

Aristotle on Abstraction

Mohammad Bagher Ghomi

mbqomi@gmail.com

Abstraction (ἐξ ἀφαίρεσεως) or abstracting (χωρίζειν) have the following characteristics in Aristotle:

1. Abstraction is a process of eliminating (περιελών) everything else to reach to a single attribute; a process usually done by mathematicians abstracting the quantitative by eliminating all the sensible qualities like weight, lightness, hardness, etc. (Met.¹, K, 1061a28-b3)
2. Having eliminated every other attribute of a thing in order to have only one abstract thing, we have the thing qua (ᾗ) the abstracted which is an indivisible thing. (Met., K, 1061a28-b3; Met., M, 1078a21-26; So., Γ, 7, 431b12-17)
3. Abstracting the subject of inquiry and investigating it as abstracted is the best way of investigation. The reason is that in our investigation of a thing, if we abstract it from every other thing so that we reach to it qua it as an individual thing, we can best investigate if an attribute belongs to that indivisible thing or not. (Met., M, 1078a21-28)
4. Although Aristotle calls the abstract thing neither prior nor posterior to the thing, (Met., M, 1077b9-11), he calls sciences dealing with abstracts more precise (Met., M, 1078a11-17) and investigations of them the best. (Met., M, 1078a21-26)
5. Supposing things separated from their attributes in abstractions does not make our inquiry to fall in error for this reason. (Met., M, 1078a17-21; Phy., B, 2, 193b32-194a1)

¹ Abbreviations used in this paper:

Cat.	<i>Categories</i>
Met.	<i>Metaphysics</i>
Phy.	<i>Physics</i>
So.	<i>On the Soul</i>

6. 'The mind, when it is thinking the objects of mathematics, thinks of them as separate though they are not separate.' (So., Γ, 7, 431b14-16) At least we can say that in thought, objects of mathematics are separable from motion. (Phy., B, 2, 193b32-194a1)
7. The relatives abstracted having anything accidental to them stripped off (καταλειπομένον), will always be spoken of in relation to each other if they are properly given. For example, when everything accidental to a master is stripped off and only being a master is left, a slave will always be spoken of in relation to that. (Cat., 7, 7a31-37)
8. Holders of the theory of Forms used to abstract by separating the objects of physics, which are less separable than those of mathematics. (Phy., B, 2, 193b32-194a1)