

Chapter 17

Connectives, Prenectives and Dishonoured Cheques of Metaphysical Explanation

Philipp Blum

Mein Grundgedanke ist, dass die 'logischen Konstanten' nicht vertreten. Dass sich die Logik der Tatsachen nicht vertreten lässt. (Wittgenstein, 1921, § 4.0312)

Abstract Throughout his work, Kevin Mulligan has shown an ongoing concern with the theory of metaphysical explanation. What do we aim for, when we, e.g. try to elucidate the natures of essence, value, perception, truthmaking, norms, emotions, relations, and colours? Mulligan has done more than anyone to elucidate what he calls the ‘metaphysical “because”’, in terms of which we formulate metaphysical explanations. Things mentioned on the right-hand side of such explanations, a natural thought goes, are more fundamental than those that are mentioned on the left-hand side. They stand to the latter in a relation of grounding, and the holding of this relation makes the ‘because’ sentence true. In recent work on Künne’s ‘modest account of truth’, however, Mulligan has flirted with the idea that ‘because’-sentences themselves are fundamental, i.e. not further analysable and not underwritten by real relations, in virtue of the obtaining of which they are true. In my contribution to this *Festschrift*, I argue that we (and he) should resist this temptation: While it is true that operator locutions are often convenient, they do not reveal the fundamental metaphysics. There is no explanation to be had without accepting something doing the explaining.

Keywords Metaphysics · Truth · Truthmaking · Connectives · Explanation

17.1 Truth Without Truthbearers?

In recent writings, Kevin Mulligan (2010, 2011) has argued against Künne (2003) that the latter should extend his ‘modest’ accounts of truth and of truthmaking without truthmakers to an account of truth without truthbearers urging—against Künne—the primacy of the truth connective ‘it is true that ...’ over the truth predicate ‘...is true’.

P. Blum (✉)
Swiss National Science Foundation, Barcelona, Spain
e-mail: philipp.blum@philosophie.ch

In his magistral *Conceptions of Truth* (2003), Künne proposed what he calls a ‘modest’ account of truth, characterising the truth-predicate by any of:

Mod₁ $\forall x (x \text{ is true} \leftrightarrow \text{things are as } x \text{ has it})$

Mod₂ $\forall x (x \text{ is true} \leftrightarrow \text{things are as they are according to } x)$

Mod₃ $\forall x (x \text{ is true} \leftrightarrow \text{for some ways things may be said to be, } x \text{ is the proposition that things are that way, and things are that way})$ (2003, pp. 335–336) or rather, to avoid misunderstandings,¹

Mod $\forall x (x \text{ is true} \leftrightarrow \exists p (x = [p] \ \& \ p))$ (2003, p. 337)

where ‘[...]’ abbreviates the singular term-forming operator ‘the proposition that ...’. Künne claims that **Mod** improves on Horwich’s minimalism by being conceptually more economical and by stating what all truths have in common. **Mod**, however, also shares an important drawback of the minimalist theory: in particular, it applies only to propositions designated by singular terms of the form ‘the proposition that ...’ (Künne 2003, p. 340). Künne says that these proper names are semantically structured in that they ‘contain’ the sentence of the second conjunct (2003, p. 342).

Künne (2003, p. 360) is explicit that his modest account presupposes the intelligibility of higher-order, but objectual, quantification over propositions and endorses the ontological commitment thereby incurred. This brings with it a familiar problem of circularity: Sundholm (2008, p. 364), for example, thinks it is a ‘mystery how to explain [Künne’s] deviant quantifier without recourse to truth’. The circularity does not lie, as Künne (2008, p. 389) thinks, in the specification of the truth-conditions of the sentential quantification,² but rather in the only way of explaining the double role of the things quantified over, to wit propositions: They are characterised as entities which are not referred to, but expressed by permissible substituends for the nominal variable. They are things which exist (‘ $\exists p(p)$ ’), and thus can be named, but also are things that name themselves and, in general, are not ‘given to us’ by name but by some sentence which expresses them. They thus do double duty: They exist, and have properties, but they are also expressed, and the meanings of sentences.³

This is not quite Dummett’s argument that propositions are sentence-meanings and that the notion of a sentence-meaning cannot be explained independently of the notion of truth. Künne (2003, pp. 369–372) is right that objects of beliefs need to

¹ One misunderstanding is that quantification over ways, not over propositions, is intended (Hofweber (2005, p. 137), David (2006, p. 189), Boghossian (2010, p. 555)). Immediately following **Mod₃**, however, Künne (2003, p. 336) makes it clear that ‘things are that way’ functions as a quantificational prosentence in **Mod₃**.

