# SOPHIA PROJECT

# PHILOSOPHY ARCHIVES



## **Aristotle**

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### 1. Life

Aristotle was the son of a Greek physician, member of the colony of Stagira in Thrace. His father, Nicomachus by name, was a man of such eminence in his profession as to hold the post of physician to Amyntas, king of Macedonia, father of Philip the subverter of Greek freedom. Not only was his father an expert physician, he was also a student of natural history, and wrote several works on the subject. We shall find that the fresh element which Aristotle brought to the Academic philosophy was in a very great measure just that minute attention to details and keen apprehension of vital phenomena which we may consider he inherited from his father.

He was born 384 B.C., and on the death of his father, in his eighteenth year, he came to Athens, and became a student of philosophy under Plato, whose pupil he continued to be for twenty years,—indeed till the death of the master. That he, undoubtedly a far greater man than Speusippus or Xenocrates, should not have been nominated to the succession has been variously explained; he is said to have been lacking in respect and gratitude to the master; Plato is said to have remarked of him that he needed the curb as much as Xenocrates needed the spur. The facts really need no explanation. The original genius is never sufficiently subordinate and amenable to discipline. He is apt to be critical, to startle his easy-going companions with new and seemingly heterodox views, he is the 'ugly duckling' whom all the virtuous and commonplace brood must cackle at. The Academy, when its great master died, was no place for Aristotle. He retired to Atarneus, a city of Mysia opposite to Lesbos, where a friend named Hermias was tyrant, and there he married Hermias' niece.

After staying at Atarneus some three years he was invited by Philip, now king of Macedon, to undertake the instruction of his son Alexander, the future conqueror, who was then thirteen years old. He remained with Alexander for eight years, though of course he could hardly be regarded as Alexander's tutor during all that time, since Alexander at a very early age was called to take a part in public affairs. However a strong friendship was formed between the philosopher and the young prince, and in after years Alexander loaded his former master with benefits. Even while on his march of conquest through Asia he did not forget him, but sent him from every country through which he passed specimens which might help him in his projected History of Animals, as well as an enormous sum of money to aid him in his investigations.

After the death of Philip, Aristotle returned to Athens, and opened a school of philosophy on his own account in the Lyceum. Here some authorities tell us he lectured to his pupils while he paced up and down before them; hence the epithet applied to the school, the *Peripatetics*. Probably, however, the name is derived from the 'Peripati' or covered walks in the neighbourhood of that temple in which he taught. He devoted his mornings to lectures of a more philosophical and technical character; to these only the abler and more advanced students were admitted. In the afternoons he lectured on subjects of a more popular kind—rhetoric, the art of politics, etc.—to larger audiences. Corresponding with this division, he also was

in the habit of classifying his writings as Acroatic or technical, and Exoteric or popular. He accumulated a large library and museum, to which he contributed an astonishing number of works of his own, on every conceivable branch of knowledge.

### 2. Aristotle's Historical Legacy

The after history of Aristotle's library, including the MSS. of his own works, is interesting and even romantic. Aristotle's successor in the school was Theophrastus, who added to the library bequeathed him by Aristotle many works of his own, and others purchased by him. Theophrastus bequeathed the entire library to Neleus, his friend and pupil, who, on leaving Athens to reside at Scepsis in the Troad, took the library with him. There it remained for nearly two hundred years in possession of the Neleus family, who kept the collection hidden in a cellar for fear it should be seized to increase the royal library of Pergamus. In such a situation the works suffered much harm from worms and damp, till at last (*circa* 100 B.C.) they were brought out and sold to one Apellicon, a rich gentleman resident in Athens, himself a member of the Peripatetic school. In 86 B.C. Sulla, the Roman dictator, besieged and captured Athens, and among other prizes conveyed the library of Apellicon to Rome, and thus many of the most important works of Aristotle for the first time were made known to the Roman and Alexandrian schools. It is a curious circumstance that the philosopher whose influence was destined to be paramount for more than a thousand years in the Christian era, was thus deprived by accident of his legitimate importance in the centuries immediately following his own.

But his temporary and accidental eclipse was amply compensated in the effect upon the civilised world which he subsequently exercised. So all-embracing, so systematic, so absolutely complete did his philosophy appear, that he seemed to after generations to have left nothing more to discover. He at once attained a supremacy which lasted for some two thousand years, not only over the Greek-speaking world, but over every form of the civilisation of that long period, Greek, Roman, Syrian, Arabic, from the Euphrates to the Atlantic, from Africa to Britain. His authority was accepted equally by the learned doctors of Moorish Cordova and the Fathers of the Church; to know Aristotle was to have all knowledge; not to know him was to be a boor; to deny him was to be a heretic.

