



Aristotle  
Professor Edith Hall

4 March 2021

Introduction

Aristotle is arguably the most influential intellectual who ever lived. I say 'intellectual' rather than 'philosopher' because he contributed to so many disciplines other than philosophy, including what we call sciences such as Physics and Zoology and art-related endeavours such as literary criticism. But despite the sheer range of his investigations, there is a coherent method and system underlying all of them, with its own terminology, much of which he created almost from scratch.

In a Gresham lecture two years ago, I described Aristotle's life, his twenty years spent studying at Plato's *Academy*, his travels in Turkey and Lesbos, his tutoring of the teenaged Alexander before he became The Great, and his university at Athens, the Lyceum.<sup>1</sup> This was the first institution to combine teaching at a range of levels from public lectures to cutting-edge specialised research across the disciplinary spectrum. It also housed his personal library, which later became the model behind the Ptolemaic Library of Alexandria. Aristotle founded the Lyceum when he was nearly 50. He died not much more than a decade later, after being driven out of Athens by politicians suspicious of his association with Kings Philip II and Alexander III of Macedon. But in that last part of his life, he produced, scholars think, the majority of the 200 or more treatises attributed to him. Around 30 authentic works have survived to be read today.

In his *Metaphysics*, Aristotle asks why humans invented philosophy. 'Human beings now and when they began to do philosophy do so because of their sense of wonder. At first, they wondered about the strange things lying in front of them, but then, progressing by small steps, they asked questions about greater things too, like what happens to the moon and everything to do with the sun and stars and the beginning of the universe' (*Metaphysics* 1.982b). Humans found aspects of their existence inexplicable, and so began to seek explanations to dispel mysteries.

Aristotle himself divided his works into three categories or branches of learning, which he called *epistēmai*. The first branch was **theoretical**; it encompassed intellectual work done solely with the aim in mind of expanding knowledge, including First Philosophy or Metaphysics, Mathematics, and Natural Philosophy or Physics, which in turn embraces Biology, Botany, Zoology and Astronomy. Psychology may belong here, too. His favourite 'theoretical' areas included time, motion, place, the gods' role in the universe, and causal explanation of phenomena.

The second branch was **practical**; practical sciences ask how we do and should act as individuals and communities. Aristotle's famous works on ethics and politics fall into this category. The third branch was **productive**: this covers discussion of the types of knowledge or craft which generates products useful in life, such as medical lore, rhetorical skills, art and architecture, shipbuilding, navigation, equestrian science, theatre and music. The second half of this lecture will look at these branches of knowledge, but the first examines the intellectual tools and methods he developed and used in all of them.

---

<sup>1</sup> <https://www.gresham.ac.uk/lectures-and-events/aristotle-lyceum>

### Tools and Methods (a): Appearances, Puzzles, Opinions

Aristotle always starts from the assumption that we can normally rely on our sense perceptions and ability to understand them—our powers of cognition. This already distinguishes him from his teacher Plato, who was convinced that sense perceptions were deceptive. Aristotle believed that the material world around us that we perceive through our senses is real and deserves our wholehearted attention, without wasting time on sceptical doubts that it exists in the first place. Regardless of what area he is investigating, he starts with what he can observe—the appearances, which he called *ta phainomena*. He identified puzzling aspects of *ta phainomena* which he would like so have explained. These were called *aporiai*, which means places from which no clear path of exit is apparent. To begin the process of understanding the puzzling aspects of the *phainomena*, he listed the opinions about them that had been expressed before, the *endoxa*, which included both scholarly views and widely held common-sense explanations of the general mass of humankind.

So, whatever we are studying, we need to identify and set out the things that appear to be the case, the *phainomena*. Some aspects of these will baffle us, and these we need to identify as *aporiai*. Then we should collect the *endoxa*, the plausible explanations traditionally offered: ‘Endoxa’ he defines as ‘those opinions accepted by everyone, or by the majority, or by the wise—and among the wise, by all or most of them, or by those who are the most notable and having the highest reputation’ (*Top.* 100b21–23). A clear example is in his treatment in the *Nicomachean Ethics* of the *aporia* in human behaviour that we are sometimes weak-willed. We may know what we should do or not do, but not be able to implement it (he calls this *akrasia*, or lack of proper blending and balance in the soul). At this point he lays out his fundamental approach: ‘As in other matters, we must set out the appearances (*phainomena*) and first identify the puzzles they entail. This is the way in which we need to prove the received opinions (*endoxa*) about these sorts of experiences’ (*NE* 1.1145b). If the *phainomena* prove to be deceptive, then we need to reformulate them (even though Aristotle has a considerable trust in sense-perceptions of reality, unlike Plato). And if the *endoxa* contradict one another, some or all will need to be discarded if the scientific work of reasoning makes it necessary.

