing totality, and far removed from living research The soul of Aristotle's thought is not putting together (συνιστάναι) but dividing (διαιρεῖν), and that not as a principle of construction but as an instrument of living research Hence his 'system' remains provisional and open in every direction No passage can be cited in which he even lays down the limits of the main disciplines unambiguously and definitively, and those who marvel at the systematic articulation of his philosophy cannot even say into what parts it divides The celebrated division into theoretical and practical and productive, with the division of the first into theology and mathematics and physics, is nowhere realized and does not embody his actual system, it is a merely conceptual classification At the level of development at which he wrote those words it signified merely a geometrical *locus* for the leading part played by metaphysics in philosophy Moreover, the particular disciplines as such always opposed the greatest difficulties to the attempt at a completed systematization, as is only too intelligible now that we know how Aristotle's writings attained their form Arising out of indefatigable work on specialized problems, they always present a disparate picture if we examine their systematic structure in detail In this respect the *History of Animals* is the same as the *Metaphysics* or the *Politics* Outlines of a systematic arrangement, often introduced only during the subsequent labour of welding the parts together, are carried only half through or remain entirely unfulfilled To produce an external architectonic was not the original idea of this builder and therefore none can be 'reconstructed', any more than the treatises with their overlapping layers can be made into a smooth literary whole

If we dismiss this sense of system, namely an edifice of dogma, there remains only that analytical power of separating and ordering which is systematic in a very different sense System will now mean not the outwardly visible façade, the construction of a totality of knowledge, lifeless and dogmatic, out of the multiplicity of particular discoveries and disciplines,[1] but the inner

[1] This Hellenistic notion of the systematic is strikingly developed by Sextus Empiricus (*Adversus Logicos* I 198, 3 ff) on the basis of his—mainly Stoic—

stratification of fundamental conceptions, which Aristotle was the first to bring to light When he flings the net of the categories over reality, then selects from them the independent 'this-something-or-other' (τόδε τι), declares it the 'substance' of philosophic thought, and so descends the pitshaft of this conception, in order to lay bare in it one after the other the levels of matter, form, essence, universal, potency, and act, that is certainly systematic thinking By this analysis the mere 'this-something-or-other' is differentiated into the form which determines matter, and in which universal conceptual thinking grasps the essence of the real, the latter being related to matter as act to potency The same fundamental conceptions persist like subterranean strata through several disciplines Thus the conception of form penetrates psychology and logic and all the special sciences, while it also belongs to physics and metaphysics, that is, to theoretic philosophy The doctrine of *Nus* runs through metaphysics, ethics, psychology, and analytics These common intellectual themes hold the disciplines inwardly together The unity does not arise, however, from any intentional assimilation of the parts to each other, it is the original kernel out of which the multiplicity has grown Plato's Idea was ethics, ontology, and theory of knowledge, in one The method of division dissolved it into several disciplines, but in accordance with Plato's striving for unity Aristotle built up beneath them a conception corresponding to the Idea, a conception common both to reality and to knowledge, which united the multiplicity at its root

Nevertheless each special sphere retains its tentative and inquiring character, never achieving satisfaction in the external form of completeness and unimpeachable construction, always improving itself, overthrowing what it had previously set up, and looking for new paths If there is any totality for which Aristotle strives it is a totality not of finished knowledge but of problems This may be illustrated by our conclusions about his ethics According to Plato's statement of the problem happiness consisted either in virtue or in pleasure or in *phronesis* The *Philebus* shows how the problem of pleasure,

sources Truth is here conceived as a 'fixed' scientific system (ως ἂν ἐπιστήμη καθεστηκυῖα συστηματική) and the latter is characterized as a congeries of many things (ἄθροισμα ἐκ πλειόνων)

for example, made itself independent in his philosophical inquiries and formed a realm of its own, touching the questions of *phronesis* and virtue and happiness only tangentially The same thing happened to the realms of *phronesis*, virtue, friendship, and happiness They all appeared frequently in the Academy, and always as relatively independent subjects of inquiry, as is shown by the titles of the works of the members Plato's dialogues give a faithful picture of the sets of problems thus rendered independent Aristotle collects together all the problems bearing on ethics (τὰ ἠθικά), and, without curtailing the free play of the particular sets, gradually subjects them all to a tighter methodical yoke within the framework of this originally loose unity The unification never prospered sufficiently, however, to allow a 'systematic' justification of the appearance of the problems *On Friendship* in the eighth and ninth books of the *Nicomachean Ethics*, for example, or to make the double discussion of the problem of *Pleasure* in Books VII and X explicable through considerations other than editorial Where we can see somewhat deeper into the origin of the writings, as in the *Metaphysics* and the *Physics*, we observe towards the end of the process an increasing effort to reach such a unified structure, although it is never completely successful Only the history of his development can clearly reveal the roots and the meaning of what we may call Aristotle's 'system' The Hellenistic systems are connected with his late work, but they take their departure from the external impression and make primary that which was secondary to him They dogmatically construct a fixed picture of the world out of 'valid propositions', and in this safe shell they seek refuge from the storms of life

II SCIENCE AND METAPHYSICS

All the lines of Aristotle's philosophy run together in his metaphysics, while it on the other hand stretches out into all other disciplines It expresses his ultimate philosophical purposes, and every study of the details of his doctrine that does not start from this central organ must miss the main point To form a correct judgement on its nature and accomplishment is not easy, if only because of the hindrance arising from the prejudice attached to the name The period during which

Aristotle's philosophy held dogmatic sway ended with the break-up of metaphysics as a branch of knowledge and thus demolished his creation Since then we involuntarily regard him as the leader of the dogmatists, the antipode whom Kant overcame, and think we do him a service by preferring the non-metaphysical parts of his philosophy and putting him in a more positivist light Yet he was never a positivist even in the days when research preponderated The living significance of his metaphysics cannot be appreciated from the point of view of modern critical philosophy, but only in relation to the problems of his own time When we look at it in the latter way we find that it is really founded on a critical purpose His aim was to purge the philosophical consciousness of its mythical and metaphorical elements and to work out the strictly scientific foundations of a metaphysical view of the world that he took over in its main outlines from Plato In other words, it was his interest in a particular method that led to this influential construction

His metaphysics arises out of that inner tension between intellectual conscience and longing for a religious view of the world which constitutes what is new and problematic in his philosophical personality In the earlier cosmologies of the Greek physicists the mythical and the rational elements interpenetrate in an as yet undivided unity From the historical point of view it is an abuse of language, not in the least excused by its frequency, to call these philosophies metaphysical systems because they contain elements that are metaphysical in our sense In this sense, naturally, Aristotle's *Physics* would also have to be called metaphysical, and yet precisely this example makes the historical absurdity of this anachronistic description as clear as daylight Its application to the Presocratics would be sensible only if it were meant to express that in founding metaphysics as an independent science Aristotle's aim had been just precisely to make these dogmatic and mythical elements in the cosmologies of his predecessors the conscious centre of philosophical thought, whereas previously they had insinuated themselves unperceived There is somewhat more justification for using the expression of Plato's world of Ideas Here it indicates the entry into philosophical consciousness of the invisible and intelligible, and especially the objective side of the

