# **True alethic functionalism?**<sup>\*</sup>

## 1. Introduction

In *Truth as One and Many* (henceforth, *TOM*), Lynch presents and develops a functionalist theory of truth. TRUTH is a functional concept, characterized by its functional role—the truth-role (to be specified below).<sup>1</sup> In turn, at the level of properties, truth is the property that plays the truth-role necessarily. Lynch thinks that there is a unique such property. The point of this brief discussion note is to pose a dilemma for Lynch. The dilemma takes aim at the idea that Lynch's uniqueness claim can be unproblematically combined with a classification of his view as a true, or pure, form of alethic functionalism.

I will proceed as follows: Sect. 2 presents selected aspects of Lynch's view, including the three principles—or "truisms"—that jointly delineate the truth-role. Sect. 3 shows that a certain disjunctive property necessarily satisfies the truisms. Lynch takes the disjunctive property to be distinct from the intended truth property of alethic functionalism. However, it would then appear that the uniqueness claim is undermined: two truth properties necessarily satisfy the truisms, and so, by purely functionalist lights, there are *two* truth properties. Sect. 4 presents the problem of mixed compounds—a problem that Lynch levels as an objection against the idea that the disjunctive property is a viable truth property. I offer the following rejoinder: in relying on the problem of mixed compounds, Lynch relies on resources that go beyond his own professed functionalism. As such, if he really wants to make use of the problem of mixed compounds to dismiss the disjunctive property, he has to grant that his view is not a true, or pure, form of functionalism. In Sect. 5 I combine the lessons learned from Sect. 3 and 4 and present the following dilemma: either Lynch has to abandon the uniqueness claim or admit that his view is not a true, or pure, form of alethic functionalism.

## 2. Alethic functionalism

Let us now turn to Lynch's alethic functionalism. I will restrict attention to the aspects of his view that are relevant for the purposes of presenting the dilemma just sketched.

The alethic functionalist endorses a certain methodological approach to analyzing of TRUTH. TRUTH is characterized by pinning down its functional role. The functional role is captured by principles that connect TRUTH with other concepts. These principles have to be widely accepted by ordinary folk, at least tacitly. For this reason alethic functionalism can be regarded as a folk theory of sorts. However, it should be stressed that the principles of alethic functionalism are perhaps best regarded as philosophical refinements of principles (tacitly) accepted by ordinary folk.

The functionalism of *TOM* is centered around the following three principles:

- (O) For every proposition *p*, *p* is true if and only if, were *p* to be believed, things would be believed to be as they are. (*Objectivity*)
- (NB) For every proposition *p*, it is prima facie correct to believe *p* if and only if *p* is true. (*Norm of Belief*)
- (EI) For every proposition *p*, other things being equal, if *p* is true, then believing *p* is a worthy goal of inquiry.<sup>2</sup> (*End of Inquiry*)

Objectivity, Norm of Belief, and End of Inquiry jointly pin down the truth-role (*TOM*, p. 72):

- (TR) For any property *F*, *F* plays the truth-role if and only if, for every proposition *p*,
  - (i) *p* is *F* if and only if, were *p* to be believed, things would be believed to be as they are,
  - (ii) it is prima facie correct to believe *p* if and only if *p* is *F*, and
  - (iii) other things being equal, if *p* is *F*, then believing *p* is a worthy goal of inquiry.

Any theory that aspires to be a theory of truth—rather than a theory of something else has to incorporate Objectivity, Norm of Belief, and End of Inquiry (*TOM*, p. 17). This is why these principles are classified as "core truisms". Following Lynch (*TOM*, p. 72), I will use "truish features" to refer to the features specified by the truisms.

Truth as a property is characterized in terms of the truish features or the truthrole:

 (T) "The property *being true* (or the property of truth) is the property that has the truish features essentially or which plays the truth-role *as such*." (2009, p. 74)

The use of the definite article reflects that (T) involves a uniqueness claim: there is precisely one functionalist truth property. Nothing more, nothing less. For this reason, truth is One, and the word "true" is univocal—it refers to the single, unique property that has the truish features necessarily (*TOM*, p. 78).

# 3. Against uniqueness: the disjunctive property $T_G$

According to Lynch, there are properties  $T_1 ldots T_n$  that play the truth-role locally for domain<sub>1</sub> ... domain<sub>n</sub>, but none of which plays the truth-role globally, or across all domains. The domain-specific, or local, properties discussed in *TOM* include naturalized forms of correspondence (Ch. 2) and species of an anti-realist property called "superwarrant" (Ch. 2, 8).<sup>3</sup> I will not dive into specifics pertaining to these local properties here, because they are not relevant to our present concerns.