A clear illustration is where he is discussing time in his *Physics* (10–14). The *phainomenon*, what appears to us, is that time exists or at least passes. But when we try to define it, we become bewildered. To address this *aporia*, we need first to assemble the *endoxa*, what things have been said about it by previous thinkers.

He sets out the first *aporia*: does time exist and if so how? One opinion is that time is the totality of past, present and future. But a different opinion asserts that only the present exists; the past and the future do not. If we respond that time is the sum of what did exist, what currently exists and what will exist, then we realise that we have a necessary but not a sufficient definition. Plenty of other things existed, exist and will exist, too. There is also another objection that can be made, that the notion of the present is in itself problematic. The present must either remain the same forever or be constantly changing. If the present remains identical then the present moment would be identical to the present ten thousand years ago, which is a silly view. If it is constantly in a state of change, then it is never the same, in which case a present in the past must have come into existence and then out of existence. The *endoxa* thus give Aristotle a staircase up which to claim in search of higher and more satisfactory analysis and explanation.

### Tools and Methods (b): Logic

Aristotle’s advanced logic can also be seen at work across his works; he doesn’t include it as a separate discipline within his tri-fold division of the branches of knowledge (Theoretical, Practical and Productive) because it belongs to all of them. His work is unified a system of logic (even though he did not use that word) and valid inference which underpins all his argumentation. In Aristotle’s framework—although he is nowhere explicit about this—logic belongs to no one science, but rather formulates the principles of

correct argumentation suitable to all areas of inquiry and which they share. He draws up the principles of adequate inference and explores common ways in which people reason falsely. The treatises on logic and modes of argumentation have been transmitted under the group name of the *Organon*, which means ‘tool’, although that was not Aristotle’s terminology. But it is an appropriate metaphor for thinking about logic as an instrument applicable across all human reasoning and knowledge acquisition.

The *Organon* has been seminal in the evolution of philosophy, science and mathematics. Aristotle was not content with using arguments: he thought that the reasons we use for supporting or refuting theories are complicated and require analysis in their own right. He saw that a discipline was needed which studied not a ‘content’— plants in botany, or human behaviour in ethics— but the form taken by the arguments we use when we apply reason. In this he was a pioneer, as he well knew: ‘In the case of rhetoric there were many old writings on which to draw, but in the case of logic we had absolutely nothing at all to say until we had spent much time in laborious research’.

In the first treatise, which is long and dense, he prepares for his whole system of argumentation by identifying ten types of bits or categories of language which can be used to classify all the things that exist: substance, magnitude, quality, relation, place, time, position, condition, action, and passion. They are thing said on their own, not combined with anything; on their own they are neither true nor false. These are the categories with examples of each:

1. Substance	ousia	woman, horse, Socrates, car
2. Magnitude	poson	2 metres long; a number like 3
3. Quality	poion	white, grammatical, bad.
4. Relation	pros ti	half, double, smaller, slave
5. Place	pou	in the Lyceum.
6. When	pote	this year, ten minutes ago.
7. Position	keisthai	sitting, winding,
8. State	echein	condition it is in because of what it has: ‘shod’, ‘inlaid’.
9. Action	poiein	lectures, hits, smiles
10. Passion	paschein	to be lectured on, to be hit, to be smiled at.

So, we could make sentence using all ten, such as ‘The woman, 5 foot seven inches tall, an academic, mother of Sarah and Georgia, at Gresham College today is standing as she lectures and is recorded’. Aristotle implies that these ten categories are comprehensive—there are no other categories—and also irreducible. No one category can be eliminated in favour of another. We need all these categories to think logically, but we don’t need any additional ones.

Of course, we can see that there in practice potential problems with several of these categories. The term ‘aslant’, for example, could be thought to an obvious case of no. 7, *position*, but you could argue that it needs something to be aslant in relation to—the flat floor, for example, or a perpendicular wall, which would make it a no. 4. Or take ‘woman’. A structural linguist might say that this word, too, does not only describe a substance, but requires something to be in relation to—the concept of a man—in order to have meaning. That said, Aristotle’s categories represented a huge step forward in the systematisation of Greek argumentation.