² They can indeed be provided using the homophonic semantics of Williamson (1999, pp. 261–263) for these sentential quantifiers that Künne (2010b, p. 587) invokes.

³ Künne explicitly acknowledges this: ‘Permissible substituends for “p” do not designate values of this variable. [...] Permissible substituends for “p” express values of this variable’ (2008, p. 389; cf. also 2003, p. 360). He thinks that our grasp of the nominal mode of ‘introducing’ propositions is based on our grasp of the sentential mode of ‘introducing’ them (2003, p. 367). I am putting scare quotes because a nominalist could plausibly deny that ‘p’ ‘introduces’ any proposition at all.

be individuated more finely than sentence-meanings and that ‘proposition’ is better taken to stand for the former than for the latter.

The circularity worry, as I understand it, concerns the expression relation: what *other*, truth-independent, grasp do we have of what some sentence expresses than the familiar idea how the world would have to be like for it to be true?⁴ This, I think, is a version of the ‘denial of intelligibility’ charge Davidson (1996) advanced against Horwich,⁵ to which Künne (2003, pp. 328–329) does not adequately reply. It is not primarily (or at least not only) a worry about the intelligibility of names for propositions (which could be dispelled by a paratactic theory as the one Künne (2003, p. 329) sketches). Rather, it concerns the particularly transparent character of these descriptive names, for propositions i.e. the fact that we know everything there is to know about their referent once we understand them at all. It follows that we do not know what is denoted by ‘the proposition that *p*’ unless we understand the proposition that *p*, and understanding this requires understanding under what conditions it is *true*. To understand **Mod**, then, we have to deploy an understanding of ‘... is true’, and hence **Mod** is, as a definition of the truth-predicate, epistemically circular.⁶

The problem in a nutshell is the following: to understand *why* propositions are the kind of things that can play the double role they play in **Mod**—and be quantified over both by quantification into singular term and into sentence position—we have to understand them as the kind of things that are bearers of truth; it is the truth-predicate that provides the ‘bridge’ between their ‘nominal’ and their ‘sentential’ role. To understand **Mod**, we need to understand the hybrid form of quantification it deploys, and hence the hybrid nature of the things quantified over, which is due to their essential evaluability for truth.

It is not clear, however, that Künne needs to be worried about *this* kind of circularity. As he makes very clear (2003, p. 13, 16, 118, 338), he does not aim to propose an eliminative (‘dismantling’), but just a ‘connecting’ (explanatory) account of truth, and does not aim to explain the concept of truth without using it. The intertwining of his theories of propositions and of truth, however, makes him vulnerable to another worry that more directly threatens Künne’s project.

⁴ Kneale (1972), in a paper where he proposes the ‘modest’ account (cf. n. 14 below), says that ‘... the lesson to be learnt from the Liar paradox is nothing specially concerned with truth or falsity, but rather that ability to *express* a proposition can never depend on an ability to *designate* it’ (1972, p. 243). Harman (1970, p. 99) makes a related point against the ‘modest’ account of Williams (1969).

⁵ This is how Künne (2003, p. 327) characterises the following remark by Davidson (1996, p. 274), which he takes to be directed equally against his modest account: ‘[T]he same sentence appears twice in instances of Horwich’s schema [“The proposition that *p* is true iff *p*”], once after ‘the proposition that’, in a context that requires the result to be a singular term, the subject of a predicate, and once as an ordinary sentence. We cannot eliminate this iteration of the same sentence without destroying all appearance of a theory. But we cannot *understand* the result of the iteration unless we can see how to make use of the same semantic features of the repeated sentence in both of its appearances—make use of them in giving the semantics of the schema instances. I do not see how this can be done.’

⁶ I think that the same problem threatens ‘hybrid’ quantification over properties, both into predicate and into singular term position, such as in ‘Ben is impatient, and that is a bad quality in a teacher’ (Künne 2003, p. 366), but I cannot make good on this claim there.

