

Aristotle's trilemma of justification:

T1: Some people think that because you must understand the primitives there is no understanding at all; others that there is, but that there are demonstrations of everything. Neither of these views is either true or necessary. The one party, supposing that you cannot understand in any other way, claim that we are led back ad infinitum on the ground that we shall not understand the posterior items because of the prior items if there are no primitives [...]. The other party agrees about understanding, which they say, arises only through demonstration. But they argue that nothing prevents there being demonstrations of everything; for it is possible for demonstrations to proceed in a circle or reciprocally. [...] We assert that not all understanding is demonstrative; rather, in the case of immediate items understanding is indemonstrable. And it is clear that this must be so: for if you must understand the items which are prior and from which the demonstration proceeds, and if things come to a stop at some point, then these immediates must be indemonstrable. (*Posterior Analytics* 1.3)

T2: All teaching and all learning of an intellectual kind proceed from pre-existent knowledge... (*APo* 1.1)

Plato's *Theaetetus* on 'Knowledge is Perception':

T3: Now doesn't it sometimes happen that when the same wind is blowing, one of us feels cold and the other not? Or that one of us feels rather cold and the other very cold? [...] Well then, in that case are we going to say that the wind itself, by itself, is cold or not cold? Or shall we listen to Protagoras, and say it is cold for the one who feels cold, and for the other, not cold? (It looks as if we must say that.) And this is how it appears to each of us? (Yes.) But this expression 'it appears' means 'he perceives it'? (Yes, it does). The appearing of things, then, is the same as perception, in the case of hot and things like that. So it results, apparently, that things are for the individual such as he perceives them. (Yes, that seems right.) Perception, then, is always of what is, and unerring—as befits knowledge. (So it appears.) (*Tht* 152b2-c4)

T4: [It is wrong to use the verb 'to be'], these wise men tell us, nor should we allow the use of such words as 'something', 'of something', or 'mine', 'this' or 'that', or any other name that makes things stand still. We ought, rather, to speak according to nature and refer to things as 'becoming', 'being produced', 'passing away', 'changing'; for if you speak in such a way as to make things stand still, you will easily be refuted. And this applies in speaking both of the individual case and of many aggregated together—such an aggregate, I mean, as people call 'man' or 'stone', or to which they give the names of different animals and sorts of thing. [...] I shall never again become thus percipient of anything else. A perception of something else is another perception, and make another and changed percipient. Nor again, in the case of that which acts on me, will it ever, in conjunction with something else, generate the same thing and itself become such as it now is. From something else it will generate something else, and itself become a changed thing. (*Tht* 157b-160a)

Plato's *Republic* and *Gorgias* on expertise:

T5: Not one of those paid private teachers, whom the people call sophist and consider to be their rivals in craft, teaches anything other than the convictions that the majority express when they are gathered together. Indeed, these are precisely what the sophists call 'wisdom'. It's as if someone were learning the moods and appetites of a huge, strong beast that he's rearing---how to approach and handle it, when it is most difficult to deal with or most gentle and what makes it so, what sounds it utters in either condition, and what sounds soothe or anger it. Having learned all this through tending the beast over a period of time, he calls this knack wisdom, gathers his information together as if it were a craft, and starts to teach it. In truth, he knows nothing about which of these convictions is fine or shameful, good, or bad, just or unjust, but he applies all these names in accordance with how the beast reacts---calling what it enjoys good and what angers it bad. He has no other account to give of these terms. And he calls what he is compelled to do just and fine, for he hasn't seen and cannot show anyone else how much compulsion and goodness really differ. Don't you think, by god, that someone like that is a strange educator? (*Republic* VI 493a-c)

T6: [The rhetor] doesn't know the things themselves, what is good or bad, what is fine or shameful or just or unjust, but has devised persuasion about them so that though he doesn't know, among those who don't know he appears to know, rather than the man who knows. [...] And I say [rhetoric] is not a craft, but a knack (*empeiria*), because it has no rational account (*logos*) by which it applies the things it applies, to say what they are by nature, so that it cannot say what is the explanation (or cause: *aitia*) of each thing; and I don't call anything a craft which is unreasoning (*alogos*). (*Gorg* 459d-465a)

Aristotle on expertise:

T7: With a view to action experience seems in no respect inferior to art, and we even see men of experience succeeding more than those who have theory without experience. The reason is that experience is knowledge of individuals, art of universals, and actions and productions are all concerned with the individual; for the physician does not cure a man, except in an incidental way, but Callias or Socrates or some other...who happens to be a man. If then a man has theory without experience, and knows the universal but does not know the individual included in this, he will often fail to cure; for it is the individual to be cured. But yet we think that knowledge and understanding belong to art rather than to experience, and we suppose artists to be wiser than men of experience (which implies that wisdom depends in all cases rather on knowledge); and this because the former know the cause, but the latter do not. For men of experience know that the thing is so, but do not know the why, while the others know the 'why' and the cause. (*Metaph* 1.1)

Aristotle on the refutation of pretenders to expertise:

T8: Dialectic is at the same time a mode of examination as well. For the art of examination is not an accomplishment of the same kind as geometry, but one which a man may possess, even though he has not knowledge. For it is possible even for one without knowledge to hold an examination of one who is without knowledge, if the latter grants him points taken not from things that he knows or from the proper principles but from the consequences which a man may know without knowing the art in questions (but which if he does not know, he is bound to be ignorant of the art). So then clearly the art of examining does not consist in knowledge of any definite subject. For this reason, too, it deals with everything; for every art employs certain common principles too. Hence everybody, including even amateurs, makes use in a way of dialectic and the practice of examining; for all undertake to some extent a test of those who profess to know things. What serves them here is the general principles; for they know these themselves just as well as the scientist, even if in what they say they seem to go wildly astray. All, then, are engaged in refutation; for they take a hand as amateurs in the same task with which dialectic is concerned professionally; and he is a dialectician who examines by the help of a theory of deduction (*sullogistikê technê*). (*De Sophisticis Elenchis* 11)