### 3. Relation to Plato

His style has nothing of the grace of Plato; he illuminates his works with no myths or allegories; his manner is dry, sententious, familiar, without the slightest attempt at ornament. There are occasional touches of caustic humour, but nothing of emotion, still less of rhapsody. His strength lies in the vast architectonic genius by which he correlates every domain of the knowable in a single scheme, and in the extraordinary faculty for illustrative detail with which he fills the scheme in every part. He knows, and can shrewdly criticise every thinker and writer who has preceded him; he classifies them as he classifies the mental faculties, the parts of logical speech, the parts of sophistry, the parts of rhetoric, the parts of animals, the parts of the soul, the parts of the state; he defines, distinguishes, combines, classifies, with the same sureness and minuteness of method in them all. He can start from a general conception, expand it into its parts, separate these again by distinguishing details till he brings the matter down to its lowest possible terms, or *infimae species*. Or he can start from these, find analogies among them constituting more general species, and so in ascending scale travel surely up to a general conception, or *summum genus*.

In his general conception of philosophy he was to a large extent in agreement with Plato;

but he endeavoured to attain to a more technical precision; he sought to systematise into greater completeness; he pared off everything which he considered merely metaphorical or fanciful, and therefore non-essential. The operations of nature, the phenomena of life, were used in a much fuller and more definite way to illustrate or even formulate the theory; but in its main ideas Aristotle's philosophy is Plato's philosophy. The one clothed it in poetry, the other in formulae; the one had a more entrancing vision, the other a clearer and more exact apprehension; but there is no essential divergence.

### 4. The Starting Point of Aristotle's Philosophy

Aristotle's account of the origin or foundation of philosophy is as follows (*Met.* A. 2): "Wonder is and always has been the first incentive to philosophy. At first men wondered at what puzzled them near at hand, then by gradual advance they came to notice and wonder at things still greater, as at the phases of the moon, the eclipses of sun and moon, the wonders of the stars, and the origin of the universe. Now he who is puzzled and in a maze regards himself as a knownothing; wherefore the philosopher is apt to be fond of wondrous tales or myths. And inasmuch as it was a consciousness of ignorance that drove men to philosophy, it is for the correction of this ignorance, and not for any material utility, that the pursuit of knowledge exists. Indeed it is, as a rule, only when all other wants are well supplied that, by way of ease and recreation, men turn to this inquiry. And thus, since no satisfaction beyond itself is sought by philosophy, we speak of it as we speak of the freeman. We call that man free whose existence is for himself and not for another; so also philosophy is of all the sciences the only one that is free, for it alone exists for itself.

"Moreover, this philosophy, which is the investigation of the first causes of things, is the most truly educative among the sciences. For instructors are persons who show us the causes of things. And knowledge for the sake of knowledge belongs most properly to that inquiry which deals with what is most truly a matter of knowledge. For he who is seeking knowledge for its own sake will choose to have that knowledge which most truly deserves the name, the knowledge, namely, of what most truly appertains to knowledge. Now the things that most truly appertain to knowledge are the first causes; for in virtue of one's possession of these, and by deduction from these, all else comes to be known; we do not come to know them through what is inferior to them and underlying them. . . . The wise man ought therefore to know not only those things which are the outcome and product of first causes, he must be possessed of the truth as to the first causes themselves. And wisdom indeed is just this thoughtful science, a science of what is highest, not truncated of its head."

"To the man, therefore, who has in fullest measure this knowledge of universals, all knowledge must lie to hand; for in a way he knows all that underlies them. Yet in a sense these universals are what men find hardest to apprehend, because they stand at the furthest extremity from the perceptions of sense."

"Yet if anything exist which is eternal, immovable, freed from gross matter, the contemplative science alone can apprehend this. Physical science certainly cannot, for physics is of that which is ever in flux; nor can mathematical science apprehend it; we must look to a mode of science prior to and higher than both. The objects of physics are neither unchangeable nor free from matter; the objects of mathematics are indeed unchangeable, but we can hardly say they are free from matter; they have certainly relations with matter. But the first and highest science has to do with that which is unmoved and apart from matter; its function is with the eternal first causes of things. There are therefore three modes of theoretical inquiry: the science of physics, the science of mathematics, the science of God. For it is clear that if the divine is anywhere, it must

be in that form of existence I have spoken of (*i.e.* in first causes). . . . If, therefore, there be any form of existence immovable, this we must regard as prior, and the philosophy of this we must consider the first philosophy, universal for the same reason that it is first. It deals with existence as such, inquiring what it is and what are its attributes as pure existence."

