

Posterior Analytics Trans G. R. G. Mure

- Nec I 2 71b 1⁵ .. the proper object of unqualified scientific knowledge is something which cannot be other than it is.
- Cert I 2 72b 3^h .. the conviction of pure science must be unshakable
- True I 2 71b 20 .. the premisses of demonstrated knowledge must be true, primary, immediate, better known than and prior to the conclusion, which is further related to them as effect to cause.
- Nec I 6 74b 5^{if then} Demonstrative knowledge must rest on necessary basic truths; (for the object of scientific knowledge cannot be other than it is.) ...
- Essent *Proprietary* I 6 74b 10^h It follows from this that premisses of the demonstrative syllogism must be connexions essential in the sense explained: for all attributes must inhere essentially or else be accidental, and accidental attributes are not necessary to their subjects.
- Same genus I 7 75a 37 .. we cannot in demonstrating pass from one genus to another.
- I 7 75b 10 .. the extreme and middle terms must be drawn from the same genus: otherwise, as predicated, they will not be essential and will thus be accidents.
- Eternal I 8 75b 20¹ .. if the premisses from which the syllogism proceeds are commensurately universal, the conclusion of such demonstration -- demonstration, i. e., in the unqualified sense -- must also be eternal.
- I 8 75b 32³ Demonstration and science of merely frequent occurrences -- e. g., of eclipse as happening to the moon -- are as such clearly eternal: whereas so far as they are not eternal they are not fully commensurate.
- Commensurate & universal I 4 32 73b 32 An attribute belongs commensurately and universally to a subject when it can be shown to belong to any random instance of that subject and when the subject is the first thing to which it can be shown to belong. (equal to two right angles: not of squares nor of isosceles but of triangle).
- I 10 different sorts of basic truths: proper (cf I 9) common (I 11)
- I 30 Chance connexions are not demonstrable
- I 32 different sciences must possess different basic truths
- Extent *4 p 281* *Ross Comment p 603* *An Pr J, 25, 42^b 16-26* I 32 88b 3^h .. it is not true that the basic truths are much fewer than the conclusions, for the basic truths are the premisses, and the premisses are formed by the apposition of a fresh extreme term or the interposition of a fresh middle (cf I 12 78a 13 ff: growth of a science by apposition of fresh extremes not by interposition of fresh middles)
- Genus I 7 75a 39 For there are three elements in demonstration: (1) what is proved, the conclusion -- an attribute inhering essentially in a genus; (2) the axioms, i. e., axioms which are premisses of

demonstration; (3) the subject-genus whose attributes, i. e. essential¹ properties, are revealed by the demonstration.

Universal

Opinion

I 33 88b 31 .. scientific knowledge is commensurately universal and proceeds by necessary connexions, and that which is necessary cannot be otherwise. So though there are things which are true and real and yet can be otherwise, scientific knowledge clearly does not concern them: if it did, things which can be otherwise would be incapable of being otherwise... 89a15 .. it is opinion that is concerned with that which may be true or false and can be otherwise: opinion in fact is the grasp of a premiss which is immediate but not necessary.

I 33 89a 11 ff Opinion can be about the fact or the reasoned fact; the man who opines may grasp what is true and necessary yet fail to grasp them as such. Today inverse: one grasps what is intelligible and probable and so constructs the ~~in~~ hypothesis and its implications.

Analytics are linguistic but as addressed to intelligence: linguistic (subject premisses attributes definition); addressed to intelligence (necessary true prior causal

I 10 76b 24 .. all syllogism, and therefore a fortiori, demonstration is addressed not to the spoken word but to the discourse within the soul, and though we can always raise objections to the spoken word, to the inward discourse we cannot always object. (cf naturally known

II 4 No demonstration of a definition, for the middle term would be the real definer.

II 19 100a 10 ff [Ross comment] Thus these states of knowledge are neither innate in a determinate form, nor come from more cognitive states of mind, but from perception; as when after a rout one man makes a stand and then another, till the rally goes right back to where the rout stated. The soul is so constituted as to be capable of this.

I 3 futility of circular reasoning
I 19-23 infinite regress