Ideas as being a higher sort of reality, not to be apprehended by experience With this is connected in the later phase of Plato's development the religious problem of teleological theology, which became the starting-point of Aristotle's metaphysics Even this use of the modern conception is, however, strictly speaking unhistorical—although we continually fall back into it against our will—and hinders the true understanding of Aristotle's real achievement Metaphysics arose in his mind, and it arose out of the conflict of the religious and cosmological convictions that he owed to Plato with his own scientific and analytical mode of thinking This inner disunion was unknown to Plato It was a consequence of the collapse of the procedure on which Plato had based the knowledge of his new supersensible reality, and in which for one instant exact science and the most ecstatic enjoyment of the inexperienceable had seemed to coincide without remainder When this concrete unity of myth and logic fell to pieces Aristotle carried away as a *depositum fidei* the unshakable confidence that in the Platonic creed of his youth the inmost kernel must somehow or other be true The *Metaphysics* is his grand attempt to make this Something that transcends the limits of human experience accessible to the critical understanding Because of this profound and previously unrecognized community of problems with the philosophers of religion in medieval Christendom, Jewry, and Islam, and not through a mere accident of tradition, he became the intellectual leader of the centuries following Augustine, whose interior world was enlarged far beyond the limits of the Greek soul by their tension between faith and knowledge The history of his development shows that behind his metaphysics, too, there lies the *credo ut intelligam*

The study of his development also allows us to see more clearly the new conception of method on which this philosophy reposed Up to now the reigning view has been that the word 'metaphysics' owes its origin merely to the order accidentally given to his writings in some complete edition of the Hellenistic age—Andronicus is usually suggested—and that it does not express the Aristotelian view of the real situation In truth, however, this word, which was surely coined by some Peripatetic earlier than Andronicus, gives a perfectly just picture of the fundamental aim of 'first philosophy' in its original sense Whereas

Plato had fixed his gaze from the very first moment on the highest peak of the world of Ideas, and believed that all certainty was rooted directly in knowledge of the invisible and intelligible, Aristotle's metaphysics is construed on the basis of physics, thus taking the opposite direction The highest monad, after having been to Plato the most exact norm and the most certain object of the mind, came to be for Aristotle the last and most difficult of all problems We usually overlook the fact that his commonest description of the new discipline is 'the science that we are seeking' In contrast to all other sciences it starts not from a given subject-matter but from the question whether its subject-matter exists Thus it has to begin by demonstrating its own possibility as a science, and this 'introductory' question really exhausts its whole nature

From the very beginning Aristotle is certain that the science that we are seeking is possible only if there are either Ideas or some 'separated' intelligible reality corresponding to them In spite of his critical attitude, therefore, he escapes no more than Plato did from the notion that all real knowing presupposes an object lying outside consciousness (ἔξω ὂν καὶ χωριστόν) which it somehow touches, represents, or mirrors As we have said, this realism is nothing specifically Aristotelian, but universal among the Greeks Ancient thinking never got beyond the confused notion of the relation between knowledge and its object indicated by these pictorial expressions Within these historical limits, however, Aristotle's *Metaphysics* represents a state of the problems whose relation to Plato's ontologic corresponds pretty exactly to that of Kant to the dogmatic rationalism of the eighteenth century The question, Is the science that we are seeking possible? has for him the objective meaning, Is there this supposed supersensible reality? while for Kant it has the methodological meaning, Are there *a priori* synthetic judgements? without which the traditional metaphysics was inconceivable The fact that ancient criticism—*sit venia verbo*—bears the realistic, while modern bears the idealistic, signature, must not prevent us from detecting the inner similarity of the historical situations Both thinkers represent extreme points in the chains of development to which they belong, and have therefore had no posterity, except for a revival following on long misunderstanding

and ending in formalism The really living evolution passes over or goes behind the metaphysical aspect of Kant or Aristotle, disregarding, with a onesidedness that is sometimes sensationalist and at other times rationalist or mystical, the scientific precision and fineness that both thinkers gave to the problems Hence Aristotle is the only Greek thinker with whom Kant could talk on an equal footing, and whom he could try to overcome For the rest, while Kant's position is based exclusively on his transcendental criticism of the apprehending consciousness, the foundation of Aristotle's critical realism is his physical system, together with a critical analysis, starting from the objects of experience, of the conception of being

Metaphysics is based on physics according to Aristotle in the first place because it is nothing but the conceptually necessary completion of the experimentally revealed system of moving nature The prime task of physics is to explain motion, and one of Aristotle's main objections to the theory of Ideas is that it does not do so In making this objection he is setting up a definite type of natural science as a classical model, namely the method of constructing hypotheses invented by Eudoxus, which explains a complicated set of facts by referring it to the most simple principles—in this instance to the mathematical construction of all planetary motions from simple circles 'To save the phenomena' is the methodological ideal of metaphysics It has to elicit the ultimate grounds of experience from the facts themselves and from their inner law To this end it must, indeed, overstep the bounds of immediate experience at one point, but it must not hope for more than to bring to light the presuppositions that lie in the facts themselves when rightly interpreted The reference of animal motion to the eternal cosmic motion and of the latter to the motion of the outermost circle was for Aristotle a fact that the natural science of Eudoxus had placed beyond all doubt It represented a degree of mathematically accurate experiential knowledge never before attained in this sphere On the presuppositions of Aristotelian physics this system of motions had to find its coping-stone in some ultimate cause The inference to a prime mover was thus suggested by nature itself

Aristotle anchors this branch of knowledge still more firmly

in physics by means of his analysis of the conception of substance He thereby gives to the idea of an ultimate cause of all motion a more definite shape as the highest and final form in the realm of natural forms The starting-point of his theory of being is the world of perceptible appearances, the individual thing of the naïvely realistic consciousness Was there any way of apprehending this individual being? The earlier physics had in fact possessed no such means Its theory of the elements and of motion did indeed offer much information about the components of 'all things' and the forces active within them, but it obtained this information by pure speculation The technical analysis of an individual thing into its material elements, as modern natural science understands it, was just as impossible for Democritus with his highly developed atomic theory as it had been for earlier and still more primitive physicists In the last and highest stage of its development Plato's philosophy embraced as the object of scientific knowledge (ἐπιστήμη) the whole hierarchy of Ideas as developed through the dialectical art of division, from the most comprehensive genus down to the lowest and not further divisible species (ἄτομον εἶδος), but all that lay on the hither side of the Ideal world, where it bordered on that of experience, was indeterminate (ἄπειρον), the object of mere opinion, and not truly real Plato's indivisible is not yet Aristotle's individual, an immanent form linked with matter (ἔνυλον εἶδος) Earnestly though Plato wrestled with the question of opinion in his last period, he could not pass from the Idea to a grasp of the individual being of experience Physics to him was merely a heap of 'likely myths'