#### 5. Aristotle and the Doctrine of Ideas

This is somewhat more technical than the language of Plato, but if we compare it with what was said above we shall find an essential identity. Yet Aristotle frequently impugns Plato's doctrine of ideas, sometimes on the lines already taken by Plato himself, sometimes in other ways. Thus (*Met.* Z. 15, 16) he says: "That which is *one* cannot be in many places at one time, but that which is common or general is in many places at one time. Hence it follows that no universal exists apart from the individual things. But those who hold the doctrine of ideas, on one side are right, viz. in maintaining their separate existence, if they are to be substances or existences at all. On the other side they are wrong, because by the idea or form which they maintain to be separate they mean the one attribute predicable of many things. The reason why they do this is because they cannot indicate what these supposed imperishable essences are, apart from the individual substances which are the objects of perception. The result is that they simply represent them under the same forms as those of the perishable objects of sensation which are familiar to our senses, with the addition of a phrase—*i.e.* they say 'man as such,' 'horse as such,' or 'the absolute man,' 'the absolute horse.'"

Aristotle here makes a point against Plato and his school, inasmuch as, starting from the assumption that of the world of sense there could be no knowledge, no apprehension fixed or certain, and setting over against this a world of general forms which were fixed and certain, they had nothing with which to fill this second supposed world except the data of sense as found in individuals. Plato's mistake was in confusing the mere 'this,' which is the conceived starting-point of any sensation, but which, like a mathematical point, has nothing which can be said about it, with individual objects as they exist and are known in all the manifold and, in fact, infinite relations of reality. The bare subject 'this' presents at the one extreme the same emptiness, the same mere possibility of knowledge, which is presented at the other by the bare predicate 'is.' But Plato, having an objection to the former, as representing to him the merely physical and therefore the passing and unreal, clothes it for the nonce in the various attributes which are ordinarily associated with it when we say, 'this man,' 'this horse,' only to strip them off successively as data of sensation, and so at last get, by an illusory process of abstraction and generalisation, to the ultimate generality of being, which is the mere 'is' of bare predication converted into a supposed eternal substance.

Aristotle was as convinced as Plato that there must be some fixed and immovable object or reality corresponding to true and certain knowledge, but with his scientific instincts he was not content to have it left in a condition of emptiness, attractive enough to the more emotional and imaginative Plato. And hence we have elsewhere quite as strong and definite statements as those quoted above about universals, to the effect that existence is in the fullest and most real sense to be predicated of *individual* things, and that only in a secondary sense can existence be predicated of universals, in virtue of their being found in individual things. Moreover, among universals the *species*, he maintains, has more of existence in it than the genus, because it is nearer to the individual or primary existence. For if you predicate of an individual thing of what species it is, you supply a statement more full of information and more closely connected with the thing than if you predicate to what genus it belongs; for example, if asked, "What is this?" and you answer, "A man," you give more information than if you say, "A living creature."

How did Aristotle reconcile these two points of view, the one, in which he conceives thought as starting from first causes, the most universal objects of knowledge, and descending to particulars; the other, in which thought starts from the individual objects, and predicates of them by apprehension of their properties? The antithesis is no accidental one; on the contrary, it is the governing idea of his Logic, with its ascending process or Induction, and its descending process or Syllogism. Was thought a mere process in an unmeaning circle, the 'upward and downward way' of Plato?

As to this we may answer first that while formally Aristotle displays much the same 'dualism' or unreconciled separation of the 'thing' and the 'idea' as Plato, his practical sense and his scientific instincts led him to occupy himself largely not with either the empty 'thing' or the equally empty 'idea,' but with the true *individuals*, which are at the same time the true universals, namely, real objects as known, having, so far as they are known, certain forms or categories under which you can class them, having, so far as they are not yet fully known, a certain raw material for further inquiry through observation. In this way Thought and Matter, instead of being in eternal and irreconcilable antagonism as the Real and the Unreal, become parts of the same reality, the first summing up the knowledge of things already attained, the second symbolising the infinite possibilities of further ascertainment. And thus the word 'Matter' is applied by Aristotle to the highest genus, as the relatively indefinite compared with the more fully defined species included under it; it is also applied by him to the individual object, in so far as that object contains qualities not yet fully brought into predication.

