Truth - from the ashes

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David Lewis has complained about the truthmaker theory as a version of the correspondence theory of truth (Lewis 2001a; Lewis 2001b). His main criticism is that the truthmaker theory, if combined with the redundancy theory, is not a theory about truth, but only »about the existential grounding of all manner of other things: the flying of pigs, or what-have-you« (Lewis 2001a: 279; Lewis 2001b: 603-4). In his view, to call such a truthmaker theory a theory of truth is a »misnomer« (Lewis 2001a: 279). Lewis does not claim that the truthmaker theory is false, nor does he reject it. Indeed, he expresses agreement with its spirit. But of course it would be an embarrassment to any defender of the truthmaker theory to find out that it is not about truth at all. Indeed, if it were not about truth we should »forget about the 'correspondence theory of truth'«, as the title of Lewis' paper suggests. Therefore, it is highly desirable for any adherent of the truthmaker theory to look for an understanding of the truthmaker theory which will let it be about truth, and to see whether anything of what Lewis has said provides an argument against it. We will argue that there is such an understanding and that Lewis has not provided any material for an argument against it.

In our view, the heart of the matter is the relation between the correspondence

¹John Bigelow, himself a friend of the truthmaker theory, seems to have accepted that the truthmaker theory is not a theory about truth (Bigelow 1988: 127). However, we are uncertain if what Bigelow accepts is

theory of truth and the redundancy theory. The question of whether we interpret the correspondence theory along the lines of the truthmaker theory is irrelevant to the main point. Therefore, we will start with a consideration about the relation between the redundancy theory and the correspondence theory in its traditional and most direct formulation. Later we will show that nothing essential is changed if one moves on to a truthmaker theory.

What is the relation between the correspondence theory and the redundancy theory? More specifically, how is one to 'combine' the two? It is certainly highly desirable, if not mandatory, for the correspondence theorist to accept the set of redundancy biconditionals

the proposition that cats purr is true iff cats purr the proposition that pigs fly is true iff pigs fly

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known collectively as the redundancy theory.² The correspondence theorist should not reject these biconditionals, but rather supplement them. Indeed, as Lewis points out, »[i]t is safe to assume [...] that the redundancy biconditionals are joined in alliance with the correspondence theory« (Lewis 2001: 275). That a theory of truth imply all these redundancy biconditionals can be seen as an adequacy criterion for any theory of truth, to echoe Tarski's famous dictum. And one could hold that this a conceptual truth about truth.³ But one need not appeal to Tarski or to conceptual truth at this point. Let us take a look

really Lewis's conclusion. And even if it were, we do not see why one should accept it.

²Of course, here the redundancy theory is not joined with some 'negative closure claim' like whe redundancy biconditionals are all the theory of truth we need« (Lewis 2001: 275). There is no reason to add such a closure clause at this point. The theory that one gets if one adds such a closure claim we will call 'redundancy theory proper'. We will come back to this theory in due course.

³This is, more or less, what Alston (2001) has proposed.

then at what the correspondence theory adds and what happens if it is added.⁴

What the correspondence theory adds is of course a set of biconditionals which

contain the substance of the idea of correspondence to fact. Traditionally, the idea of

correspondence is stated by means of the following schema:

(C) The proposition that p is true iff it corresponds to the facts.

And the set of correspondence biconditionals

the proposition that cats purr is true iff the proposition that cats purr corresponds to

the facts

the proposition that pigs fly is true iff the proposition that pigs fly corresponds to

the facts

...

which are the instances of (C) can be taken collectively as the correspondence theory of

truth. Then, the conjunction of the redundancy principle (taken as a big and open-ended

conjunction of redundancy biconditionals) with the correspondence theory (taken as a big

and open-ended conjunction of correspondence biconditionals) will imply certain double

biconditionals like

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⁴Lewis suggests that both the correspondence biconditionals and the corresponding coherence biconditionals, like 'It's true that cats purr iff it's useful to believe that cats purr', and also the corresponding biconditionals of the pragmatic and epistemic theories of truth, are »meant to be a priori« (Lewis 2001: 275). This is only one way of conceiving of the epistemic status of these biconditionals. Alternatively, one may follow Alston's proposal in Alston (2001) and take the correspondence biconditionals not as conceptual truths but rather as having the status of an (at least partly empirical) theory about the nature of truth, and equally for the biconditionals of the other theories. In any case, our arguments in this paper do

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(1) Cats purr iff the proposition that cats purr is true iff the proposition that cats purr corresponds to the facts.⁵

This, in turn, will of course imply

(2) Cats purr iff the proposition that cats purr corresponds to the facts.

But now, truth has disappeared from the stage. And one might get the impression that 'the combination' of the redundancy principle with the correspondence theory of truth has left us with something which is not about truth at all, but only »about the existential grounding of the purring of cats« (Lewis 2001a: 279).

But wait: The fact that the conjunction of the redundancy theory with the correspondence theory implies something which is not about truth does not show that the conjunction itself is not about truth. Of course, the conjunction of the redundancy theory with the correspondence theory is about truth, as can be seen from (1). The dropping out of truth from (1) by elimination of the middle proposition that contains the truth predicate is a simple and by no means mysterious consequence of the transition from a theory to one of its implications which is logically weaker than it. So, if what is meant by 'combining' the redundancy theory with the correspondence theory is an operation which starts with the two and ends up with a set of biconditionals like (2), as Lewis's discussion suggests, one will be left with something that is not about truth at all. There is nothing about this

not depend on this.

