

# A Note on Aristotle and Beliefs about the Future

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## I. Introduction

This paper falls into two main parts. In the first part, I shall consider the question of whether or not Aristotle believes that there can be true statements about what will happen in the future. I will first clarify this question, which will involve consideration of some logical and metaphysical notions in Aristotle. I will then argue that the answer to the question is ‘No’ (with a qualification). In the second part, I shall argue that his view is correct. I will do this ‘indirectly’, by way of presenting and refuting three prominent objections to the view.

## II. Does Aristotle believe that there can be true statements about what will happen in the future?

The statements about what will happen in the future, which we are considering, are statements (sentences, propositions) about events (or states of affairs) that are not either necessary or impossible (roughly, in the sense of ‘inevitable’), i.e. statements about so called ‘future contingents’ (*future contingencia*).<sup>1</sup> In what follows, I shall understand this. Aristotle’s famous example is that of the statement ‘There will be a sea battle tomorrow’.

Why is the truth (or falsity) of such statements an issue for Aristotle (and us)? Is it not a trivial consequence of his theory of truth that there can be true statements about what will happen in the future? For Aristotle is often credited with the first formulation of some version of the correspondence theory of truth with his famous passage ‘To say that that which is is not or that which is not is, is a falsehood; and to say that that which is is and that which is not is not, is true’ (*Metaphysics* 1011b26). In a more simple and modern formulation, this is as a minimum the position that ‘p’ is true if and only if p. How much

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<sup>1</sup> If they were either necessary or impossible it would trivially follow that they were either true or false.

of the correspondence theory this formulation captures is controversial (Kirkham 1992).

Someone might therefore not think that there is an obvious and ‘formal’ answer to our question: if ‘p’ here is allowed to be statements about future events and states of affairs, i.e. ‘p will be the case’, there obviously *can* be true statements about the future (what will happen in the future): ‘There will be a sea battle tomorrow’ is true if and only if there will be a sea battle tomorrow.

Such a ‘formal’ answer is available to deflationists and minimalist theories of truth (Horwich 1998) – that is, philosophers who maintain that all there is to truth is what is captured by the principle that ‘p’ is true if and only if p. Such an approach to truth contrasts radically with the theory of *maximalist truthmaking*. This theory of truth is very much the contemporary inheritor of the classical correspondence theory of truth, which, as least in one version, goes back to Aristotle, as we saw above. Roughly, it is the view that for any truth, there exists something in the world which makes it true. Clearly, the maximalist truthmaker theorist must deny that there is something in the world that makes true statements about the future. For obviously there is *nothing* to make them true: the future event or state of affairs does not exist. Since Aristotle does not consider such an answer, it seems plausible that he is a truthmaker maximalist. We shall return to maximalist truthmaking shortly. In any case, it seems clear that the question of whether or not Aristotle believes (or should believe) that there can be true statements about the future is not a trivial one.

However, the fact that the question is non-trivial does show that it should *matter* to us (if we are not historians of philosophy). Why, then, is it important – if indeed it is? The reason has to do with the importance of the *principle of bivalence*. Roughly, according to this general principle, any statement is either true or false. More formally, either ‘p’ is true or ‘not-p’ is true.<sup>2</sup> This is *prima facie* a plausible principle. When applied to future contingents (contingent events and states of affairs in the future), the principle reads as follows. If any statement is either true or false, at any one time, then – assuming the principle – any statement about future contingents is true or false now. In other

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<sup>2</sup> Assuming that (i) ‘p’ is true or ‘p’ is false and (ii) ‘not-p’ is true or ‘not-p’ is false.

words, it is either true or false now if an event in the future will occur. This sounds less appealing than the general principle, but as it stands, it is not obviously false.

But unfortunately, if Aristotle is right, it has an unacceptable consequence. His famous argument, which occurs in *De Interpretatione* (Ch. 9) can be rendered as follows. Suppose that today someone says that there will be a sea battle tomorrow and someone else says that there will not be a sea battle tomorrow. Then either what the first person says is true or what the second person says is true. But if so, it is necessary that a sea battle takes place tomorrow or it is necessary that a sea battle does not take place tomorrow, and similarly in other cases. Whatever happens, it is necessary that it does.

This consequence, (logical) *fatalism*, is highly implausible, since we firmly believe that many actual events need not have become actual and, in particular, that as agents we could have acted otherwise than what we actually did.<sup>3</sup> For the purposes of this paper, I shall assume that it is false.

However, Aristotle avoids this unpalatable consequence. Referring to the statement about the future event and its negation, he simply rejects the principle of bivalence:

One [statement] may indeed be more likely to be true than the other, but it cannot be either actually true or actually false. It is therefore plain that it is not necessary that of an affirmation and a denial, one should be true and the other false. (*De Int.* 9)

What *is* necessary is that the *disjunction* of them be true:

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. (*ibid.*)

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<sup>3</sup> See Taylor (1962) for a different, much-discussed argument for fatalism.

In other words, Aristotle denies that statements about the future (excluding the disjunction of an affirmation and its negation) can be true.<sup>4</sup>

### III. Is his view correct?

In this section, I shall defend Aristotle's view by considering and rejecting three objections to it. Consider first his argument that the principle of bivalence leads to logical fatalism – which – rightly – is an important reason to him for denying that there can be true statements about the future (and accordingly allows for exceptions to the principle of bivalence).