In his recent work (2010), Kevin Mulligan has raised a novel objection to the modest account, and indeed all accounts of truth, which take the truth-predicate ‘...is true’ as their *definiendum*. Mulligan distinguishes the truth-predicate ‘...is true’ (which takes a singular term to make a sentence) from the truth-connective ‘it is true that ...’ (which takes a sentence to make a sentence) and asks which one wears the trousers, answering that the connective, not the predicate is fundamental. He thus criticises the contention of Künne (2003, pp. 350–351) that his account of the predicate equally applies to the connective, which the latter interprets as also containing a predication of the truth-predicate, the ‘it’ in ‘it is true that ...’ functioning cataphorically, by providing the thing referred to by the subsequent noun phrase ‘that *p*’ (cf. also Horwich 1998, p. 16, n. and Künne 2013, p.161).

Though it is not entirely clear this has been realised by its participants, I think there is more at stake in this dispute than the relative priority of the truth-predicate or truth-connective. Mulligan’s point, if sound, undercuts Künne’s explication of ‘proposition’, as the word one comes to understand by ‘learning to accept, as a conceptual matter of course, any inference from (a substitution-instance of) schema [**B**₁] via [**B**₂] to the corresponding instance of [**B**₃], and vice versa’ (Künne 2003, p. 251), where such substitution instances may be the found in the following transformations:

- B**₁ A believes that it rains
- B**₂ That it rains is the content of A’s belief
- B**₃ The proposition that it rains is the content of A’s belief

Contrary to most critics, who have found the introduction, in the step from **B**₂ to **B**₃, of ‘proposition’ problematic, Mulligan’s argument targets the step from **B**₁ to **B**₂. Why think, a Mulligan-inspired question goes, that **B**₁ asserts a *relation* between a believer and some content, made more explicit in **B**₂? Why not take ‘x believes that *p*’ to be a hybrid connective or ‘prenective’ (Künne 2003, p. 68), a member of a class of expressions that ‘are as it were predicates at one end and connectives at the other’ (Prior 1971, p. 19)? This is not just a question about syntax: If ‘that it rains’ is not an isolable component of **B**₁, nothing is predicated of it, and it cannot truly be said to be the content of A’s belief (**B**₂). If there are no such things as contents of beliefs, then Künne’s modest account does not get off the ground, **Mod** either containing an empty singular term or being guilty of illicit reification.

By undermining the need for propositions, Mulligan’s criticism undercuts Künne’s argument for his modest account of truth. In the case of truth-attributions, we have an intermediate step:

- T**₁ It rains
- T**₁’ It is true that it rains
- T**₂ That it rains is true
- T**₃ The proposition that it rains is true

While Mulligan agrees with Künne (and Bolzano) that the step from **T**₁ to **T**₁’ and the concomitant ‘introduction’ of that-clauses is unproblematic, he thinks that the one from **T**₁’ to **T**₂, and its ontological commitment, can be resisted. As we have seen, Künne (2003, p. 351) holds that the first ‘it’ in **T**₁’ is a cataphoric pronoun,

as ‘he’ is in ‘he was wise, the man who drank the hemlock’ and that T'_1 and T_2 are ‘stylistic variants’ of each other (2003, p. 351; 2010b, p. 597). Against this, Mulligan (2010, p. 567, 569) claims that:

- M_1 It is true that it rains because it rains
 M_2 That it rains is true because it is true that it rains
 M_3 The proposition that it rains is true because that it rains is true

While M_1 is accepted by all sides (and Künne (2010b, p. 59), with some qualifications, agrees with M_3), M_2 is contentious. Mulligan (2010, p. 569) gives three arguments for M_2 : (i) that its left-hand side is more complex than its right-hand side, (ii) that it mentions something more problematic and (iii) that nominalisations are secondary with respect to what they are nominalisations of. In support of (i) he claims that the ‘it’ in ‘it is true that ...’ is a dummy term, an expletive pronoun like the ‘it’ in ‘it’s a long way to Tokyo’, that cannot be used in identity statements such as ‘it = that it rains’ (2010, pp. 572–573). To some extent, Künne concedes this point (2011, p. 202, 206). More important, in my view, are (ii) and (iii). The cryptic remark (iii), in this context, is best understood as a preference for less, rather than more, ontological commitments, while (ii) highlights the crucial issue: the alleged difference, between T'_1 and T_2 , in ontological commitment. If really ‘it is true that’ is semantically unbreakable, and does not predicate of anything the property of being true, then the step to T_2 introduces a new, and potentially problematic, ontological commitment. Even though Mulligan defends the unbreakability of ‘it is true that ...’ at some length,⁷ and Künne presents several arguments against this claim,⁸ Mulligan’s real concern, if I interpret him right, is with the *ontological*, not the logical form of T_1 , i.e. with the question whether it commits us to truthbearers. If it does not, then neither does T_2 , in virtue of M_2 (nor does T_3 , in virtue of M_3).