The second treatise in the *Organon*, *On Interpretation*, explores further issues in the philosophy of language, including categories relating to grammar—nouns and names, verbs, prepositions. He also addresses the problem of future contingents. This is a future which *could* be brought into effect if certain circumstances applied but remains only possible. It may or may not be fulfilled. To illustrate what he means, Aristotle offers his celebrated *Paradox of the Sea-Battle*. Take the statement, ‘tomorrow a sea-battle will take place’. Is this a true or false statement? It must be one or the other, but we cannot know until tomorrow whether it was true at the time it was uttered. This shows that some things are contingent.

The future will depend on decisions we take. How we deliberate will determine the truth or falsity of the statement at the time it was made.

One of the most important elements in all Aristotle's thought is analysed in the *The Prior Analytics*: that is the *sylogism*. Syllogisms are arguments used by Aristotle to reason and deduce principles and ideas. After Aristotle, they were used by all medieval philosophers and were a fundamental part of philosophy until very recent times. The simplest but most important forms of argument are simply statements or 'premises.' From putting two statements together we can deduce or infer a third statement which constitutes a conclusion or a truth. A syllogism in Greek just means 'a process of putting arguments together'). Here is a successful syllogism:

Premise 1: All philosophers are human.  
 Premise 2: Aristotle is a philosopher.  
 Conclusion: Therefore, Aristotle is a human.

Aristotle was the first to see that this could be written out in a universal form: all philosophers (x) are human (y). Aristotle (z) is a philosopher (x). Therefore Aristotle (z) is a human (y).

Most syllogisms fell into certain categories, depending on the form taken by the premise and the modifying adjectives—'all philosophers' or 'some philosophers,' for example. A modifier could even be negative—'no philosophers'— for Aristotle realized that slightly more complicated syllogisms involve negative statements:

Premise 1: Aristotle and Theophrastus are not both at the Lyceum today.  
 Premise 2: Theophrastus is at the Lyceum today.  
 Conclusion: Therefore, Aristotle is not at the Lyceum today.

If both premises are true, the conclusion is certain to be true. If the premises are correct, a valid and useful conclusion can be drawn.

The devil with formal logic, however, is in the detail. By the age of seven most children can spot a faulty, illogical conclusion, as in this:

Premise 1: All Britons are human.  
 Premise 2: Some humans like bananas.  
 Conclusion: Therefore, all Britons like bananas.

If only some humans like bananas, then we cannot assume that all Britons do. The conclusion does not follow: it is a non sequitur. We would need more information in order to derive that conclusion. Yet it will take most children longer to learn to question a premise that is presented to them:

Premise 1: Aristotle is a philosopher.  
 Premise 2: All philosophers are pedants.  
 Conclusion: Therefore, Aristotle is a pedant.

The first premise here is indisputable. Even the conclusion derives logically from the premises if you accept them. The problem lies in the second premise. Experienced philosophers, politicians and lawyers know well that the clever place to hide a logical problem or tendentious viewpoint is in the second premise. The vulnerable point is always the middle of the syllogism, because if the listener has accepted your first premise, they are put in the frame of mind which regards you as plausible and makes them more willing to accept your second. Most arguments relying on racial or other discriminatory prejudice house an incorrect statement— often a generalization— in their second premise: all Irish people are lazy, all redheads have a temper, no woman can park a car.

One of the problems facing Aristotle in his extraordinary project of classifying modes of logical argumentation was how few *endoxa* were available to him. He apologised to his students for any defects that might arise from this: 'Once you have surveyed our work, if it seems to you that our system has developed adequately in comparison with other treatments arising from the tradition to date—bearing in mind how things were at the beginning of our inquiry—it falls to you, our students, to be indulgent with respect to any omissions in our system, and to feel a great debt of gratitude for the discoveries it contains' (*Soph. Ref.* 184b2–8). Although logic studies have now moved far beyond the limits of Aristotle's *Organon*, it is impossible to overstate his achievement. Kant, who *disagreed* with Aristotle on countless issues, wrote, 'That since earliest times logic has travelled a secure course can be seen from the fact that since the time of Aristotle it has not had to go a single step backwards... What is further remarkable about logic is that until now it has also been unable to take a single step forward, and therefore seems to all appearance to be finished and complete' (*Critique of Pure Reason* B vii).

