Aristotle on Definition

Mohammad Bagher Ghomi

mbqomi@gmail.com

Definition has the following features in Aristotle's philosophy:

1. Each thing has only one definition and 'it is impossible that there should be more than one definition for the same thing.' (To.,[1] Z, 5, 142b^25; cf. To., Z, 4, 141a26)

2. Definition is 'a formula of the essence' (Met., H, 1042a17-18) and, thus, signifies the essence of the thing. (To., I, 5, ^101b30-) About the relation between definition and essence Aristotle regards three possibilities (PsA., B, 94a11-14):

   a) A definition as an indemonstrable statement of essential nature.

   b) A definition as a syllogism of essential nature differing from demonstration in grammatical form.

   c) A definition as the conclusion of a demonstration giving essential nature.

3. 'The definition is a formula and a formula has parts.' (Met., H, 1042a18-20) Therefore, only the composite substances are definable and the primary parts of a composite substance are not definable. The reason is that 'a definitory formula predicates something of something and one part of the definition must play the part of matter and the other that of form.' (Met., H, 1043b28-32) Thus, definition is a sort of number: a divisible including indivisible parts. (Met., H, 1043b32-36)

4. To define a thing, one should give the species or the genera of the thing which are the only other things that can be substances of it and not its accidents. (Cat., 5, 2b31-36) Aristotle also brings differentiae into the definition: 'There is nothing in the

---

[1] Abbreviations used in this paper:

Cat.	*Categories*
Met.	*Metaphysics*
PsA.	*Posterior Analytics*
To.	*Topics*

definition except the first-named genus and the differentiae. The other genera are the first genus and along with this the differentiae that are taken with, e.g. the first may be animal, the next animal which is footed, and again animal which is two-footed and featherless and …' (Met., Z, 1037b28-33) Among genera the nearer genera are more informative because they are more distinctive and less general. (Cat., 5, 2b10-13 and b32-34) However, to give the species is always more informative and apt than giving the genus. (Cat., 5, 2b8-10)

5. Primary substances admit the definition of the species they are their individuals and of their genera. In the same way, species admit the definition of the genus. The reason is that everything said of the predicate can be said of the subject. (Cat., 5, 3b2-6) Therefore, everything admits the definition of its higher classes.

6. 'Both the species and the individuals admit the definition of the differentia.' (Cat., 5, 3b6-7)

7. A formula exhibiting the cause of a thing's existence is a definition. (PsA., B, 10, 93b38-94a1)

8. It is possible to achieve the definition by division only if we keep three conditions in view (PsA., B, 97a23-26):

   a) The admission only of elements in the definable form.

   b) The arrangement of these elements in the right order

   c) The omission of no element in the definable form

   The process of division (PsA., B, 97a37-b6) is the process of dividing the genus by its differentia to the right species, the one that the subject accepts as its predicate, and again dividing the whole such searched by its right differentia to a predicable species. This process will be continued until we reach to that which is not further divisible, 'i.e. that as soon as we have taken the last differentia to form the concrete totality, this totality admits of no division into species.' In this way we achieve to a series of elements all in the definable forms without superfluous addition and

without omission of any necessary element. This series includes the primary genus with all the differentia until it achieves to that which would admit of no division.

The second condition, the right order, is the order in which that which is posited as primary be the one that is predicable of all of the other and not vice versa. The order must, then, be from more predicables to less predicables: 'The right order will be achieved if the right term is assumed as primary, and this will be ensured if the term selected is predicable of all the other but not all they of it; since there must be one such term. Having assumed this, we at once proceed in the same way with the lower terms; for our second term will be the first of the remainder, our third the first of those which follow the second in a 'contiguous' series, since when the higher term is excluded, the term of the remainder which is 'contiguous' to it will be primary, and so on.' (PsA., B, 97a26-34)

9. Things that are not the same must have different definitions. However, this does not mean that things that are the same must necessarily have the same definition. (To., I, 5, ^102a17-)

10. 'Everything applicable to property and genus and accident will be applicable to definition as well.' (To., I, 6, 102b27-)

11. 'A name, e.g. 'round', means vaguely a sort of whole: its definition analyses this into its particular senses.'

12. Definition must be done through terms that are prior and more familiar and 'anyone who has not defined a thing through terms that are prior and more familiar has not defined it at all.' (To., Z, 4, 141a26-) It is indeed this very point that is the basis of definition by genus and differentiae: 'A correct definition must define a thing through its genus and its differentiae, and these belong to the order of things which are without qualification more familiar than, and prior to, the species.' (To., Z, 4, 141b^15-) This more familiarity, however, must be without qualification, i.e. not more familiar to certain people or in certain times. Otherwise, definition could not come always to be one and the same. (To., Z, 4, ^142a1-)