Boghossian (2010, p. 558) raises a similar worry in the following form: even granting that the step from B_1 to B_2 is analytic, why should we think of it as a ‘means of grasping the notion of a proposition’ rather than as an ‘implicit definition of a technical notion—“the content of”—’? In reply, Künne (2010b, pp. 589–590) points out that the reasons usually advanced against the substitutivity *salva congruitate* of ‘that p’ and ‘the proposition that p’ do not apply in the context of B_1 and dismisses them as ‘quirks of grammar’. The worry, however, was not about the expansion of ‘that p’ to ‘the proposition that p’, but about the introduction of ‘that p’ in the first place. Applying Mulligan’s point to B_1 , we do not get B_2 , but rather ‘A’s belief is that it rains’ which is said to express not an identity, but rather some sort of specification à la Pryor (2007) and that ‘that p’ is a ‘less than fully fledged name’

⁷ Mulligan uses a curious strategy to do so, contemplating the possibility that one introduce an explicitly unbreakable truth operator ‘true+’, in analogy with ‘probably’, into English, German or French (2010, p. 576). It is not straightforward to determine, however, what light the possibility of such an operator would cast on the *actual* ‘it is true that ...’. Künne calls the suggestion ‘déroutante’ (2011, p. 212).

⁸ While he agrees that one *can*, as Frege did with his negation stroke, introduce an unbreakable truth-operator into any language, he thinks that this will not correspond to ‘it is true that ...’ (2010a, p. 559; 2011, p. 206).

(2010b, pp. 573–574). If ‘is that’ in ‘A’s belief is that it rains’ does not stand for ‘= the proposition that ...’ but rather for ‘has the content: ...’ (Pryor 2007, p. 234), then B_1 cannot be said to introduce us to the concept of a proposition.

According to Mulligan’s alternative picture—and contrary to Frege, Bolzano and the contemporary orthodoxy—belief is not conceived of as a propositional attitude: to believe that p is *not* to stand in a relation to the referent of ‘that p ’.⁹ Rather, ‘believes that ...’ is a predicate-forming operator which, combined with a sentence, ascribes a property of having a belief of a certain kind¹⁰ or rather describing such a property.¹¹ This does not mean we are home and dry, however. To capture the internal structure of such belief-properties, and to explain the validity of inferences like ‘a believes that p ; b believes that p ; hence, there is something they both believe’, some sort of quantification into predicate-position will have to be introduced: if it is interpreted substitutionally, it makes beliefs language dependent and individuates them too finely,¹² if it is interpreted objectually, it reintroduces objects of belief and it is not clear how it can be interpreted in neither of these ways.

We thus see that Mulligan’s worry really is about ontological commitment. As I understand it, Mulligan’s point is inscribed into a more general strategy of making good on the Husserlian claim that ‘ground’ and ‘explain’ derive from ‘because’ (Mulligan 2004, p. 391). As Correia (2010, p. 254) stresses, the main motivation for the operationalist view is ‘reasons of ontological neutrality: it should be possible to make claims of grounding and fail to believe in facts’.¹³ Analogously, we may understand Mulligan as urging that we may believe in claims of the forms ‘it is true that p ’ and ‘a believes that p ’ without believing in truths or objects of beliefs.

Mulligan’s criticism can thus be understood as urging Künne to go back to his earlier self, who claimed (in 1983, p. 121) that the variable in ‘ $\forall p$ (Otto claims that p & p)’ is what Brentano (1930, p. 76) calls a ‘Fürsatz’, i.e. a pro-sentence, and does *not* incur an ontological commitment (cf. Künne 2008, p. 390).¹⁴ Rather,

⁹ Bach (1997, pp. 222–223) cites Burge (1980, p. 55), Fodor (1978, p. 178) (cited after reprint in Fodor (1981)), Schiffer (1992, p. 491, 505), Soames (1987, pp. 105–106) and Stalnaker (1988, pp. 140–141) as representatives of the orthodox view. I sketch another unorthodox view in my ‘Expressivism about Belief’.