This is where Aristotle's critique begins His aim is all along to make the Idea capable of producing knowledge of appearances This was, to him, synonymous with the demand that the things of sense shall be accessible to concepts, for as a Platonist he held that only through the universal are knowledge and science possible He stands in the middle of the change undergone by the theory of Ideas in Plato's later years, which brought with it the first thorough elucidation of the logical side of the Idea, as the universal and the conception, and of its importance for knowledge The same process rendered the ontological side of the Idea problematic Aristotle considered it axiomatic that nothing universal possesses independent existence From his point of

view Plato's later theory of Ideas appeared as a hypostatization of the universal, to which he opposed his doctrine of the determination of matter by form This doctrine really abolishes the 'things' of naïve realism by making them conceptual The object of sense-experience can come to the knowledge of the thinking subject only so far as it becomes a conceptual form, on the other hand it *is* only so far as it is form The complete determination of reality by the forms of the understanding and by the categorial multiplicity of their conceptual stratification is rooted not in transcendental laws of the knowing consciousness but in the structure of reality itself Herein is concealed a serious problem, which we must not overlook, but Aristotle's whole purpose is to grasp the individual through the Idea, a procedure, however, which was conceivable to him only by supposing that through the Idea one grasped that in the thing which it really was (τὸ τί ἦν εἶναι) Matter is the remnant, the non-existent, in itself unknowable and alien to reason, that remains after this process of clarifying the thing into a form and a conception This non-existent neither is nor is not, it is 'not yet', that is to say it attains to reality only in so far as it becomes the vehicle of some conceptual determination Hence no matter is just matter, as the physicists supposed, it is matter for this definite form, but apart from this form and considered in itself it is already somehow informed Nothing absolutely formless and indeterminate 'is' at all The conception of ultimate matter, absolutely unformed and undetermined, while a limiting conception of our thinking, does not characterize any substantial reality Everything is form, but form itself becomes the matter of a higher form Thus Aristotle's view of being drives us on towards an ultimate Form that determines everything else and is not itself determined by anything His physics of immanent forms attains its goal only in the transcendent Form of his metaphysics

In this way form comes to explain motion as well, of which neither Democritus nor Plato had been able to give a scientific account from their points of view The aim of Aristotle's theory of motion is to invent a logic of it He tries to make it accessible to conceptual thought, just as he does particular material things, by discovering in it some form or determinateness through which it can be explained He therefore confines it within a fixed frame-

work, for where all is motion and flux, and nothing is fixed and enduring, science loses its rights According to his physics this enduring element is to be found in quality and in form as the end of motion, not in quantity itself In the first place, he lacked the technical means for making exact quantitative measurements or determining the quantitative conditions of qualities, so that research could not advance in this direction Above all, however, he saw that in the cosmos motion took place in fixed forms and within fixed limits The apparent caprice and lawlessness of the motions of life on the earth, which is very small in comparison with the world as a whole, could not in any way prejudice the magnificent picture of the upper and imperishable part of the universe Here, again, Eudoxus' theory of the spheres assumed fundamental importance for Aristotle's view of the world In the concert and continuity of the eternal revolution of the stars, as assumed in that hypothesis to account for the appearances visible in the sky, there was something purposeful and instinct with form that could not possibly be derived from the mechanical presuppositions of the contemporary theory of gravity For the most part the physicists had had recourse to the idea of a cosmogonic vortex which set the world in motion, but as men increased their knowledge of the orderliness and invariability of the phenomena the notion of a mechanical cosmogony retreated more and more into the background, in fact it seemed to be nonsense Aristotle went even farther than Plato in this matter The latter had at any rate attempted to conceive what the creation of the world must have been on the assumption of Eudoxus' astronomy, when he made the beginning not chaos but the reason that orders things Aristotle, however, breaks completely with this Anaxagorean ordering or διακόσμησις by Mind when he declares the heavenly bodies and the heaven itself to be everlasting and uncreated and derives their motion from internal formal or final causes

With reference to motion the form is the entelechy (ἐν-τελ-έχεια), inasmuch as in its form each thing possesses the end of motion realized within itself For the heavenly bodies this is their eternal circular revolution, but Aristotle carries over the principle to earthly things as well, thus working out Plato's teleology in every part of his world of forms The motion of

earthly things appears to be, in Platonic language, disorderly or ἄτακτος, but on closer inspection we discover that the fundamental principle of change in the organic world is the same as it is in the heavens, namely locomotion, to which all kinds of motion are to be referred Locomotion here serves the special laws of organic coming-to-be and passing-away, which in their turn depend on the form The entelechy of beings that come to be and pass away is the height of this organic development In them form appears as an orderliness and determinateness building from within and unfolding itself from the matter as from a seed

We have always supposed that this latter meaning of 'entelechy' is the original, and that the conception was first developed in the case of organic life and from thence transferred to other spheres by a generalization—that it means, therefore, something vitalistic or biological like the modern 'life-force' This assumes that Aristotle possessed from the beginning the complete mastery of zoology and biology that he displays in the *History of Animals*, and that he more or less *saw* this principle in the object during his researches Recently we have come to believe that the conception of biological development was his real achievement, which is a thoroughly vicious modernization The meaning of 'entelechy' is not biological, it is logical and ontological In every kind of motion Aristotle's gaze is fastened on the end What interests him is the fact, not that something *is coming to be*, but that *something* is coming to be, that something fixed and normative is making its way into existence—the form

> Creative Power, that works eternal schemes,
> Clasp you in bonds of love, relaxing never,
> And what in wavering apparition gleams
> Fix in its place with thoughts that stand forever[1]

The notions of potency and act, which also are usually derived from the process of organic life, are indeed occasionally illustrated by Aristotle with the example of the seed and the developed organism, but they cannot really come from this sphere They must be taken from human power or δύναμις, which now remains latent and now becomes active (ἔργον), attaining its end (entelechy) only in this activity (ἐνέργεια) It is still more unhistorical to look on the star-souls as a consequence of extending to the whole of reality the supposedly

vitalistic or even animistic *forma substantialis*, as is done by those interpreters who then consistently go on to suppose that Aristotle ascribed a soul to the inorganic also and thus make him a panpsychist

The higher we ascend in the cosmos, the more purely the motion expresses the form that is its end As a whole the motion of the world is the effect and expression of a form that is absolute and free of all matter This form completes the reaction from Pre-Platonic physics, in which the world arose out of chaotic matter and was explained by mechanical causes Reality is in its determinateness and in its essence necessarily what it is It cannot be explained from mere possibility and chance, for then it might as well not be or be otherwise There must be form at the head of motion, and the highest form must be pure act, through and through determination and thought This thought cannot think anything more perfect than itself, for as the end of the motion of the whole world it is necessarily the most perfect thing existing, since everything aims towards it Nevertheless, the thought that thinks itself is not a merely formal self-consciousness devoid of content, an absolute ego in Fichte's sense In Aristotle's teleology substance and end are one, and the highest end is the most determinate reality there is This substantial thought possesses at one and the same time the highest ideality as conceived by Plato and the rich determinateness of the individual, and hence life and everlasting blessedness God is one with the world not by penetrating it, nor by maintaining the totality of its forms as an intelligible world within himself, but because the world 'hangs' (ἤρτηται) on him, he *is* its unity, although not in it As each thing strives to realize its own form, it realizes for its part that infinite perfection which as a whole is God