And second, we observe that Aristotle introduced a new conception which to his view established a *vital relation* between the universal and the individual. This conception he formulated in the correlatives, *Potentiality* and *Actuality*. With these he closely connected the idea of *Final Cause*. The three to Aristotle constituted a single reality; they are organically correlative. In a living creature we find a number of members or organs all closely interdependent and mutually conditioning each other. Each has its separate function, yet none of them can perform its particular function well unless all the others are performing theirs well, and the effect of the right performance of function by each is to enable the others also to perform theirs. The total result of all these mutually related functions is *Life*; this is their End or Final Cause, which does not exist apart from them, but is constituted at every moment by them. This Life is at the same time the condition on which alone each and every one of the functions constituting it can be performed. Thus life in an organism is at once the end and the middle and the beginning; it is the cause final, the cause formal, the cause efficient. Life then is an *Entelechy*, as Aristotle calls it, by which he means the realisation in unity of the total activities exhibited in the members of the living organism.

In such an existence every part is at once a potentiality and an actuality, and so also is the whole. We can begin anywhere and travel out from that point to the whole; we can take the whole and find in it all the parts.

### 6. Aristotle on Reminiscence and Realisation

If we look closely at this conception of Aristotle's we shall see that it has a nearer relation to the Platonic doctrine of Ideas, and even to the doctrine of Reminiscence, than perhaps even Aristotle himself realised. The fundamental conception of Plato, it will be remembered, is that of an eternally existing 'thought of God,' in manifold forms or 'ideas,' which come into the consciousness of men in connection with or on occasion of sensations, which are therefore in our experience later than the sensations, but which we nevertheless by reason recognise as necessarily prior to the sensations, inasmuch as it is through these ideas alone that the sensations

are knowable or namable at all. Thus the final end for man is by contemplation and 'daily dying to the world of sense,' to come at last into the full inheritance in conscious knowledge of that 'thought of God' which was latent from the first in his soul, and of which in its fulness God Himself is eternally and necessarily possessed.

This is really Aristotle's idea, only Plato expresses it rather under a psychological, Aristotle under a vital, formula. God, Aristotle says, is eternally and necessarily Entelechy, absolute realisation. *To us*, that which is first *in time* (the individual perception) is not first in *essence*, or absolutely. What is first in essence or absolutely, is the universal, that is, the form or idea, the datum of reason. And this distinction between time and the absolute, between our individual experience and the essential or ultimate reality, runs all through the philosophy of Aristotle. The 'Realisation' of Aristotle is the 'Reminiscence' of Plato.

### 7. The Nature of Thought

This conception Aristotle extended to Thought, to the various forms of life, to education, to morals, to politics.

Thought is an entelechy, an organic whole, in which every process conditions and is conditioned by every other. If we begin with sensation, the sensation, blank as regards predication, has relations to that which is infinitely real,—the object, the real thing before us,—which relations science will never exhaust. If we start from the other end, with the datum of thought, consciousness, existence, mind, this is equally blank as regards predication, yet it has relations to another existence infinitely real,—the subject that thinks,—which relations religion and morality and sentiment and love will never exhaust. Or, as Aristotle and as common sense prefers to do, if we, with our developed habits of thought and our store of accumulated information, choose to deal with things from a basis midway between the two extremes, in the ordinary way of ordinary people, we shall find both processes working simultaneously and in organic correlation. That is to say, we shall be increasing the *individuality* of the objects known, by the operation of true thought and observation in the discovery of new characters or qualities in them; we shall be increasing by the same act the *generality* of the objects known, by the discovery of new relations, new genera under which to bring them. Individualisation and generalisation are only opposed, as mutually conditioning factors of the same organic function.

This analysis of thought must be regarded rather as a paraphrase of Aristotle than as a literal transcript. He is hesitating and obscure, and at times apparently self-contradictory. He has not, any more than Plato, quite cleared himself of the confusion between the mutually contrary individual and universal in *propositions*, and the organically correlative individual and universal in *things as known*. But on the whole the tendency of his analysis is towards an apprehension of the true realism, which neither denies matter in favour of mind nor mind in favour of matter, but recognises that both mind and matter are organically correlated, and ultimately identical.

### 8. The Crux of Aristotle's Philosophy

The crux of philosophy, so far as thus apprehended by Aristotle, is no longer in the supposed dualism of mind and matter, but there is a crux still. What is the meaning of this 'Ultimately'? Or, putting it in Aristotle's formula, Why this relation of potentiality and actuality? Why this eternal coming to be, even if the coming to be is no unreasoned accident, but a coming to be of that which is vitally or in germ *there*? Or theologically, Why did God make the world? Why this groaning and travailing of the creature? Why this eternal 'By and by' wherein all sin is to

disappear, all sorrow to be consoled, all the clashings and the infinite deceptions of life to be stilled and satisfied?...That the answer is a failure need not surprise us. If we even now 'see only as in a glass darkly' on such a question, we need not blame Plato or Aristotle for not seeing 'face to face.'