¹⁰ Cf. McKinsey (1999, p. 527) for a recent version of this view.

¹¹ Compare Bach (1997, p. 224) for an argument against what he calls the ‘specification assumption’—‘that belief reports specify belief contents, i.e., to be true a belief report must specify a proposition the person believes’ (1997, p. 222)—based on the Paderewski puzzle: ‘According to the descriptivist view, the condition on the truth of a belief report is that the believer believe a certain thing which requires the truth of the proposition expressed by the ‘that’-clause in the belief report. [...] Just as “Adam bit a certain apple” does not specify which apple Adam bit, although it entails that there is a certain one that he bit, so “Peter believes that Paderewski had musical talent” does not specify which sort of that-Paderewski-had-musical-talent belief he has, although it requires that there be certain one that he has.’ (1997, p. 226)

¹² We will not be able to infer that there is something a and b both believe, for example just on the basis of the truth of ‘a believes that snow is white’ and ‘b croit que la neige est blanche’.

¹³ This is also why Fine (2012) opts for a notion of ground as an essential operator.

¹⁴ In fact, Künne (1983, p. 126) already proposed the modest account and said that it ‘went back’ to Kneale (1972, p. 239) and Mackie (1973, p. 52) (cf. also Mackie (1970, p. 330)). He could also

he then said, it is to be understood as quasi-ontic quantification à la Prior (1971, p. 36, 68) and Lejewski (1970, pp. 174–178). Künne now says that ‘[i]n the years after the publication of (2003) [he] ruefully returned to the view of quantification into sentence-position that [he] had endorsed in (1983): sentential quantification is quantification *sui generis*—it is not quantification over anything, and it is not substitutional quantification either.’ (2010b, p. 586) But what *is* it?

An immediate problem, therefore, is how to understand quasi-ontic quantification. Understanding it as substitutional¹⁵ makes the ‘modest’ account circular, for reasons clearly explained by Künne (2003, pp. 357–359). So how is to be understood? In 2003 (p. 361, fn. 130), Künne agrees with the complaint of Richard (1996, pp. 438–442) that Prior’s view makes sentential quantification ‘unduly mysterious’.

While Mulligan’s point legitimately pressures Künne on this point, it also undercuts the very project. Even if we grant the intelligibility of primitive, *sui generis* ‘quasi-ontic’ quantification, Mulligan’s problem remains: Both \mathbf{B}_2 and \mathbf{T}'_1 do, as Künne (2010b, p. 587, n. 10) says, start from “‘something,” namely a premiss containing a “that”-clause’. If the relational construal of ‘believes’ and the predicational construal of ‘it is true’ are undercut, then these sentences do not have quantificational structure *at all*, quasi-ontic or not. Fortunately for Künne, this broader attack can be answered.

17.2 The Aristotelian Equivalence and The Relational Nature of Truth

To better understand the central issue in question, and to prepare the grounds for my criticism of Mulligan’s criticism of Künne, let us briefly review a claim about which they agree, i.e. \mathbf{M}_1 above. Nothing, we learned on Tarski’s knees, deserves the name ‘truth-predicate’ if it does not satisfy the T-schema (Tarski 1933) or ‘Aristotelian Equivalence’:

(T) It is true that p iff p .

The T-schema is a biconditional, and with all biconditionals, we may ask in what direction (if any) goes the relation of explanatory priority (or, equivalently, which side ‘wears the trousers’). This question may be phrased as the one whether

have mentioned Williams (1969, p. 116), to whom Mackie (1973, p. 60) refers. Williams (1971) subsequently defended the ‘modest’ account against the criticism by Sayward (1970) that it presupposes, rather than explains, propositions, before finally giving it up in favour of nihilism in his (1976), which Künne discusses.