Consider the following generic truth property,  $T_{G}$ , characterized as follows:

(TG)  $(\forall p)(T_G(p) \leftrightarrow ((T_1(p) \land \operatorname{domain}_1(p)) \lor \dots \lor (T_n(p) \land \operatorname{domain}_n(p)))$ 

i.e. a proposition is generically true just in case it possesses property  $T_1$  and belongs to domain<sub>1</sub>, possesses property  $T_2$  and belongs to domain<sub>2</sub> or ... or it possesses property  $T_n$  and belongs to domain<sub>n</sub>.<sup>4</sup>

I will now argue against the uniqueness claim involved in (T) by reference to  $T_G$ . The essence of the argument is this:  $T_G$  necessarily satisfies the truisms. According to Lynch,  $T_G$  is not the intended truth property of alethic functionalism—and so, he must take the properties to be distinct. However, by the lights of functionalism,  $T_G$  ought to qualify as a truth property. This means that are two functionalist truth properties, not just one as (T) would have it.

I claimed that  $T_G$  necessarily satisfies the truisms, or that the property necessarily has the truish features. To support this claim, let me start by showing that  $T_G$  has the truish features, i.e. that

(OTG)	For all $p$ , $p$ is $T_G$ if and only if (if $p$ is believed, things are believed
	to be as they are).
(NBTG)	For all $n$ , $n$ is $T_c$ if and only if it is correct to believe $n$

(NBTG) For all p, p is  $T_G$  if and only if it is correct to believe p. (EITG) For all p, if p is  $T_G$ , then believing p is a worthy goal of inquiry.

Once (OTG), (NBTG), and (EITG) have been established, we can move on to the necessity part of the claim.

To establish (OTG), (NBTG), and (EITG) the following assumption can be made:

(SAT) The domain-specific (or local) properties  $T_1 \dots T_n$  satisfy the truisms.

I allow myself to assume (SAT), because Lynch grants that  $T_1 \dots T_n$ —i.e. correspondence et al.—possess the truish features.

The argument for (OTG) is as follows:

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(1)	$T_G(p)$		Assumption
(2)	If $T_G(p)$ , then $T_i(p)$	(for some $T_i$ )	(TG)
(3)	$T_i(p)$		(1), (2)
(4)	$T_i(p)$ if and only if (if p is believed)	, things are believed to be as they are).	(SAT)
(5)	If $p$ is believed, things are believed	d to be as they are.	(3), (4)
(6)	If $T_{G}(p)$ , then (if p is believed, thin	gs are believed to be as they are).	(1), (5)

(1)	If <i>p</i> is believed, things are believed to be as they are.	Assumption
(2)	$T_i(p)$ if and only if, if p is believed, things are believed to be as they are.	(SAT)
(3)	$T_i(p)$	(1), (2)
(4)	$T_{G}(p)$	(TG)
(5)	If (if <i>p</i> is believed, things are believed to be as they are), then $T_G(p)$ .	(1), (4)

By combining  $\Rightarrow$  and  $\Leftarrow$ , we get the result that *p* is  $T_G$  if and only if (if *p* is believed, things are believed to be as they are). Since *p* was arbitrary, we can prefix a universal quantifier: for all *p*, *p* is  $T_G$  if and only if (if *p* is believed, things are believed to be as they are). But this is precisely (OTG).

I will not provide the arguments for (NBTG) and (EITG), but note that, like the argument for (OTG), they involve (TG), (SAT), and moves licensed by the rules of basic logic.<sup>5</sup> Now, we are still not quite where we need to be. It remains to be shown that, *necessarily*,  $T_G$  has the truish features (or satisfies the truisms). How do we obtain this conclusion? We do so by observing that the arguments for (OTG), (NBTG), and (EITG) only rely on (TG), (SAT), and basic logical inference. (TG) is a definition and, as such, holds of conceptual necessity. We can assume that (SAT) holds of necessity, too, since Lynch takes it to do so.

Lynch takes the disjunctive property  $T_G$  to be distinct from his own favoured truth property. In light of the above argument, *two* truth properties should be acknowledged by the lights of alethic functionalism—Lynch's own intended property and  $T_G$ . Why should  $T_G$  qualify as a truth property by alethic functionalist standards? Answer: given the above argument, we can conclude that the disjunctive property  $T_G$ possesses the truish features, and that it does so necessarily. But according to the alethic functionalist, this is precisely what characterizes truth at the property level, and hence, by alethic functionalist lights,  $T_G$  ought to count as a truth property.

