

# Propositional Logic, Truth Tables, and Epicurus' Objection to "Dialectic"

Post by "Cassius" of September 20, 2021 at 3:43 PM

Also directly relevant to our topic tonight is Usener 376:

U376

**Cicero *Academica* II.30.97 (Lucullus):** They will not get Epicurus, who despises and laughs at the whole of dialectic, to admit the validity of a proposition of the form "Hermarchus will either be alive tomorrow or not alive," while dialecticians demand that every disjunctive proposition of the form "either x or not-x" is not only valid but even necessary. See how on his guard the man is whom your friends think slow; for "If," he says, "I admit either of the two to be necessary, it will follow that Hermarchus must either be alive tomorrow or not alive; but as a matter of fact in the nature of things no such necessity exists." Therefore let the dialecticians, that is, Antiochus and the Stoics, do battle with this philosopher, for he overthrows the whole of dialectic.

**Cicero, *On The Nature of The Gods*, I.25.70 (Cotta speaking):** Epicurus did the same sort of thing in his argument with the logicians. It is an axiom of the traditional logic that in every disjunctive proposition of the form "X either is ... or is not ..." one of the alternatives must be true. He was afraid that if he admitted anything of this sort, then in a proposition such as "Tomorrow Epicurus will either be alive or he will not be alive," one or the other of the statements would be a *necessary* truth: so to avoid this he denied that there was any logical necessity at all in a disjunction proposition, which is too stupid for words!

**Cicero, *On Fate*, 10.21:** Now here, first of all, if it were my desire to agree with Epicurus and deny that every proposition is either true or false, I would rather accept that blow than agree that all things come about through fate; for the former opinion gives some scope for discussion, but the latter is intolerable. So Chrysippus strains every sinew in order to convince us that every proposition is either true or false. Epicurus is afraid that, if he concedes this, he will have to concede that whatever comes about does so through fate; for if either the assertion or the denial is true from eternity, it will also be certain - and if certain, also necessary. [cf. *Ibid.*, 9.19]

## Potentially Relevant in Addition:

U380 (this may be a good clue to those categories in which dialectical formal logic is especially to be distrusted:

**Aetius, *Doxography*, I.29.6 [p. 326 Diels] (Plutarch, I.29.2; Stobaeus *Anthology*, *Physics* 7.9):** Epicurus says that chance is a cause which is uncertain with respect to persons, times, and places.