

ON THE LIMITS OF LOGIC

Apodeixis in Aristotle's Theoretical Writings

Meta XIII, 10, 1087a23: “It is only accidentally [kata symbebekos] that sight sees universal [katholou] color, because this [tode] color which it sees is color; and this A which the grammarian studies is an A. For if the first principles must be universal, that which is derived from them must also be universal, as in the case of logical demonstrations [hosper epi ton apodeixeon]; and if this is so, there will be nothing which has a separate existence [estai choriston]; i.e. no substance. But it is clear that although in one sense knowledge is universal, in another it is not.”

Rhetoric I 1359b9: “... [R]hetoric is a combination of the sciences of logic and of ethics; and it is partly like dialectic, partly like sophistical reasoning. But the more we try to make either dialectic or rhetoric not, what they really are, practical faculties, but sciences, the more we shall inadvertently be destroying their true nature; for we shall be re-fashioning them and shall be passing into the region of sciences dealing with definite subjects rather than simply with speeches” [CWA].

De An I 402a12: “The inquiry ... which treats of substance [ousian] ... is common to many other fields, and one might suppose that there is one method applicable to all the things whose real nature we wish to understand; just as logical demonstration [**apodeixis**] applies to all their attributes. If so, this method must be discovered; but if there is no one common method of finding the essential nature, our handling of the subject becomes still more difficult. For we shall be obliged to establish the proper method in each individual case; and even if it is patent whether demonstration [**apodeixis**], or division, or some other method is the right one, there is still room for confusion and error as to the premises from which we must start the inquiry; for the premises of all the subjects are not the same; for instance those of arithmetic and those of plane geometry are different.”

Meta V, 5, 1015b7: “Again, demonstration [**apodeixis**] is a ‘necessary’ thing, because a thing cannot be otherwise if the demonstration [**apodeiktai**] has been absolute. And this is the result of the first premises, when it is impossible for the assumptions upon which the syllogism depends to be otherwise.”

Meta VII, 15, 1039b31: “For this reason also there is no definition or demonstration [**apodeixis**] of particular sensible substances, because they contain matter whose nature is such that it can both exist and not exist. Hence all the particular [kath’ hekasta] instances of them are perishable. If, then, the demonstration [**apodeixis**] and definition of necessary truths requires scientific knowledge, and if, just as knowledge cannot be sometimes knowledge and sometimes ignorance (it is opinion that is of this nature), so too demonstration [**apodeixis**] and definition cannot vary (it is opinion that is concerned with that which can be otherwise than it is)—then clearly there can be neither definition nor demonstration [**apodeixis**] of particular sensible substances. For [a] things which perish are obscure to those who have knowledge of them when they are removed from the sphere of their perception, and [b] even though their formulae are preserved in the soul, there will no longer be either definition or demonstration [**apodeixis**] of them. Therefore in cases relating to definition, when we are trying to define any particular, we must not fail to realize that our definition may always be upset; because it is impossible to define these things.”