¹⁵ Both Prior and Lejewski say things pointing in that direction, claiming that the meaning of propositional quantification is to be given in terms of ‘specifications’—‘a “specification” being a sentence in which the prefix “for some p ” is dropped, and the remaining variable p replaced by an expression of the sort for which it stands, i.e. a sentence’ (Prior 1971, p. 36)—or their infinite expansions into conjunctions and disjunctions (Lejewski 1970, p. 175). Quine, in the discussion following Lejewski (1970), interprets him this way.

(r2l) It is true that p because p

or rather

(l2r) p because it is true that p

is true. As far as I know, it is common ground that if one of them is true at all, it is (r2l), i.e. M_1 .¹⁶ Some of us want indeed to be able to say things like:

Truth is a matter of reality, which means that if a statement is true, it is because reality renders it true: No sentence is true but reality makes it so... (Quine 1970, pp. 10–11)

It is indeed undeniable that whenever a proposition or an utterance is true, it is true *because* something in the world is a certain way—something typically external to the proposition or utterance. (Horwich 1998, p. 104)

In the first edition of *Truth*, Horwich (1990, pp. 111–112) accepted ‘Snow is white’s being true is explained by snow’s being white’, ‘The fact that “snow is white” is true is explained by the fact that snow is white’, and even “‘snow is white’ is made true by the fact that snow is white’ as ‘trivial reformulations’ of (r2l) and said that the minimal theory could account for it:

In mapping out the relations of explanatory dependence between phenomena, we naturally and properly grant ultimate explanatory priority to such things as basic laws and the initial conditions of the universe. From these facts we deduce, and thereby explain, why for example

(5) Snow is white.

And only then, given the minimal theory, do we deduce, and thereby explain, why (6) ‘Snow is white’ is true. (Horwich 1990, p. 111)¹⁷

Why this falls short of accounting for the “‘correspondance” intuition’¹⁸ has been aptly put by Crispin Wright:

This train of thought, it may well seem, is just beside the point. The challenge was to legitimate the idea of a state of affairs (snow’s being white) being the *source* of the truth of the sentence ‘snow is white’—the idea of a state of affairs transmitting a truth value, as it were, across a substantial relation, the converse of correspondence. [Horwich’s explanation] is, evidently enough, not to explain why ‘snow is white’ is true in terms of *snow’s being white*; it is rather (quite a different thing) to explain why ‘snow is white’ is true in terms of the physical laws and initial conditions which also explain snow’s being white. (Wright 1992, pp. 26–27)¹⁹

While Künne (2003, pp. 156–157) agrees with Wright’s criticism of Horwich, he does not say much about how his own account fares any better. But it does. The general statement of the modest account allows us to locate the explanatory priority

¹⁶ Soames (2008, p. 317) even goes so far to call an instance of (l2r) ‘patently ridiculous’.

¹⁷ In the second edition, Horwich (1998, p. 105) simply says that ‘[s]ince [that truths are made true by elements of reality] follows from the minimal theory (given certain further facts), it need not be an explicitly stated part of it’.

¹⁸ Both Horwich and Wright put scare quotes.

¹⁹ In a rather cryptic comment immediately following the quote, Wright goes on to say that even though this comment is ‘fair’, there is not really a problem at all. Künne (2003, p. 157) also finds Wright’s comments ‘not very illuminating’.

on the right-hand side of (T), by privileging the expressing function of the sentential variable over its denoting one. It is because ‘p’ has the meaning it has that it is true iff p.²⁰

It is not clear, however, how Mulligan’s anemic operator-theory can match this. The question is not so much whether one’s account of truth allows us to *accept* \mathbf{M}_1 —it is rather what resources it does provide to *explain* \mathbf{M}_1 . It is here, I think, that we find a reason to side with Küne against Mulligan on the relative priority of the truth-predicate and the truth-connective. If we do not identify, in \mathbf{M}_1 , an attribution of the property of truth to some truthbearer, we have no possibility whatsoever to explain *its* truth. We simply postulate a brute explanatory connection without earning our right to do so. While arguing in favour of \mathbf{M}_2 , Mulligan was *presupposing* that he is, in the same way as Küne, entitled to \mathbf{M}_1 . But he is not.