Life is an entelechy, not only abstractedly, as already shown, but in respect of the varieties of its manifestations. We pass from the elementary life of mere growth common to plants and animals, to the animal life of impulse and sensation, thence we rise still higher to the life of rational action which is the peculiar function of man. Each is a *potentiality* to that which is immediately above it; in other words, each contains in germ the possibilities which are realised in that stage which is higher. Thus is there a touch of nature which makes the whole world kin, a purpose running through all the manifestations of life; each is a preparation for something higher.

### 9. Philosophy of Education

Education is in like manner an entelechy. For what is the differentia, the distinguishing character of the life of man? Aristotle answers, the possession of reason. It is the action of reason upon the desires that raises the life of man above the brutes. This, observe, is not the restraining action of something wholly alien to the desires, which is too often how Plato represents the matter. This would be to lose the dynamic idea. The desires, as Aristotle generally conceives them, are there in the animal life, prepared, so to speak, to receive the organic perfection which reason alone can give them. Intellect, on the other hand, is equally in need of the desires, for thought without desire cannot supply motive. If intellect is *logos* or reason, desire is that which is fitted to be obedient to reason.

It will be remembered that the question to which Plato addressed himself in one of his earlier dialogues, already frequently referred to, the *Meno*, was the teachableness of Virtue; in that dialogue he comes to the conclusion that Virtue is teachable, but that there are none capable of teaching it; for the wise men of the time are guided not by knowledge but by right opinion, or by a divine instinct which is incommunicable. Plato is thus led to seek a machinery of education, and it is with a view to this that he constructs his ideal *Republic*. Aristotle took up this view of the state as educative of the individual citizens, and brought it under the dynamic formula. In the child reason is not actual; there is no rational law governing his acts, these are the immediate result of the strongest impulse. Yet only when a succession of virtuous acts has formed the virtuous habit can a man be said to be truly good. How is this process to begin? The answer is that the reason which is only latent or dynamic in the child is actual or realised in the parent or teacher, or generally in the community which educates the child. The law at first then is imposed on the child from without, it has an appearance of unnaturalness, but only an appearance. For the law is there in the child, prepared, as he goes on in obedience, gradually to answer from within to the summons from without, till along with the virtuous habit there emerges also into the consciousness of the child, no longer a child but a man, the apprehension of the law as his own truest nature.

#### 10. Ethics

These remarks on education are sufficient to show that in Morals also, as conceived by Aristotle, there is a law of vital development. It may be sufficient by way of illustration to quote the introductory sentences of Aristotle's *Ethics*, in which the question of the nature of the chief good is, in his usual tentative manner, discussed: "If there be any end of what we do which we

desire for itself, while all other ends are desired for it, that is, if we do not in every case have some ulterior end (for if that were so we should go on to infinity, and our efforts would be vain and useless), this ultimate end desired for itself will clearly be the chief good and the ultimate best. Now since every activity, whether of knowing or doing, aims at some good, it is for us to settle what the good is which the civic activity aims at,—what, in short, is the ultimate end of all 'goods' connected with conduct? So far as the name goes all are pretty well agreed as to the answer; gentle and simple alike declare it to be happiness, involving, however, in their minds on the one hand well-living, on the other hand, well-doing. When you ask them, however, to define this happiness more exactly, you find that opinions are divided, and the many and the philosophers have different answers.

"But if you ask a musician or a sculptor or any man of skill, any person, in fact, who has some special work and activity, what the chief good is for him, he will tell you that the chief good is in the work well done. If then man has any special work or function, we may assume that the chief good for man will be in the well-doing of that function. What now is man's special function? It cannot be mere living, for that he has in common with plants, and we are seeking what is peculiar to him. The mere life of nurture and growth must therefore be put on one side. We come next to life as sensitive to pleasure and pain. But this man shares with the horse, the ox, and other animals. What remains is the life of action of a reasonable being. Now of reason as it is in man there are two parts, one obeying, one possessing and considering. And there are also two aspects in which the active or moral life may be taken, one potential, one actual. Clearly for our definition of the chief good we must take the moral life in its full actual realisation, since this is superior to the other.

"If our view thus far be correct, it follows that the chief good for man consists in the full realisation and perfection of the life of man as man, in accordance with the specific excellence belonging to that life, and if there be more specific excellences than one, then in accordance with that excellence which is the best and the most rounded or complete. We must add, however, the qualification, 'in a rounded life.' For one swallow does not make a summer, nor yet one day. And so one day or some brief period of attainment is not sufficient to make a man happy and blest."

The close relation of this to the teaching of Socrates and Plato need hardly be insisted on, or the way in which he correlates their ideas with his own conception of an actualised perfection.