### Tools and Methods (c): Explanatory Adequacy via the Four Causes

In his *Physics* Aristotle gives an account of his theory that an adequate explanation of most things can be arrived at by identifying its four causes, or 'be-causes', which allow us to think about the relation between matter or content and form—his theory of hylomorphism. Material things are made out of matter, which will persist after the form changes. A statue is made of bronze or stone, and while the statue may cease to be, the bronze or stone substance will not. So bronze is the material cause. But the statue also has a form or pattern, which makes it essentially what is—its formal cause. It also has something or someone what caused the change in the matter, the introduction of the new form: in the case of the statue, the sculptor, who is the efficient cause. And there is another cause—the purpose which it will serve, the reason for which it is created, its final end or *telos*. A statue is created to stand in a temple in honour of a god. If we have identified the four causes of anything, says Aristotle, we have a reasonably adequate explanation of the thing.

The most difficult and important of these causes is the final cause. It is what Aristotle's central concept of **teleology** is founded on. It is also fundamental to his critique of Plato's theory of eternal forms. His teacher's theory is, he says, inadequate because it can't explain change, generation, and passing away. There must be an efficient cause which sets in motion the process by which something achieves its potential—its **dynamis**—its final purpose or **telos**. A pile of bricks has the potential to become a building but needs a builder to do so. Aristotle's teleology is also crucial to his studies of living organisms, both human beings and other animals. Our different body parts have different final causes—the heart does not serve the same purpose as teeth—but each individual human and animal also has a final cause, which is to grow into the fully mature adult version of themselves. There are two great virtues to this account. It is not anthropocentric, and it denies a role to a creator or arranger of the world outside that exists outside the world. Teleology, for Aristotle, is immanent in nature and doesn't privilege humans over other animals except insofar as we have certain potentials—to deliberate, for example—that other animals do not. These are amongst the reasons why Aristotle is a heroic figure for those who are advancing green politics and asking for a revolution in the way we think about other organisms, both plants and animals, and for those who take a scientific rather than a religious view of the world.

### Branches of Knowledge (1): Theoretical Science

Aristotle's basic premise about the physical universe is that all terrestrial bodies are composed of four elements—earth, water, air, and fire. He maintains that matter is infinitely divisible; that the universe is full, and that there is no vacuum in nature; that the world is eternal; that the sun, which has always revolved as it does at present, will for ever continue to do so; and finally, that the generations of men succeed each other without having had a beginning or foreseeing an end. Everything on earth changes and organic things perish, but the bits they are constituted of do not pass away. They simply move, so that the material mass of the world remains whole. He thinks that the dry land and the sea are constantly

changing under the action of rivers, and saw evidence in the discovery of seashells far inland. He thinks that these physical changes, plus war, famine, earthquake, fires and plagues, mean that human civilisations are sporadically almost wiped out.

Against this background, Aristotle described numerous species, in a comparative way, where the classifications depend on their organs and functions. He seems to have used rudimentary spreadsheets to help him collate the vast masses of information he had collected. Although other Peripatetics, especially his closest friend and colleague Theophrastus, specialised in Botany, Aristotle was fascinated by animals and is regarded universally as the father of Zoology. It was on Theophrastus' island of Lesbos that they seem to have started working on these two disciplines.

His *The History of Animals* is a remarkable read. The distinctions it draws, constantly grouping and regrouping animals into fundamental categories which still underpin Zoology today. Animals differ in their mode of living, actions, and manners: some live on land, others in water; some breathe water, others air. Of aquatic animals, some inhabit the sea, others the rivers, lakes, or marshes. Of those which live in the sea, some are pelagic, others littoral, and others inhabit rocks. We know no animal, says Aristotle, that flies only, as the fish only swims, for those with membranous wings walk, and even bats have feet. Many species both walk and swim.

Animals also differ in their habits; thus, some are gregarious, others solitary. Some obey a leader (bees) while others act independently. Some feed on flesh, others on fruits, others on both; some have homes, others live in the open air. Some burrow in the earth (snakes) while others (horses live above ground). Some animals seek their food at night, others by day; some are tame, others wild; some utter sounds, others are mute, and some sing; all of them, however, sing or cry in some way at mating time. By drawing these and many other distinctions, he arrives at the human being, who is an advanced animal who has one thing the others do not: many have memory and teachability, but only humans can reflect, deliberate, and deliberately recollect.