One way of opposing this move is of course to reject the very argument for logical fatalism. But is this plausible? At first sight, the argument seems sound. However, as we have seen, it moves from truth to necessity, as it were. Roughly, it maintains that any statement's being true (or false) means that it is a necessity that it is true (or false). Someone might object that this is a fallacious move. Indeed, is it not similar to the fallacy of arguing that necessarily if 'p' is true, then 'p' it true; so if 'p' is true, then necessarily 'p' is true (cf. Price 2015)? No, Price argues (ibid.), Aristotle's position is just a consequence of his view that 'What is, necessarily is, when it is, and what is not, necessarily is not, when it is not' (quoted in Price ibid.), in turn arguably a consequence of his correspondence theory of truth (and, in effect, maximalist view of truthmaking) that there must (i.e. by necessity is) something in the world that makes statements true. There is no logical fallacy involved in this.

Secondly, consider instead the objection that even if the argument for logical fatalism is sound, Aristotle's solution (which, as we have seen, requires rejecting bivalence) is untenable, on the grounds that bivalence should be *upheld*. This however is a weak objection. For bivalence is controversial. It is rejected by polyvalent logics (logics that has more truth-values than 'true' and 'false').<sup>5</sup> And indeed Łukasiewicz (1967) formulated a system of three-valued logic, with the third truth-value being *indeterminate*,

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<sup>4</sup> See Whitaker (1996) for alternative interpretation on which Aristotle does not deny the principle of bivalence.

<sup>5</sup> And it is neither affirmed nor denied in intuitionistic logic.

precisely in order to avoid the conclusion of Aristotle's argument for fatalism. This system and its philosophical underpinning was further developed by Prior (1962, 1967).<sup>6</sup>

Thirdly, however, a different kind of objection is *prima facie* strong. It is the objection that in pre-theoretical thought and talk we treat (atomic) *predictions* as having a truth-value: if someone says in 1972 that 'Red Rum will win the Grand National Next year' and Red Rum wins, then this is true, not just in 1973, but in 1972 as well (Price 2015).

It seems correct that our intuitions about (atomic) predictions work that way. In general, of course, when assessing a philosophical theory, one of the things we consider is how it takes our pre-theoretical intuitions into account. Now, Aristotle could simply reject the intuition at issue as in fact being wrong. He could simply 'bite the bullet', as we might say. However, there are in my view independent *theoretical* reasons to reject such predictions as having truth-value. They come from the theory of truthmaking (Armstrong 2004), specifically *truthmaker maximalism* (Cameron 2008, 2011). Truthmaker maximalism is the view that if a truth is true (at a time *t*), then there is something in the world (at *t*) that makes it true. Thus, if 'Red Rum will win the Grand National Next' is true in 1972, then there must be something in the world that makes it true. But – assuming of course our rejection of fatalism and that it is not now already determined that if (that) Red Rum will win – there is *not* anything in the world that makes it true in 1972. What we would have to be prepared to accept is that it suffices to make a statement true that there *will* at some point in time be an event or state of affairs in the world that makes it true (Price 2015). Price (*ibid.*) maintains that this is the stance we should take. He thus rejects the principle of truthmaker maximalism. However, since there are strong independent reasons to believe in this principle (Cameron 2008), the objection from the pre-theoretical status of predictions in my view fails. Simple (atomic) statements about the future do not have any truth-value.

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<sup>6</sup> There is an interesting technical issue of whether rejection of the principle of bivalence is compatible with not rejecting the closely related law of excluded middle (either 'p' or 'not-p'). Price (2015) argues that it is, and argues that Aristotle only rejects the former. However, assuming for the sake of argument this kind of logic with *indeterminate* as the third truth-value (specifically, van Fraassen 1966) he points out that it suffers from some logical problems, viz. a lack of equivalence between 'p' and 'p is true' and a failure of truth-functionality for 'or' and 'and'. It is beyond the scope of this essay to consider these alleged problems.

#### IV. Conclusion

Having clarified what is meant by the question of whether or not Aristotle believes there can be true statements about the future, I first explained why his correspondence theory of truth does not allow him to answer this trivially. I then outlined an interpretation of Aristotle on which he denies that statements about the future (with a qualification) can be true. Next, in the second part of the paper, I went on to consider three objections to Aristotle's stance on this interpretation. I argued that each of them fails and can thus conclude that Aristotle's view is correct.<sup>7</sup>

#### Bibliography

- Armstrong, David. *Truth and Truthmakers*. Cambridge: Cambridge University Press, 2004.
- Aristotle. *De Interpretatione*. Translated by E.M. Edghill. eBooks@Adelaide. <https://ebooks.adelaide.edu.au/a/aristotle/interpretation/> (10 August 2015).
- Cameron, Ross. "How to be a Truthmaker Maximalist." *Nous* 42 (2008): 410-21.
- Cameron, Ross. "Truthmaking for Presentists." In *Oxford Studies in Metaphysics: Volume 6*, edited by Karen Bennett and Dean Zimmerman, 55-100. Oxford: Oxford University Press, 2011.
- Horwich, Paul. *Truth*, 2nd edn. Oxford: Clarendon Press, 1998.
- Kirkham, Richard. *Theories of Truth*. Cambridge, Mass.: MIT Press, 1992.
- Łukasiewicz, Jan. (1967) "On Determinism." In *Polish Logic 1920-1939*, edited by Storrs McCall, 19-39. Oxford: Oxford University Press, 1967.
- Prior, Arthur. *Formal Logic*. Oxford: Oxford University Press, 1962.
- Prior, Arthur. *Past, Present and Future*. Oxford: Oxford University Press, 1967.
- Price, Huw "Fatalism." The Stanford Encyclopedia of Philosophy (Summer 2015 Edition). <http://plato.stanford.edu/archives/sum2015/entries/fatalism>.
- van Fraassen, Bas. "Singular Terms, Truth-Value Gaps and Free Logic." *Journal of Philosophy* 63 (1966): 28-35.
- Whitaker, C. W. A. *Aristotle's De Interpretatione: Contradiction and Dialectic*. Oxford: Clarendon Press, 1996.

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