Aristotle then proceeds to a definition of the 'specific excellence' or virtue of man, which is to be the standard by which we decide how far he has fully and perfectly realised the possibilities of his being. To this end he distinguishes in man's nature three modes of existence: first, feelings such as joy, pain, anger; second, potentialities or capacities for such feelings; third, habits which are built upon these potentialities, but with an element of reason or deliberation superadded. He has no difficulty in establishing that the virtue of man must be a habit. And the test of the excellence of that habit, as of every other developed capacity, will be twofold; it will make the worker good, it will cause him to produce good work.

So far Aristotle's analysis of virtue is quite on the lines of his general philosophy. Here, however, he diverges into what seems at first a curiously mechanical conception. Pointing out that in everything quantitative there are two extremes conceivable, and a *mean* or average between them, he proceeds to define virtue as a mean between two extremes, a mean, however, having relation to no mere numerical standard, but having reference *to us*. In this last qualification he perhaps saves his definition from its mechanical turn, while he leaves himself scope for much curious and ingenious observation on the several virtues regarded as means between two extremes. He further endeavours to save it by adding, that it is "defined by reason, and as the wise man would define it."

### 11. Political Philosophy

Reason then, as the impersonal ruler,—the wise man, as the personification of reason,—this is the standard of virtue, and therefore also of happiness. How then shall we escape an externality in our standard, divesting it of that binding character which comes only when the law without is also recognised and accepted as the law within? The answer of Aristotle, as of his predecessors, is that this will be brought about by wise training and virtuous surroundings, in short, by the civic community being itself good and happy. Thus we get another dynamic relation; for regarded as a member of the body politic each individual becomes a potentiality along with all the other members, conditioned by the state of which he and they are members, brought gradually into harmony with the reason which is in the state, and in the process realising not his own possibilities only, but those of the community also, which exists only in and through its members. Thus each and all, in so far as they realise their own well-being by the perfect development of the virtuous habit in their lives, contribute *ipso facto* to the supreme end of the state, which is the perfect realisation of the whole possibilities of the total organism, and consequently of every member of it.

The State therefore is also an entelectly. For man is not made to dwell alone. "There is first the fact of sex; then the fact of children; third, the fact of variety of capacity, implying variety of position, some having greater powers of wisdom and forethought, and being therefore naturally the rulers; others having bodily powers suitable for carrying out the rulers' designs, and being therefore naturally subjects. Thus we have as a first or simplest community the family, next the village, then the full or perfect state, which, seeking to realise an absolute self-sufficiency within itself, rises from mere living to well-living as an aim of existence. This higher existence is as natural and necessary as any simpler form, being, in fact, the end or final and necessary perfection of all such lower forms of existence. Man therefore is by the natural necessity of his being a 'political animal,' and he who is not a citizen,—that is, by reason of something peculiar in his nature and not by a mere accident,—must either be deficient or something superhuman. And while man is the noblest of animals when thus fully perfected in an ordered community, on the other hand when deprived of law and justice he is the very worst. For there is nothing so dreadful as lawlessness armed. And man is born with the arms of thought and special capacities or excellences, which it is quite possible for him to use for other and contrary purposes. And therefore man is the most wicked and cruel animal living when he is vicious, the most lustful and the most gluttonous. The justice which restrains all this is a civic quality; and law is the orderly arrangement of the civic community" (Arist. Pol. i. p. 2).

### 12. God and Necessity

Throughout Aristotle's physical philosophy the same conception runs: "All animals in their fully developed state require two members above all—one whereby to take in nourishment, the other whereby to get rid of what is superfluous. For no animal can exist or grow without nourishment. And there is a third member in them all half-way between these, in which resides the principle of their life. This is the heart, which all blood-possessing animals have. From it comes the arterial system which Nature has made hollow to contain the liquid blood. The situation of the heart is a commanding one, being near the middle and rather above than below, and rather towards the front than the back. For Nature ever establishes that which is most honourable in the most honourable places, unless some supreme necessity overrules. We see this most clearly in the case of man; but the same tendency for the heart to occupy the centre is seen also in other animals, when we regard only that portion of their body which is essential, and the limit of this

is at the place where superfluities are removed. The limbs are arranged differently in different animals, and are not among the parts essential to life; consequently animals may live even if these are removed. . . . Anaxagoras says that man is the wisest of animals because he possesses hands. It would be more reasonable to say that he possesses hands because he is the wisest. For the hands are an instrument; and Nature always assigns an instrument to the one fitted to use it, just as a sensible man would. For it is more reasonable to give a flute to a flute-player than to confer on a man who has some flutes the art of playing them. To that which is the greater and higher she adds what is less important, and not *vice versâ*. Therefore to the creature fitted to acquire the largest number of skills Nature assigned the hand, the instrument useful for the largest number of purposes" (Arist. *De Part. An.* iv. p. 10).