Aristotle's attempt to make the exact thinking that Plato had discovered, the conception and the form, bear fruit in knowledge of the sensible world, could consist only of a conceptual apprehension of nature and its essence, it could not at first assist our insight into the material causes It thus created a philosophy of nature, resting on a basis that was 'metaphysical' in our modern sense Aristotle's own intention was the opposite He believed that his teleological explanation of nature had done away with

the earlier physics, which derived all that occurs from material and mechanical causes While recognizing these lower causes he subordinated them to the formal and final causes Matter and force are not 'nature' They are nature's handymen, she herself is the builder proceeding according to an inner plan and idea Natural necessity as the Atomists understood it is of course the indispensable condition of nature's activity as of man's techniques, but to the interpreter of nature it remains, as Plato had already laid down, a merely secondary cause (συναίτιον) The farther Aristotle went in positive research in the course of his life, the deeper he had to penetrate in the investigation of the special material constitution of individual things So long, on the other hand, as his physics remained in the sphere of conceptual discussion, the relation between the secondary and the final cause gave him little difficulty The spurious fourth book of the *Meteorology*, which contains the first ancient attempt at chemistry, illustrates how this relation becomes problematic to a follower of Aristotle as soon as he turns to the question of the constitution of matter Democritus' atomic theory and his conception of the void instantly reappear as working hypotheses, without at first endangering the fundamentally teleological character of physics The author of the fourth book of the *Meteorology* belongs to this transitional stage [1] Strato goes farther and drops teleology and metaphysics along with it, rebuilding Aristotle's physics on a Democritean base He transfers the 'craftsmanship' of nature to matter and its qualities It has been suggested that he is the author of this book, which would then be an early work in which the doctrine of his master struggled with atomist conceptions, but we do not need the famous name in order to understand the direction of the development revealed in this interesting work Teleological physics penetrated from Plato's later days into Aristotle's first period and became the groundwork of the latter's philosophy It found fruitful soil for its principle in the investigation of the animal and vegetable kingdoms When it came to the examination of inorganic matter, on the other hand, the principle of form failed in the long run, and the atomist point of view reappeared of its own accord

[1] For what follows see J Hammer-Jensen, *Hermes*, vol l, pp 113 ff

Aristotle's interest in method rules in his further development also, as when he afterwards inserts between the *Physics* and the *Metaphysics* a special connecting inquiry into the continuity and eternity of the world's motion and into circular motion, which takes us right to the threshold of metaphysics and shows that physics without metaphysics is a trunk without a head The fundamental idea of the later metaphysics is also an idea about method, namely to prefix to theology a doctrine of substance in general and thus expand metaphysics into a study of the various meanings of being The theory of supersensible being, whose subject-matter was distinct from that of physics, now becomes a study of the nature, as being, of the very subject-matter that physics looks at from the point of view of motion Thus the two original fundamental subjects of metaphysics—the physical subject of the first mover and the metaphysical subject of the supersensible—retreat into the background, and instead of them there appears the new subject of the morphology of being One can detect in this the characteristics of Aristotle's later universal science of reality, beginning to have its effect on metaphysics and receiving here an ontological and axiomatic foundation The suppression of speculation in favour of factual research also left its traces, as we have seen, on the later treatment of the question of the prime mover The conceptually necessary complement of the body of physical doctrine, the principle on which everything depends, now becomes very like a mere cosmological hypothesis in character, and the impossibility of confirming it like other hypotheses through experience is immediately felt to be an incurable defect

This interest in the method tended to repress Aristotle's interest in picturing his philosophy It was not given to him to create striking symbols of the content of his view of the world like Plato's myths and similes He must have felt this himself, once, in his first account of his own philosophy, the manifesto *On Philosophy*, he tried to give pictorial form to his new attitude towards things in a variant of the simile of the Cave in Plato's *Republic* (above, p 163). The simile of the ascent of the subterranean men to the vision of the eternal orders and forms of the cosmos strikes us as a fine and individual version of the Platonic original, but dependent upon it to the last, and the

relation between his attitude towards the world and Plato's leaves the same impression It is as though he were absolutely presupposing it and turning at once to his own methodical argumentation and analysis Only in isolated passages do we suddenly become aware, almost with astonishment, of the living presence of a felt whole behind the subtle network of conceptions. It remains latent like the driving religious force that lies behind the *Metaphysics* without ever coming forward and directly confessing itself This is why both reveal themselves only in the indirect forms of conceptual thinking and of the method he uses to wrestle with them, and why the force of his philosophy as a religion and as a world-view has come alive in history only where men have not been merely seeking aesthetic intuitions but have themselves known something of this heavy struggle Let us nevertheless attempt to make his world pictorially visible to ourselves

Aristotle introduced the logically discrete character of Plato's Ideal world into the visible world as well According to Plato the happiest image of the world of appearances is the Heraclitean flux of all things, in which certain enduring islands appear Aristotle did not look at nature so, for him it was a cosmos in which all motion revolved around the fixed centres of abiding forms Nevertheless, he does not, as one might expect, foist upon the living reality the rigid hierarchy of a world of abstract conceptions, his forms work as the constructive laws of all becoming What we feel in them most of all, however, is the separateness of accurately determined logical unities The image in which he pictures his world is τάξις or order, not συμφωνία or harmony What he wants is not a sounding polyphonic concord, however natural this feeling may have been to a Hellenistic Greek, but the organized common labour of all forms for the realization of a superordinate Thought To express this view of the world he invented, for once, a happy simile—the tactical motion of the warriors in an army, through which is executed the plan of the unseen general Compared with the 'breath penetrating all things' of the Stoic monism it is a classic world of plastic forms and contours The members of this realm lack contact and dynamic reaction upon each other. This feature, foreign to the 'harmoniously unified' world of imperial

philosophy, is what Plotinus had in mind when he desiderated some contact between the prime mover and the forms of the movers of the spheres The same is true of the whole realm of forms in Aristotle's cosmos, though their law is embodied most purely and beautifully in that of the spheres

'The things that change imitate those that are imperishable' The coming-to-be and passing-away of earthly things is just as much a stationary revolution as the motion of the stars In spite of its uninterrupted change nature has no history according to Aristotle, for organic becoming is held fast by the constancy of its forms in a rhythm that remains eternally the same Similarly the human world of state and society and mind appears to him not as caught in the incalculable mobility of irrecapturable historical destiny, whether we consider personal life or that of nations and cultures, but as founded fast in the unalterable permanence of forms that, while they change within certain limits, remain identical in essence and purpose This feeling about life is symbolized by the Great Year, at the close of which all the stars have returned to their original position and begin their course anew In the same way the cultures of the earth wax and wane, according to Aristotle, as determined by great natural catastrophes, which in turn are causally connected with the regular changes of the heavens That which Aristotle at this instant newly discovers has been discerned a thousand times before, will be lost again, and one day discerned afresh Myths are the lost echoes telling of the philosophy of lost ages, equal in value to our own, and some day all our knowledge too will be only a hoary myth The philosopher, standing upon the earth in the centre of the universe, embraces within the limits of thought a cosmos itself bounded by fixed limits and enclosed in the ethereal ball of the outer heaven The philosophic *Nus*, when gazing from the peak of human knowledge upon the eternal rhythm of the whole, divines something of the pure unsullied happiness of the world-spirit perduring unmoved in contemplative thought

The old geometrical cosmos of the Greeks was differentiated but not broken by Aristotle's picture of the world The new ideas of the fourth century were introduced into its typical outlines Reality is now seen from within, it is no longer solid, but to a

certain extent transparent Aristotle completes the reception of Platonism into the ordinary Greek picture of the world The perspective is indefinitely extended both in space and in time by the astronomical and historical inquiries of the century In its finiteness Aristotle's world is identical with Plato's, but the contrast between the two realms, which gave the last-named its special mood and spiritual impetus, is gone, and now the visible cosmos itself shines with Platonic colours. The Greek picture of the world has attained its maximum of unified harmony and completeness Yet all this moves the spirit of the philosopher not from the aesthetic and emotional side, but merely so far as it can be conceptually established by strict science Although this singularly beautiful picture collapsed long ago, science is still wrestling with the problems and methods that were developed by means of it In them, and not in the picture as such, lies the real ἐνέργεια or activity of its genius