But what is so bad about biting this bullet? Indeed, Mulligan (2004) has recently argued from the absence of an explanation for \mathbf{M}_1 to the failure of Husserl’s account of modification. The latter ‘cannot get off the ground’, he says, because

It is obvious that (The proposition that Sam is sad is true because Sam is sad) because... cannot be completed so as to yield a truth by any sentence referring to the essence of what ‘Sam is sad’ refers to. Similarly, no essential ground of the inference [‘Sam is sad. Therefore, the proposition that Sam is sad is true.’] is forthcoming. (2004, p. 407)

In the light of the foregoing, this criticism can be met: what grounds the truth of \mathbf{M}_1 is the essential fact that ‘Sam is sad’ has the meaning it actually has, viz. that Sam is sad. So, even if the T-schema is true because of facts about truth and the nature of truthbearers, this does not yet settle the question of the relation of the explanatory dependence between its left-hand side and right-hand side. Philosophers of a realist persuasion, however, may appeal to other considerations to settle the matter: It is because truth depends on the world, in its broadest sense, that (r21), but not (12r), is true—because only in the first, but not the second case what comes after ‘because’ may serve as a *truthmaker*.

We thus arrive at a double conclusion: Küne is right that an account of truth goes in tandem with an account of truthbearers and right to resist the invitation to do away with this ontological commitment by turning ‘operationalist’. Accepting truthbearers that have their meaning essentially in addition has the advantage that one earns the right to \mathbf{M}_1 , i.e. to an explanation of the Aristotelian equivalence. In order to *explain* \mathbf{M}_1 (and not just to assert it), however, one has to go further and accept a real relation, underwriting the explanation of truth: truthmaking. Rather than trying to have truth without truths, as Mulligan would have it, or having truthmaking without truthmakers, as is Küne’s intent, we should be staunch realists about all four of them: truth, truths, truthmakers and truthmaking. As Mackie has said about his version of the ‘modest account’ (cf. n. 14 above):

The word ‘true’ is here eliminated, but truth is not eliminated but displayed: the *relation* in which it consists is made clear. (1973, p. 52, my emphasis)

²⁰ This is only part of the explanation. For reasons I sketch at some length in my ‘Truthmaking is explanation by things’, I think that ‘truthmaking without truthmakers’ is not truthmaking at all.

Acknowledgements Work on this paper was generously supported by the Swiss National Science Foundation (grant number 126656) and the Coordinación de Humanidades, Universidad Nacional Autónoma de Mexico.

References

- Bach K (1997) Do belief reports report beliefs? *Pac Philos Quart* 78:215–241
- Boghossian PA (2010) Our grasp of the concept of truth: reflections on Künne. *Dialectica* 64:553–563
- Brentano F (1930) *Wahrheit und Evidenz*. Felix Meiner, Leipzig
- Burge T (1980) The content of propositional attitudes. *Noûs* 14:53–68
- Correia F (2010) Grounding and truth-functions. *Logique et Analyse* 53:251–279
- David MA (2006) Künne on conceptions of truth [review of Künne (2003)]. *Grazer Phil Stud* 70:179–191
- Davidson D (1996) The folly of trying to define truth. *J Philos* 93:263–278
- Fine K (2012) A guide to ground. In: Correia F, Schnieder B (eds) *Metaphysical grounding: understanding the structure of reality*. Cambridge University Press, Cambridge, pp 37–80
- Fodor JA (1978) Propositional attitudes. *Monist* 61:501–523
- Harman GH (1970) ‘—is true’ [on Williams (1969)]. *Analysis* 30:98–99
- Hofweber T (2005) Review of Künne (2003). *Philos Rev* 114:136–138
- Horwich P (1990) *Truth*. Basil Blackwell Publishers, Oxford
- Horwich P (1998) *Truth*, 2nd ed., Basil Blackwell Publishers, Oxford
- Kneale WC (1972) Propositions and truth in natural languages. *Mind* 81:225–243
- Künne W (1983) *Abstrakte Gegenstände. Semantik und Ontologie*. Suhrkamp Verlag, Frankfurt
- Künne W (2003) *Conceptions of truth*. Clarendon Press, Oxford
- Künne W (2008) Replies to commentators. *Dialectica* 62:385–401
- Künne W (2010a) *Die Philosophische Logik Gottlob Freges. Ein Kommentar mit den Texten des Vorworts zu Grundgesetze der Arithmetik und der Logischen Untersuchungen I-IV*. Klostermann, Frankfurt
- Künne W (2010b) Replies to Paul Boghossian (2010) and Kevin Mulligan (2010). *Dialectica* 64:585–615
- Künne W (2011) *Vérité sans vérités? Réponse à Kevin Mulligan*. *Philosophiques* 38:195–218
- Künne W (2013) Truth, without Truth? ‘Propositional Attitudes’ without Propositions? Meaning with Meanings? In: Mulligan K, Kijania-Placek K, Placek T (eds) *The History and Philosophy of Polish Logic*, Palgrave Macmillan, Basingstoke, pp 160–204
- Lejewski C (1970) Quantification and ontological commitment. In: Yourgrau W, Breck AD (eds) *Physics, logic, and history*, Plenum Press, New York, pp 173–181. (Proceedings of the International Colloquium on Logic, Physical Reality, and History, at the University of Denver, 1968).
- Mackie JL (1970) Simple truth. *Philos Quart* 20:321–333. (Reprinted, in a substantially revised version, as Mackie (1973, Chap. 2))
- Mackie JL (1973) *Truth, probability and paradox -Studies in philosophical logic*. Clarendon Press, Oxford
- McKinsey M (1999) The semantics of belief ascriptions. *Noûs* 33:519–557
- Mulligan K (2004) Essence and modality. The quintessence of Husserl’s theory. In: Siebel M, Textor M (eds) *Semantik und Ontologie - Beiträge zur philosophischen Forschung*. Georg Olms Verlagsbuchhandlung, Hildesheim, pp 387–418
- Mulligan K (2010) The truth connective vs. the truth predicate. On taking connectives seriously. *Dialectica* 64:565–584
- Mulligan K (2011) Meaning something and meanings. *Grazer Phil Studien* 82:255–284
- Prior AN (1971) *Objects of thought*. Oxford University Press, Oxford (Edited by Peter Geach and Anthony Kenny)