Democritus on appearance and reality:

T9: By convention, sweet; by convention, bitter; by convention, hot; by convention, cold; by convention, color; but in reality, atoms and the void. (Fr 68B9)

T10: Either nothing is true, or at least to us it is unclear. It is because thinkers suppose intelligence to be sensation, and that, in turn, to be an alteration [i.e. of the soul-atoms by atoms entering from without] that they say that what appears to our senses must be true. (Fr 68a112)

T11: In reality we know nothing, for truth is in the depths. (Fr 68B117)

The dreaming argument in Plato's *Theaetetus*:

T12: Soc: There's a question you must often have heard people ask---the question what evidence we could offer if we were asked whether in the present instance, at this moment, we are asleep and dreaming all our thoughts, or awake and talking to each other in real life. Tht: Yes, Socrates, it certainly is difficult to find the proof we want here. The two states seem to correspond in all their characteristics. There is nothing to prevent us from thinking when we are asleep that we are having the very same discussion that we have just had. And when we dream that we are telling the story of a dream; there is an extraordinary likeness between the two experiences. (*Tht* 158c)

Against the criterion in Cicero's *Academica*:

T13: There are four general premises which conclude to the position that nothing can be known, apprehended, or comprehended, around which the whole debate centres: [A](i) that some false impression exists; (ii) that this cannot be apprehended; (iii) that in the case of impressions among which there is no difference it is not possible that some of them can be apprehended while others cannot; (iv) that there is no true impression deriving from the senses to which there does not correspond another impression which does not differ from it and cannot be apprehended. Of these four, everybody admits (ii) and (iii); Epicurus does not grant (i), but you [sc. the Stoics and their followers] with whom we are arguing allow this too; the whole conflict concerns (iv). (Cicero *Acad.* II 83)

Perception in Plato's *Timaeus*:

T14: Now whenever daylight surrounds the visual stream, like makes contact with lie and coalesces with it to make up a single homogenous body aligned with the direction of the eyes. This happens wherever the internal fire strikes and presses against an external object it has connected with. And because this body of fire has become uniform throughout and thus uniformly affected, it transmits the motions of whatever it comes in contact with as well as of whatever comes in contact with it, to and through the whole body until they reach the soul. This brings about the sensation we call 'seeing'. (*Tim* 45c-d)

Aristotle on how to refute the skeptic:

T15: [Some] think it is not proper that the truth [about perceptible things] be judged by a large number or by a few; and that the same thing is thought sweet by some when they taste it and bitter by others. So if everyone were ill, or if everyone were mad, except two or three who were well or sane, the latter would be thought ill and mad and not the others...Therefore, which of these impressions are true and which are false is not clear...Hence, Democritus at least says that either there is no truth or, at least to us, it is unclear. [...]. One might well be astonished that anyone should raise this difficulty, whether magnitudes are as great, and colors are such, as they appear to be to those who are at a distance or to those who are close at hand, and to the healthy or to the sick [...] and whether those things are true which appear so to those who are sleeping or to those who are awake. For it is obvious that they do not in fact believe it. No one, at least, who is in Libia, if he takes it one evening [in a dream] that he is in Athens, sets out [when he gets up upon waking] for the Odeon. (*Metaph* IV.5)

Ancient medicine on signs:

They call a sign recollective if, having been observed evidently together with the thing it signifies, at the same time as it makes an impression on us—and while the other thing remains unclear---it leads us to recall the thing which has been observed together with it and is not now making an evident impression (as in the case of smoke and fire). A sign is indicative, they say, if it signifies that of which it is a sign not by having been observed evidently together with the thing it signifies but from its proper nature and constitution (as bodily movements are a sign of the soul). (Sextus Empiricus, *PH* II.99)

(The ‘dogmatist’ speaks): When I know a thing thoroughly and hold it for certain in virtue of the things perceptible to the eye to which I assign the part of signs from which I draw this inference, I proceed to elicit other invisible things by its means and I reach my conclusion on the things which I shall use for treatment of the disease by inference from those invisible matters which I discovered with the help of those perceptible to the eye. (Galen, *Med. Exp.* 31 153).

Asclepiades says (1) ‘Because phrenitis is due to atoms not being found in their proper places in the pores of the cerebral membrane, blood-letting is not necessitated nor advisable; emptying blood from the veins will only weaken the strength of the sick person.’ [...] (2) ‘A person suffering from the disease known as loss of memory (stupor) must not be spoken to, since his disease is due to inflammation of the cerebral membrane, and motion is not good for any inflamed organ.’ (*Med. Exp.* 136-137).

Epilogistic Rebuttal 1: ‘I do not say that I know, nor that I reject or deny anything of that which this man (i.e. Asclepiades) says, because he speaks of things which are highly invisible, and if you wish to hear what in this case has been evident to the eye, not once, nor twice, but very many times, I shall describe it to you. For I have seen very many sufferers from phrenitis who were treated by blood-letting. Those of them who were young and strong benefitted greatly therefrom, but the others derived but small benefit.’

Epilogistic Rebuttal 2: ‘I have often observed that in every case when we sat by the bedside of a person sick of this disease which had him completely in his power and controlled him, if we did not rouse him and keep him awake, he was worse’. (*Med. Exp.* 25 136-137).