III THE ANALYSIS OF MAN

The foundation of ethics as a science was profoundly affected by the fact that Socrates had brought the question of moral *knowledge* to the forefront and that Plato went farther in this direction We are accustomed to consider that personal conscience and intention is the essential problem, and hence we tend to look on Socrates' alien way of putting the question as an historical condition of his thought, concealing what was in reality a question not of consciousness but of conscience However justifiable it may be to make the great phenomena in the history of the Greek mind clearer to ourselves by translating them into the corresponding categories of our day, it involves the danger of missing the real achievement of Greece This achievement lies not in religious prophecy nor merely in the thorough radicalism with which they applied morality to life, but in their apprehension of the objectivity of ethical values and of the objective position of the ethical element in the universe as a whole Socrates was not indeed an ethical theorist, he was merely seeking the road towards virtue and away from his aporia of ignorance, but this very starting-point contains the seed of the conclusion towards which the development that he inaugurated was to strive, the foundation of 'ethics' The

question 'What *is* the good or the just?' is not that of a prophet but that of an inquirer Passionately though it affirms the good, what it puts first is the discovery of the nature of what we call good, and ignorance of this is the real distress that it expresses That the greatest moral leader of Greece should be so much concerned with objectification and the apprehension of the right shows that the Greeks could attain their highest moral achievement only in the creation of a philosophy of morals This is why the question of subjective intention and 'performance', of the education of the will, takes second place with Socrates and is treated by him in a way that—however much we may talk around it—cannot satisfy us For him, as for Plato, this question was not so much the sole guiding purpose as simply the presupposition of the question that they really did feel intensely, namely what is the essence of the good The road to knowledge was long for them, on the other hand, that knowledge would ensure action seemed almost self-evident

The development from Socrates to Aristotle has been represented as a process of increasing alienation from the former in the course of which his practical moral teaching was gradually reduced to theoretical form, and this is how it really appears if one looks on Socrates as investigating the nature of conscience and spreading a gospel of moral freedom, in other words, if one ascribes to him the modern Protestant and Kantian attitude [1] From our point of view, however, the actual course of events was the inevitable process of progressively objectifying the morally right, and was due to the essential nature of the Greek spirit, not to the accident of particular personalities Only this process could overcome the old traditional morality, which was steadily disintegrating, together with the complete subjectivism that accompanied the disintegration The striving for objectivity was certainly born from the practical aporia of a powerful and militant moral personality, but its own nature compelled it to develop by allying itself to philosophical thought, in which it found the instrument of obtaining its end—or more correctly, by calling into existence a new philosophical movement, which created new instruments for itself The movement took a

[1] Cf Heinrich Maier, *Sokrates, sein Werk und seine geschichtliche Stellung*, pp 516 ff and 577 ff

different course with each Socratic, according to whether he approached Socrates externally with sophistical problems already in possession of his mind, and used him merely to enrich his material without grasping the core of his problem in its supra-personal significance, or, recognizing the new and pioneering element in him, as Plato did, seized on this point and developed it with originative force

Scholars commonly regard it as another merely historical accident that Plato made his great discovery of the moral Ought, to use modern terms, in the form of an Idea, that is, a supersensible essence having a higher reality, and we excuse this roundabout method by pointing to the artistic requirements of the Greek spirit Yet here again merely to claim superior knowledge and precipitately impose our own 'more advanced' point of view is not enough The very feature that to us seems roundabout or wrong was the necessary historical presupposition of the recognition of the real nature of the thing itself The discovery of the objective spiritual values, whether moral or aesthetic or logical, and their abstraction in purified form from the jumbled chaos of moral and aesthetic and logical assumptions always occurring in human souls, was possible only because of the objectifying, shaping, formative vision with which the Greeks approached all things, even the intellectual, and to which they owe their species of philosophy and art Other peoples have experienced great moral elevations, but for a philosophic account of morality as a value in its pure form the Greeks and Plato had to come into the world The Idea, when it dawned on the Greek mind, appeared to be by natural necessity an objective reality, independent of the consciousness in which it is reflected And since it had come as the answer to the Socratic question 'What is so and so?' it also possessed the attributes of the object of logic, the conception This is the only way in which it was possible, at that non-abstract level of thought, to recognize two of the essential properties of the moral Ought, its incontestability and its unconditionality Plato must have thought, as he discovered the Idea, that he was for the first time attaining a real understanding of the essence of Socrates' lifework, it had been the erection of a higher intellectual world of unshakable ends and aims (τέλος, ὅρος) In the transcendental vision of the

Good in itself, not to be derived from any sense-experience, the Socratic search now attains fulfilment

Plato is fond of putting his philosophical recognition that the pure Good is the only morally valid motive of human action in the form of the popular Greek search for the highest good or best life To the numerous suggestions that had already been made, including more or less all the goods of the world, he opposed his own, 'that a man becomes happy when he becomes good' Only the good man can use the world's goods rightly, and hence it is only for him that they are goods in the real sense of means to the Good He, however, is independent of them, and carries happiness within himself Thus Plato banishes eudaemonism and the ethics of goods, the foundations of every popular Greek view of life Like a true Greek, however, he recalls them in the same instant, though in changed and elevated shape The vision of the Good in itself is the fruit of a lifetime of fervid toil It presupposes the soul's gradual familiarization with the 'Good itself', it is revealed only to him who is really seeking wisdom, and then only at the end of a painful intellectual road passing through all the methods of argument (μέθοδοι λόγων) Unlike mechanical knowledge it cannot be transferred from one person to another The best life is therefore the 'philosophic' life, and the highest Good is the inner happiness of him who truly apprehends the Good

Thus Plato became not merely the theoretical discoverer of morality, but also the creator of a new ideal of life, although he left the common morality standing as a lower level beside philosophic virtue In the course of his later development the philosophic life became more and more religious in character, as the thought of God took the place of the Idea of the Good as the measure of all measures Through all phases of his development, however, his chief concern remained the problem of objective values and norms Life 'with reference to the end' included in itself the impulse to strive for the end Plato was, in fact, overwhelmingly impressed by the newly discovered objective world of pure values and by the new sureness that it imparted to life

