Aristotle and the Future

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Abstract: We intend to show that Aristotle's contention that future tense contingent statements are neither true nor false leads to inconsistency.

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We intend to show that Aristotle's contention that future tense contingent statements are neither true nor false[1] leads to inconsistency. Aristotle's account of truth[2] as expressed by Tarski's T-equivalence schema[3] implies that:

> (T1) A sea fight takes place tomorrow, if and only if, 'A sea fight takes place tomorrow' is true.

But given that for Aristotle the sentence 'A sea fight takes place tomorrow' is not true, it is not the case that a sea fight takes place tomorrow. In the same way, the T-equivalence:

> (T2) A sea fight does not take place tomorrow, if and only if, 'A sea fight does not take place tomorrow' is true,

implies that a sea fight does take place tomorrow. For 'A sea fight does not take place tomorrow' is not true as well. Hence, Aristotle's account of truth as

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[1] Aristotle writes:

"A sea-fight must either take place to-morrow or not, but it is not necessary that it should take place to-morrow, neither is it necessary that it should not take place, yet it is necessary that it either should or should not take place to-morrow....

... One of the two propositions in such instances must be true and the other false, but we cannot say determinately that this or that is false, but must leave the alternative undecided. One may indeed be more likely to be true than the other, but it cannot be either actually true or actually false." See Aristotle, *On Interpretation* 19a30-40, in McKeon (1941, 48).

"These awkward results and others of the same kind follow, if it is an irrefragable law that of every pair of contradictory propositions, ... one must be true and the other false, ...that all that is or takes place is the outcome of necessity." See Aristotle, *On Interpretation* 18b: 27-32 in McKeon (1941, 47).

[2] "To say of what is that it is not, or of what is not that it is, is false, while to say of what is that it is, and of what is not that it is not, is true." See Aristotle, *Metaphysics* 1011b25 in McKeon (1941, 749).

[3] Tarski writes:

"(T) X *Is true if, and only if*, p. We shall call any such equivalence (with 'p' replaced by any sentence of the language to which the word 'true' refers and 'X' replaced by a name of this sentence) an equivalence of the form (T)." (1944, 54-55).

expressed by Tarski's T-equivalences, implies that a sea fight both will and will not take place tomorrow.

It may at first appear that the inconsistency is due to Tarski's T-equivalence schemata and not to Aristotle's thesis. But that cannot be, T-equivalence statements cannot coherently be denied.[4] For what could it mean to say that a sea fight takes place tomorrow, but it is not true that a sea fight takes place tomorrow?

To avoid being committed to fatalism, future tense statements would have to lack truth value, for what is true or false cannot be, respectively, false or true. But surely one can state this or that about the future without thereby being either inconsistent or a fatalist. Yes, but in that case, contingent statements about the future would have to contain a built in suppressed clause to the effect that this is how the future appears *at the present.*[5]

References

Aristotle. 1941. *"De Interpretatione (On Interpretation)."* Translated by E.M. Edghill. In *The Basic Works of Aristotle*, edited by Richard McKeon, 38-61. New York: Random House.

———. 1941. "Metaphysics*."* Translated by E.M. Edghill. In *The Basic Works of Aristotle*, edited by Richard McKeon, 689-934. New York: Random House.

Dummett, Michael. 1958-9. "Truth." *Proceedings of the Aristotelian Society* 59: 141-162 New Series.

Feigl, Herbert and Wilfrid Sellars. 1949. *Readings in Philosophical Analysis*. New York: Appleton-Century-Crofts.

McKeon, Richard. 1941. *The Basic Works of Aristotle*. New York: Random House.

Tarski, Alfred. Originally 1944. "The Semantic Conception of Truth and the Foundations of Semantics." In *Readings in Philosophical Analysis,* edited by Herbert Feigl and Wilfrid Sellars, 52-84. New York: Appleton-Century-Crofts.

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[4] Michael Dummett rejects a similar argument for he contends that statements whose truth value cannot be determined are cogent but are neither true nor false. He adopts the Intuitionist position out of mathematics as well. For the same reason he maintains that 'p or not-p' is not logically necessary. We don't agree with the position that statements whose truth-value cannot be determined are neither true nor false. See Dummett (1958-9, 145, 157-60).

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