- Pryor J (2007) Reasons and that-clauses. In: Sosa E, Villanueva E (eds) *Philosophical issues 17: the metaphysics of epistemology*. Basil Blackwell Publishers, Oxford, pp 217–244
- Quine WO (1970) *Philosophy of logic*. Cambridge University Press, Cambridge
- Richard M (1996) Propositional quantification. In: Copeland BJ (ed) *Logic and reality: essays on the legacy of Arthur Prior*. Clarendon Press, Oxford, pp 437–460
- Sayward C (1970) Williams' definition of "X is True" (on Williams (1969)). *Analysis* 30:95–97
- Schiffer S (1992) Belief ascription. *J Philos* 89:499–521
- Soames S (1987) Substitutivity. In: Thomson JJ (ed) *On being and saying: essays for Richard Cartwright*. The MIT Press, Cambridge, pp 99–132
- Soames S (2008) Truthmakers? *Philos Books* 49:317–327
- Stalnaker RC (1988) Belief attribution and context. In: Grimm R, Merrill DD (eds) *Contents of thought*. University of Arizona Press, Tucson, pp 150–166
- Sundholm G (2008) *Summa de Veritate Hamburgensis: truth according to Wolfgang Künne*. *Dialectica* 62:359–371
- Tarski A, 1933. *Pojęcie prawdy w językach nauk dedukcyjnych*. *Prace Towarzystwa Naukowego Warszawskiego, Wydział III, nauk matematycznofizycznych* (Travaux de la Société des Sciences et des Lettres de Varsovie, Classe III, Sciences Mathématiques et Physiques) 26. English translation Tarski (1956, 152–278)
- Williams CJF (1969) What does "X is True" say about X? *Analysis* 29:113–124
- Williams CJF (1971) Truth: a composite rejoinder (to Sayward (1970), Harman (1970), and Jones (1970)). *Analysis* 32:57–64
- Williams CJF (1976) *What is truth?* Cambridge University Press, Cambridge
- Williamson T (1999) Truthmakers and the converse Barcan formula. *Dialectica* 53:253–270
- Wittgenstein L (1921) *Logisch-philosophische Abhandlung*. *Annalen der Natur-und Kunstphilosophie* 14:184–261. Cited after *Logisch-philosophische Abhandlung/Tractatus logico-philosophicus*. Suhrkamp Verlag, Frankfurt a M Critical ed by Brian McGuinness and Joachim Schulte
- Wright C (1992) *Truth and objectivity*. Harvard University Press, Cambridge