Aristotle's early dialogues are full of a tremendous ardour for Plato's philosophic life, but at the same time even as early a book as the *Protrepticus* clearly shows the limits of the influence

that could be exerted on civic reality by this exclusive ideal of intellectual aristocracy The attempt to impose it on the whole life of the nation could only lead to a complete renunciation of reality, since reality showed itself unable to adopt it The tendency to renounce the world, together with a pitchblack pessimism about its goods and a pitiless criticism of its unintellectual society, is strikingly obvious in Aristotle's early work Against this foil his metaphysico-religious optimism stands out all the more clearly, shining over all the worthlessness and all the misery of this world, striving with the pure intellect beyond this realm of appearances towards the beckoning goal of immortal life The lasting impression that Aristotle received from this Platonic view of things cannot be doubted by any one who has followed its influence through his later development, but we must also bear in mind the background that is hidden from us by this typical Academic view In this school began the movement that culminated in Aristotle's ethics, and even his dialogues betray something of the penetrating conceptual analysis that brought it into being Men sought to understand the high ideal of the philosophic life by means of the nature of the human spirit itself, and in so doing, although they might at first, owing to the lack of analytical psychology, seem to find confirmation of their belief in the primacy of the knowing mind over the other parts of the soul, they at any rate stumbled on the problem of the different 'parts' of the soul, and on the task of doing justice to the irrational parts also, that is to say, of including them in the process of assimilating the spirit to God In the *Philebus* as in the *Protrepticus* other 'lives' appear besides the philosophical, and an attempt is made to relate them A question like that of the part played by pleasure in the pure philosophic life leads to the investigation of the motives of moral action, and the pedagogical idea of Plato's old age, which was to train up the young to the good by accustoming them early to feel pleasure in the good and displeasure at the bad, is already close to Aristotle's ethics, according to which an act is good only when accompanied by joy in the good The problem of character must also have been worked out in the Academy, since Xenocrates divided philosophy into logic, physics, and ethics or the study of character Plato's later dialogues show signs of a theory of the will and of moral

responsibility, which proves that Aristotle was not the first person to attain a philosophical mastery of this question so much discussed in Greek criminal law When Aristotle examines and rejects definitions of such words as choice, happiness, and pleasure, he probably takes them all from discussions in the Academy The intellectualization of Plato's early metaphors and the inauguration of ethics as a separate study were already in full swing in that school Aristotle is merely the Platonist who carried out these tendencies with the greatest definiteness

Aristotle was not a moral lawgiver in Plato's manner This was neither within the compass of his nature nor allowed by the advance of the problems Though his ethics was at first saturated with the idea of the divine norm, and regarded all life as the service and knowledge of God, even in his earliest work the new element reveals another direction, namely the analysis of the forms of the moral life as they actually are He abandons Plato's theory of virtue for a theory of living types, adequate to the rich variety of the moral life in all conceivable manifestations, including economics, society, class-relationships, law, and business Between this realistic study of civic life, and the lofty ideas handed down from Plato's religious philosophy, which form the framework of the whole, there is great tension Although Aristotle explains the types of the just man, the brave, the proud, the liberal, and the magnificent, by means of a single formal conception of virtue, the principle of the proper mean, and although he develops his types not by pure description but by a dialectical construction in which every feature is logically connected with the others, the content is taken from experience and the types themselves arise from factual relationships as they are actually given The introductory discussion of the fundamental nature of virtue is orientated with regard to the question of moral intention and its cultivation This was a decided step forward, the essence of moral value is now developed out of the subjective self, and the sphere of the will is marked off as its peculiar realm This really gives the virtue of character pre-eminence over that of the intellect, and hence the larger part of the discussion is devoted to it, although Aristotle is still far from making a fundamental division between the two The theory of ethical virtue now becomes to a certain extent an

ethics within ethics, and determines the name of the whole From Aristotle alone we should no longer see why the theory of intellectual virtue comes into ethics at all, if we did not know that to Plato (and to Aristotle in his youth) it had been the very centre, the science of the highest objective value Even in his later days Aristotle connected the highest end of human life with the divine end of the world, and hence made ethics culminate in theoretical metaphysics, but his main emphasis then lay not on the apprehension of this eternal norm, but on the question how human individuals can realize this norm in will and action As in ontology he made Plato's Idea bear fruit in the apprehension of the world of appearances, so in ethics he made the will of the moral individual adopt the transcendental norm and thus objectify itself The norm when thus internalized of course loses its character of universal validity, for there is no imperative that is binding on all men equally, except a purely formal generalization devoid of content Aristotle's aim is to unite the idea of complete obedience to the norm with the greatest individual variety The moral personality is 'a law to itself' In this guise the idea of personal moral autonomy, which was foreign to Plato, enters Greek consciousness for the first time

The two main parts of Aristotle's ethics, the ethical doctrine of morality based on the good will and the metaphysical doctrine of the contemplation of God as our norm, evince a tendency to rid themselves of each other more and more in the course of his development The actual 'ethic' or theory of character, which in the original *Ethics* was closely bound up with the theological culmination, afterwards becomes independent and finds a principle of its own in practical moral insight Aristotle finally abandoned altogether the attempt to carry Plato's primacy of theoretical reason into the sphere of everyday ethics He had, of course, watered down Plato's 'wisdom' and '*Nus*' into pure 'theoretical reason', and the necessity for a sharp distinction between civic and metaphysical ethics is a direct result of the intellectualization of these conceptions, which to Plato meant both the knowledge of the good and the actual goodness of the soul Thus Aristotle preserved the fundamentally critical character of his philosophy in ethics too The result was a

tremendous enlargement and refinement in psychological comprehension of the moral self, and the compression of 'intellectualism' and the metaphysical element into a very small space As in metaphysics, however, so in ethics he remains ultimately a Platonist, there in that he explains the world of experience teleologically by reference to a highest inexperienceable end, here in that he recognizes, beyond ordinary civic morality and the realm of practical action and will, a life passed in contemplating the eternal, which in his estimate unconditionally deserves the palm, and stands on a higher level even from the ethical point of view In the *Nicomachean Ethics*, however, he makes the morality of civic life independent of this theology They are two separate worlds differing in rank The appearance of the 'theoretic life' at the end of the work means now, not that all earthly change must be 'made immortal' as far as possible, but that above the world of practical morality there is a higher Thus Aristotle builds the Platonic world of his youth into the actual world, and gives it the highest position therein, the place from which the light of the eternal shines upon this world This juxtaposition of the two 'lives' has always been felt to be in some way personal and dependent on the philosopher's own experience It does not possess the radical consistency either of Plato, who finds only the philosophic life worth living, or of Kant, who breaks once and for all with the primacy of theoretical reason and declares the moral will to be the highest thing in the world Both in ethics and in metaphysics Aristotle goes a little way with Kant, but something in him makes him shrink from the final conclusion Neither the self-sufficiency of pure natural science nor the self-confidence of the mere will to fulfil one's moral obligations satisfied his sense of reality and of life Plato's transcendent world would not let him go, and he was conscious that in introducing it he had added a new portion of reality to the old Greek structure of the world Only so can we explain why his *Nus* takes on an almost mystical gleam in the theological parts of his metaphysics and ethics This summit of human contemplation comes directly out of Plato's intellectual realm into Aristotle's world of facts, and gives to his view of life its peculiar modern tension and two-sidedness