The disjunctive truth property  $T_G$  thus puts pressure on the uniqueness claim incorporated into Lynch's functionalism. If the uniqueness claim is undermined, truth will not be One, but Two. Several things follow. Among other things, the word "true" fails to be univocal. Instead "true" will come out as being ambiguous between the intended functionalist truth property and  $T_G$  (assuming that uniqueness is undermined in the particular way suggested here). By Lynch's own admission, this would be bad (*TOM*, pp. 54-55).

### 4. Impure alethic functionalism

As mentioned above, Lynch takes the disjunctive property  $T_G$  to be distinct from his own intended functionalist truth property. Indeed, not only that, he objects to the viability of  $T_G$  as a truth property by arguing that it falls prey to the so-called problem of mixed compounds.<sup>6</sup> If this turns out to be so, it might be tempting to think that the alethic functionalist can hold on to the idea that truth is One. The problem of mixed compounds would, so to speak, knock out the competition. In this section, I will block this line of thought. Put more carefully, I will make a case for thinking that relying on the problem of mixed compounds will come at a big cost for anyone aspiring to be an alethic functionalist—*viz*. the cost of having to admit that one is not a true, or pure, alethic functionalist after all.

Let me briefly present the problem of mixed compounds. A mixed compound is a compound whose constituents are true in virtue of possessing different properties. For the sake of illustration, let us assume that the truth of propositions concerning the empirical world (if true) is due to their corresponding with reality, and that the truth of legal propositions (if true) is due to their cohering with the law. If so, the following conjunction is an example of a mixed conjunction: *there are mountains, and drunk driving is illegal*. Both conjuncts of this conjunction are true. Following our assumption, the first conjunct is true because it corresponds with reality, and the second conjunct is true, because it coheres with the law.

Now, while it is clear that the conjunction itself is likewise true (it has true conjuncts!), it is less clear what to say about *how* it is true—especially if we think in terms of the disjunctive property  $T_G$ . From the assumption that each of the conjuncts possesses a property that, within their respective domains, grounds truth it follows that each of the conjuncts is  $T_G$  (by a straightforward application of (TG) from Sect. 3). We also want to say that the conjunction itself is  $T_G$ . However, it can only be so if it possesses some property that is "alethically potent" within a specific domain. But what property would that be? Correspondence? Coherence? Some third property? None of these options seems appealing. But that is just to say that someone who endorses  $T_G$  as a truth property has no plausible story to tell about the truth of mixed conjunctions. The same goes for other types of mixed compounds.

Granted, the problem of mixed compounds is a difficult problem—and one that draws an increasing amount of attention, as witnessed by the growing literature on the topic.<sup>7</sup> Perhaps the problem is especially hard for people who endorse the disjunctive truth property  $T_G$ . I am inclined to think that it is not. However, I am also inclined to think that this does not matter for present purposes. Neither would it matter if the problem of mixed compounds really turned out to be entirely intractable for the adherent of  $T_G$ . This is because the problem of mixed compounds is not relevant to the discussion that we have been engaged in here. Let me elaborate.

What is at issue in our discussion is whether providing a functionalist characterization of truth in terms of necessary possession of the truish features suffices

to pin down a unique truth property. Sect. 3 argued against the claim that it does—i.e. against Lynch's uniqueness claim. I proceeded by focusing on the disjunctive property  $T_{\rm G}$ . As seen, Lynch takes this property to be distinct from the intended functionalist truth property. Bearing this in mind, two things are needed to undermine the uniqueness claim by reference to  $T_G$ : first, it must be shown that  $T_G$  has the truish features, and second, it must be shown that it does so necessarily. Both of these tasks were executed in Sect. 3. This, together with the distinctness of  $T_G$  and the intended functionalist truth property, is enough to undermine the uniqueness claim. No solution, or response, to the problem of mixed compounds is needed. The problem goes beyond, or is not part of, the functionalist characterization of truth in terms of necessary possession of the truish features. As such, it drops out as being irrelevant to the present discussion. For what is at issue is whether the alethic functionalist characterization of truth pins down a unique truth property—not whether the alethic functionalist characterization plus something else succeeds in doing so. Thus, in light of the argument from Sect. 3, a true, cardcarrying alethic functionalist would—and should—grant that  $T_G$  qualifies as a truth property.