Aristotle's classification of animals is into two main categories, repeatedly sub-divided: Red-blooded Animals (Quadrupeds including animals, Serpents, Birds, Fishes, Cetacea); and White-blooded Animals (Testacea, Crustacea, Mollusca, Insects). His quadrupeds include the mammals and the quadrupedal reptiles. He divides them into those which are viviparous, and those which are oviparous; the former covered with hair, the latter with scales. Serpents are also scaly, and, excepting the viper, oviparous. Yet all viviparous animals are not hairy; for some fishes, he remarks, likewise bring forth their young alive. In the great family of viviparous quadrupeds also, he says, there are many species (or genera): man, the lion, the stag, and the dog. He then mentions, as an example of a natural genus, those which have a mane, as the horse, the ass, the mule, and the wild-ass of Syria, which are severally distinct species, but together constitute a genus or family.

The *History of Animals* will lead us into Aristotle's Ethics and Politics, his Practical Sciences, because it is simultaneously an exposition of what it means to be a human. Humans are but animals with distinctive characteristics. There are, however, a few areas in which animals are definitely superior. There are things which animals can do and humans can't: when describing animals with visible outer ears, he claims that man is the only one 'which cannot move this organ.' There are, in fact, some people—admittedly a small minority—who can wiggle their ears, but clearly Aristotle was not one of them. Aristotle also knows that, in some animals, most of the senses are far more highly developed than in man, such as the sense of smell in a dog. He recommends kindness to animals. Just as in humans, where he knows that poverty is a direct cause of social conflict, Aristotle insists that aggression in animals is linked to scarcity of resources, especially food. He has recommendations on how to deal with male elephants at mating season, and says that 'abundance of food tends to tame them.' Most of all, he revels in interaction and cooperation between humans and animals. He describes the Athenian mule, who lived to the age of eighty at the time when the Parthenon was being built (that is, in the 430s BCE). Because of its great age, the mule was 'retired' and no longer required to work. But it turned up

every day to help drag burdens and encourage the other mules. ‘In consequence a public decree was passed forbidding any baker driving the creature away from his bread- tray.’ Aristotle also has an inkling of the superior intelligence of the dolphin: he tells of a shoal which entered a harbor in Caria (southwest Turkey) and remained there until a fisherman set free a dolphin from their community which he had caught in his net. He regarded female red deer as highly intelligent, because he noticed that they bring their fawns close to the sides of public roads; the wild animals who prey on young deer are deterred from attacking them there through fear of the humans passing by. He tells of the cooperation between wolves and fishermen in the north-eastern Black Sea region, by the Sea of Azov; provided the fishermen divide their spoils with the wolves, all is well. But if they do not give them fish, the wolves ‘tear their nets in pieces as they lie drying on the shore.’

### Branches of Knowledge (2): Practical Knowledge

The method of consulting the *endoxa*, according to Aristotle, leads to the realisation that in many matters no unitary or univocal account can be identified. In fact, the world tends to produce multivocal explanations rather than the univocal ones that Plato’s theory of Forms assumed. A good example is Socrates’ view that there is only one kind of excellence, *aretē*, common to all excellent people, regardless of whether they are male, female, adult, child, slave or free (*Meno* 71-72). [20] Aristotle is concerned that the idea of excellence or universal goodness raises serious *aporiai*. Goodness must be different in different cases, rather than, as Plato said, ‘something universal, common to all good things, and single’ (*NE* 1096a28). This observation has important consequences in his *Ethics*, where the variety and particularity of human experience are fundamental, and solutions needed to be tailored to individual cases in all their granular detail. For goodness is different in different cases. He then makes a kind of apology (*NE* 1096a11-16):

*“We had perhaps better consider the universal good and run through the puzzles concerning what is meant by it—even though this sort of investigation is unwelcome to us, because those who introduced the Forms are friends of ours. Yet presumably it would be the better course to destroy even what is close to us, as something necessary for preserving the truth—and all the more so, given that we are philosophers. For though we love them both, piety bids us to honour the truth before our friends.”*

Aristotle’s notion of excellence is central to his two great works of on Practical Knowledge, his *Nicomachean Ethics* and his *Politics*. Humans have a potential to live good lives, which will allow them to achieve their *telos* of happiness or *eudaimonia*. This is best sought by living in accordance with reason, identifying one’s virtues and vices and working to become the best possible version of yourself. The precise meaning of *eudaimonia* is controversial. It can also be translated as ‘flourishing’ or ‘living well’. For Aristotle it means realizing our potential best natures by actualizing to the highest degree our human capacities. But what are these?