In politics, which we will here touch on only briefly, the inner

stratification is the same as in ethics and metaphysics. In fact, the historical development is particularly clear in this field From the standpoint of the history of the mind the decisive problem in Plato's politics lies in that strict unconditional subordination of the individual to the state by which he 'restored' the genuine old Greek life In the fourth century this life had long been disrupted by the preponderance of commercial forces and interests in the state and in the political parties, and by the intellectual individualism that became general during the period Presumably every intelligent person saw clearly that the state could not be healed unless this individualism could be overcome, at least in its crudest form as the unbounded selfishness of each person, but it was hard to get rid of when the state itself was inspired by the same spirit—had, in fact, made it the principle of its actions The predatory politics of the end of the fifth century had gradually brought the citizens round to these new ways of thinking, and now the state fell a victim to the egoistic idea, impressively pictured by Thucydides, that it had itself made into a principle The old state with its laws had represented to its citizens the totality of all 'customary' standards To live according to the laws was the highest unwritten law in ancient Greece, as Plato for one last time sadly represents it in his *Crito* That dialogue shows the tragic conflict of the fourth century sharpened into conscious absurdity, the state is now such that according to its laws the justest and purest man in the Greek nation must drink the hemlock The death of Socrates is a *reductio ad absurdum* of the whole state, not merely of the contemporary office-holders In the *Gorgias* Plato measures the Periclean state and its weaker successors by the standard of the radical moral law, and arrives at an unconditional condemnation of the historical state When he goes on in the *Republic* to sacrifice the life of the individual completely to the state, with a one-sided strictness intolerable to the natural feelings of his century, his justification lies in the changed spirit of his new state The sun that shines in it is the Idea of the Good, which illuminates its darkest corners Thus the subordination of all individuals to it, the reconversion of emancipated persons into true 'citizens', is after all only another way of expressing the historical fact that morality had finally separated itself from

politics and from the laws or customs of the historical state, and that henceforth the independent conscience of the individual is the supreme court even for public questions There had been conflicts of this sort before, what is new is the proclamation of a permanent conflict Plato's demand that philosophers shall be kings, which he maintained unabated right to the end, means that the state is to be rendered ethical through and through It shows that the persons who stood highest in the intellectual scale had already abandoned the actual ship of state, for a state like Plato's could not have come alive in his own time, and perhaps not at any time

Aristotle retains Plato's external subordination of ethics to politics, but with him, too, the real strength lies in the former, and from it he derives the norm of the best state and the content of the 'best life' To his sense of reality, however, this starting-point presents insoluble difficulties, which lead, at the very beginning of the earlier sketch of the ideal state, to the first clear formulation of the profound conflict concealed in Plato's state In politics, too, Aristotle lives not in the Ideal world but in the tension between Idea and experience The actual political life of his time, however, does not allow him to find any way of relaxing this tension In metaphysics and ethics he keeps the door to Plato's world open, in spite of his immanent point of view, and he can do so because that world is actual within himself In politics, on the other hand, the 'best state' remains a mere Utopia, and shows all too clearly that along this road the most one can attain to is a mere educational institution Incidentally, Aristotle did indeed formulate the problem of power clearly—he appends it to Plato's notion of the state as a sort of question-mark—and also explain that not all 'mastery' is fundamentally bad, but he did not reach a satisfying solution, and in that advanced stage of general Greek culture a practical solution was no doubt altogether impossible

The problem of the state was wholly unmanageable The Greeks' theoretical awareness of their own political life attained its highest point, like the conscious nervous nationalism of the Demosthenic party, at a time when the Greek city-state had begun to decline It was a form that had lived its life out, and it now succumbed to societies of a cruder sort that still retained

their vigour In his sketch of the ideal state Aristotle turns immediately to the significant question whether to escape from the state be not the only possible aim, and begins his analysis of actual political life by declaring that, with regard to reality, there is nothing for the philosopher to do but contribute his superior knowledge of the conditions of each particular constitution to the correct treatment of political disorders as they arise This attitude of resignation is typical of the intellectual personalities of the time, even of the practical statesmen, who one and all approached the state with a certain detachment and whose politics always remained a sort of experiment This detachment and the consciousness of it went furthest with Aristotle, because, himself without a state, he lived as an objective observer in a great state in the throes of dissolution, and had mastered the tremendous wealth of forms and possibilities The only effective community that still had a strong hold on the Greeks of his time was civil society with its firm notions of education, demeanour, and urbanity Significantly, he counts this not as a political force but as part of the permanent ethical make-up of personality, and therefore his discussion of it appears in the *Ethics* in the form of special 'virtues' The outer and inner support of the old morality had been the laws of the state, that of the modern was the objective forms of society There is no abstract ethical individualism in Aristotle—even the Stoics and Epicureans kept far from that extreme, in spite of the cosmopolitanism of the former and the ideal friendship of the latter—but his *Politics* shows with crass realism that society itself is only a small group of favoured persons, dragged hither and thither and maintaining a precarious existence in the universal struggle for money and power Hellenistic ethics finally came to rest in the notion of inward freedom, which only occasionally appears in Aristotle, this confirmed for good and all the individual's independence of state and society Within Aristotle's ethics this self-sufficiency exists only for the man who shares in the 'theoretic life', and even for him only on certain conditions, but this increased sensitiveness to man's dependence on 'fortune' and external circumstances is itself precisely an expression of that longing for inward freedom, and that sense of the moral dignity of personality, which are characteristic of the whole age

IV PHILOSOPHY AS THE UNIVERSAL SCIENCE

Aristotle's philosophy represents the difficulties that his age felt about the universe, expressed with the highest art of methodical thought His scientific research, on the other hand, is more, and extends far beyond the vision of his contemporaries To see this side of his achievement in a false light, by applying to it the standards of modern science and factual knowledge, is only too easy, and has been done again and again, every time that he has engaged the attention of the representatives of the specialized branches of science or the historians of the positive sciences Perhaps, however, we may venture to hope that to-day the *naiveté* of all such comparisons is clear even to those who have not been schooled by historical thought, and that we are relieved of the obligation to examine them Here we may not only exclude the question of the correctness of Aristotle's detailed observations, but also omit to give any precise account of his epoch-making achievement as an inventor of methods, since our concern is only to evaluate the significance of his researches as a sign of the evolution of philosophy

The enlargement of Platonic 'philosophy' into universal science was a step forced on Aristotle by his high estimate of experience and by his principle that speculation must be based on perceptible reality Nevertheless, it took place only gradually, for, though he was by nature a scholar from the beginning and stood out as the great reader among the abstract Platonists—the story that Plato called him so is true in essence at any rate—the intellectual attitude of his first or transcendental period is incompatible with his subsequent unreserved devotion to the endless world of facts From theoretical insight into the necessity of bringing experience within the sphere of philosophic thought, for the logical establishment of a conception of being approximating to the world of appearances, it is still a long way to the collection and elaboration of a gigantic mass of facts purely for their own sake, and where we possess detailed insight into Aristotle's development we can still see clearly how once he set foot on this road he was driven step by step farther along it One example must suffice The celebrated sketch of the development from Thales to Plato in the first book of the *Metaphysics* is

strictly philosophical in intention, its purpose is to derive the four principles on which Aristotle bases metaphysics, that is to say, it is not historical, as has often been supposed, but systematic It compresses and distorts the facts for the sake of what he wishes to extract from them In his later period this account was enlarged into a general history of the sciences It went far beyond its original systematic purpose and became an independent science, governed solely by its concern for the material The collection of constitutions is rather different, at any rate in theory this factual research remained a part of politics, its relation to which is certainly closer than that of the history of the sciences to metaphysics Even in politics, however, the advance from mere bookish scholarship and from the principle of respecting experience to the working-up of all that constitutional material is an immense step and takes us beyond the bounds of philosophy proper

