Aristotle's Principle of Non-Contradiction

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1) Definition of PNC [1]

Some forms of defining PNC in Aristotle's works are as follows:

a) Everything must be either affirmed or denied (φάναι ἢ ἀποφάναι). (Met., B, 996b28-29) or: it will not be possible to assert and deny the same thing truly at the same time. (Met., Γ, 1008a36-b1) In other words, 'contradictory statements (ἀντικειμένας φάσεις) are not at the same time true. (Met., Γ, 1011b13-14) Also, 'It is impossible that contradictories (ἀντίφασιν) should be at the same time true of the same thing.' (Met., Γ, 1011b15-16) Also, 'Opposite statements (ἀντικειμένας φάσεις) can never be true of the same subjects.' (Met., K, 1062a33-34; 1063b15-17) Also, 'Of all affirmation or negation one is impossible. (PsA., A, 11, 77a22)

b) A thing cannot at the same time be and not be. (Met., B, 996b30-31; Γ, 1006a3-5) This can also be extended to many other similar pairs of opposites: 'The same thing cannot at the same time be and not be, or admit any other similar pair of opposites.' (Met., K, 1061b34-1062a2) Also, 'It will be possible for the same thing to be and not to be, except in virtue of an ambiguity.' (Met., Γ, 1006b18-19) This is also asserted in another similar way: it is impossible that it should be at the same time true to say the same thing is a thing and is not a thing.' (Met., Γ, 1006b33-34)

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[1] Abbreviations used in this paper:

Met.	*Metaphysics*
OI.	*On Interpretation*
PNC	Principle of Non-*Contradiction*
PsA.	*Posterior Analytics*

c) 'The same attribute cannot at the same time belong (ὑπάρχειν) and not belong to the same object in the same respect.' (Met., Γ, 1005b19-21)

d) Those positive and negative propositions are said to be contradictory which have the same subject and predicate. (OI, I, 7, 17a33-35)

The opposition between an affirmation and a denial makes contradictories (ἀντίφασεως). (PsA., A, 2, 72a11-14) Based on Aristotle's definition, 'An affirmation is opposed to a denial in the sense which I denote by the term 'contradictory' (ἀντίφατικως), when, while the subject remains the same, the affirmation is of universal character and the denial is not.' (OI., I, 7, 17b16-19)

2) *Characteristics of PNC*

a) It is the most certain (Met., Γ, 1005b22-23 and b11) and the most indisputable (Met., Γ, 1006a5-6) of all principles.

b) It is impossible: to believe its contrary (Met., Γ, 1005b24-30); to be really in that position (Met., Γ, 1008b11-13); and to defend it. (OI, I, 9, 18b17-19) Nonetheless, Aristotle thinks that many of the writers about nature assert the contrary of PNC and use a language opposite to it. (Met., Γ, 1005b35-1006a3)

c) It is the starting point of all the other axioms. (Met., Γ, 1005b32-34)

d) It is not hypothetical. (Met., Γ, 1005b13-17)

e) Contradictories are extremely opposed to each other. (Met., Γ, 1007a1-4)

f) Believing in PNC saves substance and essence and not believing in it makes all attributes accidents and there will be nothing as being essentially something. The reason is that something which essentially is a being cannot avoid being that thing. (Met., Γ, 1007a20-29 and b16-18)

g) PNC supports plurality of things because otherwise all things will be one: 'If all contradictories are true of the same subject at the same time, evidently all things will be one. For the same thing will be a trireme, a wall, and a man, if it is equally

possible to affirm and deny anything of anything.' (Met., Γ, 1007b18-22) In fact, PNC supports difference: 'For if contradictories can be predicated alike of each subject, one thing will in no wise differ from another; for if it differs, this difference will be something true and peculiar to it.' (Met., Γ, 1008a25-27)

h) To accept truth and falsity, whether in an absolute sense (e.g. A is more true than B; or C is less true than D) entails PNC. (Met., Γ, 1008b2-7 and b31-35; 1009a2-5) In fact, PNC is entailed by accepting true affirmation. (Met., K, 1062b7-11)

i) Judging and choosing between at least two things entails PNC: you cannot choose one as better than another without a previous judging that one is A and the other not A. (Met., Γ, 1008b18-24) The same is true about avoiding. (Met., Γ, 1008b24-29)

j) PNC guarantees speaking and saying anything intelligible because otherwise e.g. saying 'yes' means both yes and no. (Met., Γ, 1008b7-13)

k) Contradictories do not accept intermediates that means we must either affirm or deny a predicate on a subject and there is no third option. (Met., Γ, 1011b23-24; Met., I, 1055b1-2; PsA., A, 2, 72a11-14; Met., I, 1057a33-36)

l) PNC is applicable also to the future time. (OI., I, 9, 19a28-29)

m) PNC is presupposed by the least semantic of words. If we accept that each word has a meaning and, thus, signifies something definite, we cannot accept that it has the contradictory meaning and signies contradictory things and this approves PNC. Thus, Aristotle asks the opponent of PNC to say just one word, a significant word and takes this as the demonstration of PNC because by saying the word e.g. 'man' you have already signified man and not-man. (Met., Γ, 1005a11-13 and a18-22; 1006a28-31 and b13-15) Therefore, signification entails PNC: 'He, then, who says this is and is not denies what he affirms, so that what the word signifies, he says it does not signify; and this is impossible. Therefore, if 'This is' signifies something, one cannot truly assert the contradictory.' (Met., K, 1062a16-20) He says again: 'If the word signifies something and this can be truly asserted of it, it necessarily is this; and it is not possible that that which is necessary should ever not be: it is not

possible therefore to make the opposed assertions truly of the same subject.' (Met., K, 1062a20-23; cf. Met., K, 1062a24-31)

n) At Met., 4, 3, 1005b9-10 (check???) PNC is called as principle of things (ἀρχὰς τοῦ πράγματος). (quoted from B215, 517)