And in the macrocosm, the visible and invisible world about us, the same conception holds: "The existence of God is an eternally perfect entelechy, a life everlasting. In that, therefore, which belongs to the divine there must be an eternally perfect movement. Therefore the heavens, which are as it were the body of the Divine, are in form a sphere, of necessity ever in circular motion. Why then is not this true of every portion of the universe? Because there must of necessity be a point of rest of the circling body at the centre. Yet the circling body cannot rest either as a whole or as regards any part of it, otherwise its motion could not be eternal, which by nature it is. Now that which is a violation of nature cannot be eternal, but the violation is posterior to that which is in accordance with nature, and thus the unnatural is a kind of displacement or degeneracy from the natural, taking the form of a coming into being.

"Necessity then requires earth, as the element standing still at the centre. Now if there must be earth, there must be fire. For if one of two opposites is natural or necessary, the other must be necessary too, each, in fact, implying the necessity of the other. For the two have the same substantial basis, only the positive form is naturally prior to the negative; for instance, warm is prior to cold. And in the same way motionlessness and heaviness are predicated in virtue of the absence of motion and lightness, *i.e.* the latter are essentially prior.

"Further, if there are fire and earth, there must also be the elements which lie between these, each having an antithetic relation to each. From this it follows that there must be a process of coming into being, because none of these elements can be eternal, but each affects, and is affected by each, and they are mutually destructive. Now it is not to be argued that anything which can be moved can be eternal, except in the case of that which by its own nature has eternal motion. And if coming into being must be predicated of these, then other forms of change can also be predicated" (Arist. *De Coelo*, ii. p. 3).

This passage is worth quoting as illustrating, not only Aristotle's conception of the divine entelechy, but also the ingenuity with which he gave that appearance of logical completeness to the vague and ill-digested scientific imaginations of the time, which remained so evil an inheritance for thousands of years. It is to be observed, in order to complete Aristotle's theory on this subject, that the four elements, Earth, Water, Air, Fire, are all equally in a world which is "contrary to nature," that is, the world of change, of coming into being, and going out of being. Apart from these there is the element of the Eternal Cosmos, which is "in accordance with nature," having its own natural and eternal motion ever the same. This is the fifth or divine element, the aetherial, by the schoolmen translated *Quinta Essentia*, whence by a curious degradation we have our modern word Quintessence, of that which is the finest and subtlest extract.

#### 13. The Nature of the Soul

Still more clearly is the organic conception carried out in Aristotle's discussion of the Vital

principle or Soul in the various grades of living creatures and in man. It will be sufficient to quote at length a chapter of Aristotle's treatise on the subject (*De Anima*, ii. p. 1) in which this fundamental conception of Aristotle's philosophy is very completely illustrated:—

"Now as to Substance we remark that this is one particular category among existences, having three different aspects. First there is, so to say, the raw material or Matter, having in it no definite character or quality; next the Form or Specific character, in virtue of which the thing becomes namable; and third, there is the Thing or Substance which these two together constitute. The Matter is, in other words, the *potentiality* of the thing, the Form is the *realisation* of that potentiality. We may further have this realisation in two ways, corresponding in character to the distinction between *knowledge* (which we have but are not necessarily using) and actual *contemplation* or mental perception.

"Among substances as above defined those are most truly such which we call bodily objects, and among these most especially objects which are the products of nature, inasmuch as all other bodies must be derived from them. Now among such natural objects some are possessed of life, some are not; by life I mean a process of spontaneous nourishment, growth, and decay. Every natural object having life is a substance compounded, so to say, of several qualities. It is, in fact, a bodily substance defined in virtue of its having life. Between the living body thus defined and the Soul or Vital principle, a marked distinction must be drawn. The body cannot be said to 'subsist in' something else; rather must we say that it is the matter or substratum in which something else subsists. And what we mean by the soul is just this substance in the sense of the form or specific character that subsists in the natural body which is potentially living. In other words, the Soul is substance as *realisation*, only, however, of such a body as has just been defined. Recalling now the distinction between realisation as possessed knowledge and as actual contemplation, we shall see that in its essential nature the Soul or Vital principle corresponds rather with the first than with the second. For both sleep and waking depend on the Soul or Life being there, but of these waking only can be said to correspond with the active form of knowledge; sleep is rather to be compared with the state of having without being immediately conscious that we have. Now if we compare these two states in respect of their priority of development in a particular person, we shall see that the state of latent possession comes first. We may therefore define the Soul or Vital principle as The earliest realisation (entelechy) of a natural body having in it the potentiality of life.