In *TOM*, Lynch relies on the problem of mixed compounds in his rejection of the disjunctive property  $T_G$ . Given the  $T_G$ -driven attack on uniqueness offered in Sect. 3, this reliance does substantive, slightly odd work: it rules out a property that ought to count as a truth property by purely functionalist lights—that is, by the lights of someone who, like Lynch, takes truth to be functionally characterized in terms of necessary possession of the truish features. The additional constraints derived from the problem of mixed compounds might ultimately get Lynch uniqueness, or at least it might get  $T_G$  out of the way. However, note that this particular road to uniqueness—or eliminating  $T_G$ —would go via distinctively non-functionalist territory. This is an important observation to make, for the following reason: if the functionalistically kosher property  $T_G$  is ruled out by invoking the problem of mixed compounds, then Lynch's view in *TOM* does not qualify as true, or pure, alethic functionalism. Rather, it is alethic functionalism plus something else.<sup>8</sup>

### 5. A dilemma: non-uniqueness or impure functionalism

*TOM* advances a functionalist theory that characterizes truth in terms of necessary possession of the truish features. This is paired with a uniqueness thesis: there is precisely one truth property. The arguments presented in Sect. 3 and 4 jointly suggest that these two aspects of *TOM* do not make for a happy fit—that, indeed, Lynch faces the following dilemma:

*Non-uniqueness:* give up uniqueness while remaining a true, or pure, alethic functionalist, or

#### *Impure functionalism:*

give up true, or pure, alethic functionalism while retaining uniqueness.

The arguments provided centered around the disjunctive property  $T_G$ . Very roughly, the argument in favour of giving up uniqueness was that, necessarily,  $T_G$  possesses the truish features, and so, by the lights of pure alethic functionalism, qualifies as a truth property. Very roughly, the argument supporting the abandonement of pure alethic functionalism was that eliminating  $T_G$  as a viable truth property—and so, retaining uniqueness—could only be achieved by invoking non-functionalist machinery.

Both horns of the dilemma are undesirable for Lynch. Living with nonuniqueness would, among other things, involve conceding that "true" is ambiguous. This is something that Lynch is very keen to avoid, as highlighted earlier. On the other hand, being an impure alethic functionalist might not sit that well with him either. After all, one of the main projects of *TOM* is precisely to advance a pure form of alethic functionalism.

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#### Notes

<sup>3</sup> Lynch's notion of superwarrant is modeled on Wright's notion of superassertibility, which in turn is a generalization of the notion of truth as it figures in mathematical intuitionism. For further details, cf. *TOM*, Ch. 2, and Wright (1992, 2003).

<sup>4</sup> The domain conjuncts of (TG) will be omitted in the sequel for ease of exposition. For more on (TG), see Pedersen (2006), (2010), and Pedersen and Wright (forthcoming).

<sup>5</sup> I spell out the arguments in full in Appendix A of Pedersen and Wright (forthcoming).

<sup>6</sup> Lynch (2009: 67). See Williamson (1994) and Tappolet (2000) for earlier presentations of the problem.

 $^7$  For a sample of contributions, see Edwards (2008) and (2009), Cotnoir (2009), Lynch (2004) and (2009: 86-91), Pedersen (ms), and Wright (forthcoming).

<sup>8</sup> As highlighted in Sect. 2, Lynch takes Objectivity, Norm of Belief, and End of Inquiry to be core truisms. One way to attempt a functionalist response to the point just raised would be to add a "no problem of mixed compounds" truism and take it to be characteristic of truth in the same way that Objectivity, Norm of Belief, and End of Inquiry are. This would immediately raise the question what precisely such a truism would look like. Would it, e.g., explicitly mention the problem of mixed compounds? Letting it do so would probably not be a promising path to take. For the truisms are meant to be principles accepted at least tacitly by ordinary folk (or philosophical refinements of such principles), and presumably, ordinary folk do not accept principles pertaining to the problem of mixed compounds, not even tacitly. But then we are just back at the initial question: what would the relevant truism look like?

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<sup>&</sup>lt;sup>1</sup> Notational convention: I use capitals for concepts.

<sup>&</sup>lt;sup>2</sup> *TOM*, p. 8, 10, 12. In *TOM*, Objectivity and End of Inquiry are stated in terms of beliefs, while Norm of Belief is formulated in terms of propositions—which Lynch takes to be the primary truth-bearer (*TOM*, pp. 129-132). It should also be noted that Lynch states Objectivity and Norm of Belief as schemas while End of Inquiry has the form of a universal generalizations. The regimented formulation of (O), (NB), and (EI) is adopted from David (forthcoming).

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