It is not that humans are alive, in the sense of nutrition and growth, which is even common to plants. It is not life as a perceptive being, because this is also common to all other animals. What remains, therefore, is a life of action belonging to the kind of soul that has reason (*NE* 1097b22–1098a4). He gives an account of human happiness which puts centre stage the exercise of reason, whether practical or theoretical. Happiness for Aristotle is a verb, an activity, rather than a state permanently achieved: its rational activity executed excellently. This forms the basis of his *Virtue Ethics*.

In an impressive piece of argumentation, or dialectic, he shows that humans are happier when they are doing good things than doing bad ones. The path to happiness comes through taking on a life’s project of becoming a great-souled man or woman—of being magnanimous. The Great-souled person is the one almost all of us fundamentally aspire to be: he does not court danger for its own sake but is prepared even to sacrifice his life for an important cause. He prefers helping other people to asking for assistance himself. He is never obsequious to the rich and powerful, and he is always

courteous even to humble folk. He is ‘open both in love and in hate,’ because only a person who is afraid of what other people think of him needs to conceal his true feelings. But he avoids gossip because it is usually negative. He rarely criticizes other people, even his enemies, unless in an appropriate context (a lawsuit, for example), but equally he avoids excessively lavish praise. In short, being magnanimous means being quietly courageous, self-sufficient, non-sycophantic, polite, discreet and candid: this is a role model everyone can adopt with enthusiasm and sincerity. Just because it was written down more than twenty- three centuries ago does not make it any less inspiring.

The practical ethical philosopher needs therefore to analyse what doing good means in respect of all the human characteristic virtues and vices, such as courage, self-control, civility, generosity. For Aristotle, character traits and emotions are almost all acceptable— indeed necessary to a healthy psyche— provided that they are present in the right amounts. He calls the right amount the ‘middle’ or ‘mean’ amount, the *meson* (he actually never used the term ‘golden mean’). Anger, for example, is essential to a healthy personality, and someone who never feels anger is not always going to do the right thing and will therefore not achieve happiness. If your child is bullied at school and you do not get angry you will not take them to the Headteacher’s office to ask for something to be done. Yet too much anger is also a shortcoming or defect—a vice. It is always a question of the right amount at the right time. In his *Eudemian Ethics* Aristotle draws up a chart to help us analyse a series of virtues with their correlative vices if they are in excess or deficiency. Here are some of them:

<b>Excessive</b>	<b>Mean</b>	<b>Deficient</b>
insolence	respectfulness	shyness
self-indulgence	self- control	being insensitive to pleasure
avarice	financial integrity	gullibility
boastfulness	truthfulness	false modesty
deviousness	prudence	gullibility

This matter in our collective lives outside the household, too. At the end of the *Nicomachean Ethics* Aristotle says that political theory is a continuation of ethical theory. Ethical theory analyses the best form of human life for an individual; political theory characterizes the forms of social organization best suited to its realization. The book in which he lays out his views on how collective happiness might best be pursued in the city-state, the polis, where humans as political animals—that is, community-dwelling animals—is his *Politics*. Fundamental here are his famous classification of different types of constitution, and assessment of which is most likely to make the attainment of collective happiness possible: Monarchy, Tyranny, Oligarchy and Democracy. Of these, he did believe that democracy was the best system if it was working, which required a sterling effort with state education. Otherwise, it was likely to become a deviant democracy and was vulnerable to turning into tyranny.

Branches of Knowledge (3): Productive Knowledge

Finally, let us turn to what Aristotle said about productive knowledge. His two surviving books on this deal with speechmaking and writing tragedy respectively. Aristotle broke ground by insisting that rhetoric, like logic, is a neutral skill, which can be used for good and evil. Rhetoric, in fact, is essential for any individual pursuing happiness: ‘It is absurd to hold that a man should be ashamed of an inability to defend himself with his limbs, but not ashamed of an inability to defend himself with speech and reason; for the use of rational speech is more distinctive of a human being than the use of his limbs.’ He compared the individual trained in rhetoric with his favourite figure of the medical practitioner. The consummate medic uses his complete repertoire of techniques for healing, even though he cannot cure every single patient. The rhetorician, similarly, needs to have a total understanding of the techniques available, and how to implement them—even if he may not always succeed in persuading everyone.