"To every form of organic structure this definition applies, for even the parts of plants are organs, although very simple ones; thus the outer leaf is a protection to the pericarp, and the pericarp to the fruit. Or, again, the roots are organs bearing an analogy to the mouth in animals, both serving to take in food. Putting our definition, then, into a form applicable to every stage of the Vital principle, we shall say that *The Soul is the earliest realisation of a natural body having organisation*.

"In this way we are relieved from the necessity of asking whether Soul and body are one. We might as well ask whether the wax and the impression are one, or, in short, whether the *matter* of any object and that whereof it is the matter or substratum are one. As has been pointed out, unity and substantiality may have several significations, but the truest sense of both is found in *realisation*.

"The general definition of the Soul or Vital principle above given may be further explained as follows. The Soul is the *rational* substance (or function), that is to say, it is that which gives essential meaning and reality to a body as knowable. Thus if an axe were a *natural* instrument or organ, its rational substance would be found in its realisation of what an axe means; this would be its *soul*. Apart from such realisation it would not be an axe at all, except in name. Being, however, such as it is, the axe remains an axe independently of any such realisation. For

the statement that the Soul is the *reason* of a thing, that which gives it essential meaning and reality, does not apply to such objects as an axe, but only to natural bodies having power of spontaneous motion (including growth) and rest.

"Or we may illustrate what has been said by reference to the bodily members. If the eye be a living creature, sight will be its soul, for this is the rational substance (or function) of the eye. On the other hand, the eye itself is the material substance in which this function subsists, which function being gone, the eye would no longer be an eye, except in name, just as we can speak of the eye of a statue or of a painted form. Now apply this illustration from a part of the body to the whole. For as any one sense stands related to its organ, so does the vital sense in general to the whole sensitive organism as such, always remembering that we do not mean a dead body, but one which really has in it potential life, as the seed or fruit has. Of course there is a form of realisation to which the name applies in a specially full sense, as when the axe is actually cutting, the eye actually seeing, the man fully awake. But the Soul or Vital principle corresponds rather with the *function* of sight, or the *capacity* for cutting which the axe has, the body, on the other hand, standing in a relation of potentiality to it. Now just as the eye may mean both the actual organ or pupil, and also the function of sight, so also the living creature means both the body and the soul. We cannot, therefore, think of body apart from soul, or soul apart from body. If, however, we regard the soul as composed of parts, we can see that the realisation to which we give the name of soul is in some cases essentially a realisation of certain parts of the body. We may, however, conceive the soul as in other aspects separable, in so far as the realisation cannot be connected with any bodily parts. Nay, we cannot be certain whether the soul may not be the realisation or perfection of the body as the sailor is of his boat."

Observe that at the last Aristotle, though very tentatively, leaves an opening for immortality, where, as in the case of man, there are functions of the soul, such as philosophic contemplation, which cannot be related to bodily conditions. He really was convinced that in man there was a portion of that diviner aether which dwelt eternally in the heavens, and was the ever-moving cause of all things. If there was in man a *passive* mind, which became all things, as all things through sensation affected it, there was also, Aristotle argued, a *creative* mind in man, which is above, and unmixed with, that which it apprehends, gives laws to this, is essentially prior to all particular knowledge, is therefore eternal, not subject to the conditions of time and space, consequently indestructible.

#### 14. Aristotle's Philosophical Method

Finally, as a note on Aristotle's method, one may observe in this passage, *first*, Aristotle's use of 'defining examples,' the wax, the leaf and fruit, the axe, the eye, etc.; *second*, his practice of developing his distinctions gradually, Form and Matter in the abstract, then in substances of every kind, then in natural bodies, then in organic bodies of various grades, in separate organs, in the body as a whole, and in the Soul as separable in man; and *thirdly*, his method of approaching completeness in thought, by apparent contradictions or qualifications, which aim at meeting the complexity of nature by an equally organised complexity of analysis. To this let us simply add, by way of final characterisation, that in the preceding pages we have given but the merest fragment here and there of Aristotle's vast accomplishment. So wide is the range of his ken, so minute his observation, so subtle and complicated and allusive his illustrations, that it is doubtful if any student of his, through all the centuries in which he has influenced the world, ever found life long enough to fairly and fully grasp him. Meanwhile he retains his grasp upon us. Form and matter, final and efficient causes, potential and actual existences, substance, accident, difference, genus, species, predication, syllogism, deduction, induction, analogy, and