Every other example would serve to convince us in a similar way that in spite of the inner consistency of this evolution it involved a momentous displacement of the centre of gravity in the direction of positive research The conceptual philosopher became a scientist who explained the whole world in universal fashion Philosophy to him was now the name of the sphere of the sciences as a whole When the word was coined it meant in the first place every kind of study or intellectual interest, and in a narrower sense the search for truth and knowledge The first person to give it a permanent terminological significance was Plato, who needed, to describe *his* kind of knowing, a word that expressed at once the unattainability of the transcendental goal of knowledge and the eternity of the struggle towards it, the suspension between ignorance and 'wisdom' Never, however, had it meant the established unity and present totality of all knowledge Such an idea had never entered any one's brain at all In Aristotle it did not take the form of attempting to justify the collection and organization of all existing sciences in one school by means of some attempt at external systematization He was not an encyclopaedist This is shown by the fact that, though it may have been his theory to do so, he did not actually adopt in his 'philosophy' the older independent sciences such as mathematics, optics, astronomy, and geography Only medicine

got in and was industriously pursued, because and so far as it offered a fruitful field for the actualization of Aristotle's morphological ideas Those other studies did not do so, and thus the exceptions show that the astounding totality of Aristotle's science is an organic growth from the central point of his philosophy, the notion of form This notion determined the limits of what his philosophy could master As he developed his 'form' changed from a theoretical conception of being to an instrument of applied science, a morphological and phenomenological study of all things He thus put philosophy in a position to attain a scientific grasp of the whole of reality It ruled over all the provinces of knowledge to an extent that has never since been equalled We must, however, keep on insisting that the cause of this fact is that his philosophy possessed the power of creating sciences, so that new ones were always springing forth from its lap, such as the biological, morphological, and physiological study of nature, or the biographical and morphological sciences of culture Mere logic or formal systematic could never enable philosophy to maintain such a place in science, still less could an arbitrarily dictated view of the universe

The relation between science and world-view is the problematical point in Aristotle's philosophy There are two sides to it, since science rests on principles that have to be established not by itself but by philosophy, while on the other hand philosophy is built up on the basis of scientific experience He believed that with this conception of thought and experience he could make Plato's philosophy into critical science, for, although he does not distinguish philosophy and science by different names, the starting-point of his criticism of all earlier philosophy is a firm conception of what constitutes science Even within his own philosophy he recognizes that the factual knowledge of the special sciences is scientific in a superior degree, not because of its greater exactitude (for this belongs rather to conceptual thinking) but because of its impregnable reality—the problem whether the supersensible is real gave rise to all kinds of uncertainty in the other sphere Aristotle's intellectual world presents a unified appearance from without, but it carries within itself a conscious discord in the fundamental idea that philosophy and science tend to diverge, in spite of his efforts to bring them together by

conceiving philosophy in the narrower and higher sense of the word as the necessary conclusion of the study of reality Greek science had always received strong stimulation from that metaphysical attitude towards the world which is the driving force of philosophy, and each had furthered the other during their development Once on the summit, however, they found themselves in conflict Aristotle restores them to unstable equilibrium This instant represents the high point of the common part of their development

In Post-Aristotelian times neither philosophy nor science was able to maintain itself on this height Science needed freer play than philosophy gave it Its results often rendered doubtful the methods and principles of explanation that philosophy had provided it with On the other side, the cultured classes, who had lost their religion, needed a metaphysical view of the world, and thus tempted philosophy to renew its bold speculative flight, and we have to admit that in trying to satisfy this longing it was only obeying the impulse of self-preservation Compared with Aristotle's critical attitude Stoicism and Epicureanism look like dogmatism and the collapse of scientific philosophy They took over his logical technique and developed the content of some of his metaphysical views, mixing them with older primitive ideas, or they renewed Pre-Socratic physics as Epicurus renewed Democritus, and built up an ethical ideal of life on that foundation The centre of gravity lay in metaphysics and ethics, real research was not prosecuted at all After the third generation the Peripatos assumed the same practical tendency, although it could not compete with the Stoics and the Epicureans in this field, the result was the regrettable collapse of the school after Strato That great investigator clearly shows, however, the only path that the movement initiated by Aristotle could take under the circumstances During his period Peripatetic research was already in touch with Alexandria, where the soil was more favourable than in Attica to the development of the positive sciences, and where the keen wind of reality was blowing Alexandrian science is the spiritual continuation of Aristotle's last period There the link between science and philosophy was definitely broken, the infinitely refined technique of Ptolemaic research dispensed with the stable intellectual

centre that Aristotle's detailed work had possessed in his great spiritualist view of the universe On the other hand, the most important discoveries of ancient science are due to this separation, which was a necessary liberation of research It was now that medicine and natural science, together with exact philology, attained their greatest flowering They were represented by figures like Aristarchus, Aristophanes, Hipparchus, Eratosthenes, and Archimedes From the standpoint of Aristotelian philosophy and science, of course, all this is but half of the intellectual realm, but the desire for a metaphysical view of the world, and the desire for scientific strictness, never came together again in the ancient world Aristotle is classical in spite of his lateness just because he united them, although even in him research and explanation preponderate over the formation of world-pictures

High as Aristotle's ideal was in itself, what is still more wonderful is its realization in the mind of a single man This is and will remain a psychological marvel, into which we cannot penetrate deeper The word 'universality' describes only his astounding power of spreading himself over all fields of reality, and his tremendous capacity for assimilation, both of which were attainable only in a period conscious of technique, but what is far greater is the intellectual range that included both the contemplation of supersensible essences by pure *Nus* and a knifelike keenness of the conceptual understanding and a microscopic accuracy of sensible observation This phenomenon becomes more comprehensible if we observe in the course of Aristotle's development that originality and power of assimilation balance each other, but even so his leaning towards metaphysics and his highly developed capacity for inward experience remain something unique in the spiritual make-up of a pronounced observer and discoverer In spite of the many layers of his mental world there is a great unity about it because all his powers are developed only so far as they serve as instruments for the objective contemplation of reality His *Nus* lacks Plato's world-transforming power, his conceptual thinking the solid practical bulk of dogmatism, his observation the turn for inventions and technical improvements, the three are united in one single task, the apprehension of what is His whole creativity is exhausted

in the continual production of new instruments for the service of this work

The presupposition of this complete devotion to the contemplation of the world is the objectivity, to the ultimate spiritual depths of which we cannot penetrate, in which everything that Aristotle put out is steeped, and which he bequeathed to Hellenistic science We have already remarked that it is not to be confused with impersonality, but is a suprapersonal form of the mind It is as far removed from the artistic objectivity with which Plato in his writings clothes his spiritual passion to transform human life, as from that Thucydidean kind which escapes the pains of a frightful historical fate by regarding it as the necessary course of events and turning it into political knowledge In those two Attic writers the struggle for objectivity is the reaction of a self that concentrates on sovereign values and is passionately interested in life In their cases we ought to speak of objectification rather than simple objectivity The objectivity of Aristotle is something primary It expresses a great serenity towards life and the world, which we look for vainly in Attica from Solon to Epicurus It is to be found rather in Hecataeus, Herodotus, Anaxagoras, Eudoxus, and Democritus, much as these men differ from each other There is something peculiarly contemplative and non-tragic about them Aristotle, too, possessed that world-wide Ionian horizon, of whose soul-liberating breadth the brooding Athenians had no inkling At the same time the essence of the Attic spirit had a profound influence upon him as it had upon Herodotus, it gave to his comprehensive ἱστορία or inquiry its unity and strictness of principle Through these gifts he became, what it was not vouchsafed to any of the Ionian contemplators of the universe to be, the compelling organizer of reality and of science