Aristotle's theory of persuasion was developed integrally with the rest of his works. Emotions and thought underlie Aristotle's Virtue Ethics but are also integral to his advice on persuasion. Some of his most interesting empirical observations on cognition through speech— how people take in information delivered in words—also occur in the *Rhetoric*. His entire theory is built on the relationship between the communicator and the audience, and how emotions and language create that relationship.

Aristotle is not taken in by rhetorical tricks. He offers examples of how speakers put a positive or negative 'spin': one man's terrorist is another man's freedom fighter. Aristotle's example is that you can call Orestes, who killed his mother Clytemnestra in revenge for her killing of his father, either a 'father- avenger' or a 'mother- murderer' depending on whether you want your audience to sympathize with him or loathe him. Aristotle remarks that in his day, 'robbers' had begun to 'talk themselves up' by describing themselves as 'purveyors.' The poet Simonides, who was asked to write an ode celebrating a competitor's victory at one of the athletics contests in the race for mules. Simonides declined, thinking that it was impossible to write an ode— an elevated verse genre— on such an undignified animal. But when the customer offered him enough money, he decided to 'talk up' the mules, and wrote 'Hail, daughters of storm-footed steeds!' Simonides would have made a good spin doctor.

The only leisure interest to which Aristotle devoted serious philosophical thought was dramatic literature, which is the central topic of his *Poetics*. It is remarkable that he should do this, because his teacher Plato had objected so strongly to the arts that they are banned from his ideal city-state in the Republic. Why would Aristotle spend so much time thinking about the fictional stories enacted in the popular theatre? The only explanation is that he was personally convinced that such entertainment had the potential massively to enhance the emotional and moral life of both individual spectators and the community as a whole. Aristotle was the first philosopher to argue that the arts could be wonderfully educative. He argued that the producers of drama and music in a democracy hold such great responsibility that they should be publicly appointed officials, and of secondary importance only to priests. The arts in general and tragedy in particular allowed us to think deeply about difficult subjects such as death while experiencing pleasure and emotional responses that are beneficial for the spectators' moral lives and psyche—the idea of *katharsis* meaning this type of beneficial process.

### Conclusion: Aristotle's Afterlife

Aristotle's status as Great Thinker is indisputable. His works lay at the heart of the work of the philosophical schools in later antiquity. From the 6<sup>th</sup> to the 12<sup>th</sup> centuries, although in western Europe most of his writings were inaccessible, he was studied extensively both in Byzantine philosophy, and the Arabic intellectual tradition. In the early 11<sup>th</sup> century, he was read avidly by the Persian Peripatetic philosopher, polymath and medic Ibn Sina, known in the west as Avicenna; In the 12<sup>th</sup> century, the way Aristotle was received radically affected how not only Christians but also Jews and Muslims saw the relationship between faith and reason, when the great Aristotelian Averroes (Ibn Rushd, ابن رشد) was writing his commentaries in Andalusia. Thomas Aquinas in the 13<sup>th</sup> century tried to fuse Aristotelian philosophy with the principles of Christianity, and Dante sees him sitting there in charge of all of the other great world thinkers; he's the 'maestro di color che sanno' [the master of those who know]. He was central to Renaissance thinking and Early Modern Science, although falling somewhat out of favour until the 20<sup>th</sup> century, when Modern philosophers, including Alasdair MacIntyre and Philippa Foot, rehabilitated Virtue Ethics, while some of Aristotle's economic and biological thought is increasingly being seen as a productive basis for green and environmentalist philosophy. Truly he deserves Dante's title of 'Master of those who Know'.

### Further Reading

Barnes, Jonathan (2008) *Coffee with Aristotle*. Duncan Baird.

Hall, Edith (2018) 'Why read Aristotle today?', <https://aeon.co/essays/what-can-aristotle-teach-us-about-the-routes-to-happiness>

Hall, Edith (2018) *Aristotle's Way: How Ancient Wisdom Can Change Your Life*. Penguin Random House.

Kraut, Richard (2002) *Aristotle: Political Philosophy*. OUP.

Leroi, Armand Marie (2014) *The Lagoon: How Aristotle Invented Science*. Bloomsbury.

Natali, Carlo (2013) *Aristotle: His Life and School*. Princeton University Press.

Woodfin, Rupert and Judy Groves (2001) *Introducing Aristotle: A Graphic Guide*. Icon Books.