⁵The double biconditional is a three-place connective which is equivalent with the conjunction of two

operation that is wrong. But it does not establish in any sense that the redundancy theory, or the correspondence theory, or the conjunction of the two, is not about truth. Of course they are about truth. And the - unsurprising - fact that the 'combination' of the redundancy theory with the correspondence theory in the sense just explained is not about truth is plainly insignificant.⁶

David Lewis complains: So far, nothing substantial has been said about what the correspondence theorist's 'correspondence to fact' means. But a correspondence theory must say something about this in order to go anywhere beyond the redundancy theory. For if correspondence didn't go beyond redundancy, the two theories wouldn't be distinct. Most importantly, if by 'correspondence to fact' the correspondence theorist meant nothing other than the truth of the proposition, the alliance of the correspondence theory with the redundancy biconditionals would collapse into the redundancy theory. However, if one spells out 'correspondence to fact' by means of the notion of a truthmaker, then the combination of the truthmaker theory with the redundancy theory will not be about truth. So either the correspondence theory becomes vacuous, or it turns into a theory which is not a theory of truth. (Lewis 2001a: 275-277)

The complaint, it seems to us, is only partly fair. In fact there is no dilemma here, since one can avoid the first charge of vacuousness without falling prey to the second charge of missing the topic. Of course, the correspondence theorist cannot accept the identification of 'correspondence to fact' with truth of the proposition. But it is unclear to what else the correspondence theorist is committed. The correspondence theory must deny

biconditionals.

⁶One might say that (2) is still about truth, since it is implicitly about truth. But this is of no help. Anything

the 'negative closure claim' that is usually added to the redundancy biconditionals in order to yield the redundancy theory properly socalled, viz., the claim that »the redundancy biconditionals are all the theory of truth we need« (Lewis 2001a: 275). And this denial can only be upheld by rejecting the identification of correspondence to fact with truth, as Lewis points out. But what else does the correspondence theorist have to say? To us it seems that, in principle, the correspondence theorist could be content with holding that correspondence to fact is something primitive and irreducible. Alternatively, the correspondence theorist could appeal to the notion of a truthmaker in order to spell out 'correspondence to fact' (as will be seen in a moment). At least these two ways are open for the correspondence theorist in order to avoid the first charge of vacuousness. The former version may not be very attractive. But attractiveness is beside the point here. What is important is this: The correspondence theory must deny the 'negative closure claim' of the redundancy theory properly so called and, thus, has to reject the identification of correspondence to fact with truth. This constraint can be satisfied in either of the two ways just mentioned, i.e., by taking correspondence as primitive or by reducing it to truthmakers. Satisfaction of the constraint, however, leaves entirely intact the strategy that has been used above in order to circumvent Lewis's second charge that the correspondence theory, if 'combined' with the redundancy biconditionals, will not be about truth. Satisfying the constraint - in either way - is entirely compatible with the fact that the conjunction of the correspondence theory with the redundancy biconditionals will be a theory about truth. And the fact that the 'combination' of the two in the way mentioned above will not be about truth is simply beside the point- no matter whether correspondence is taken as primitive or spelled out by means of truthmakers.

Let us see, then, how this works if one appeals to the more recent truthmaker theory. It will not make any difference for the argument given above if we spell out correspondence by means of truthmakers. According to the idea of truthmaking, the correspondence theory will have to be stated somehow along the following lines:

(C') The proposition that p is true iff there exists something such that the existence of that thing implies that p.

Conjoining again the redundancy biconditionals, among the corresponding truthmaker double biconditionals we will then have

(1') Cats purr iff the proposition that cats purr is true iff there exists something such that the existence of that thing implies that cats purr.

This, in turn, will imply

(2') Cats purr iff there exists something such that the existence of that thing implies that cats purr.

And again, this is not about truth at all (but about the 'existential grounding of the manner of things', as Lewis puts it). But equally, this way of 'combining' the redundancy theory with the truthmaker theory in no way establishes that the truthmaker theory, or the redundancy theory, or the conjunction of the two, is not about truth. Thus, the general picture is not changed if one accepts some truthmaker theory as one's version of a correspondence theory of truth. The special interpretation that the truthmaker theory gives

to the idea of 'correspondence to fact' is irrelevant for the issue of whether it is, or is not, about truth. The truthmaker theory may be the best way of giving substance to the idea of 'correspondence to fact', as Lewis himself agrees. (It may not entirely deserve the name of a theory of 'correspondence to facts', since there may be non-facts that serve as truthmakers as well. But then, certainly the spirit of the correspondence theory is preserved, and what hangs on whether we allow certain non-facts as truthmakers in addition to facts? We could speak equally well of 'correspondence to reality' instead as the main idea behind the correspondence theory of truth. If that is all there is to the complaint, then we certainly need not follow Lewis's advice to 'forget about the correspondence theory of truth'.) The truthmaker theory may be our best way of avoiding a 'vacuous' conception of facts that identifies them with true propositions, and of avoiding a primitve notion of correspondence. But the important point to note is that it is as much about truth as the original correspondence theory which did not tell us what correspondence consist in. So Lewis's main complaint about the truthmaker theory (combined with the redundancy theory) is unjustified.

To bring out our main point more vividly, we finish the paper by drawing an analogy between (1) and a famous *dictum* from the philosophy of mathematics:

(3) 'We now define the notion [...] of an *effectively calculable* function of positive integers by identifying it with the notion of a recursive function of positive integers [footnote suppressed] (or of a λ -definable function of positive integers).'8

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⁷Note that one need not interpret the truthmaker theory as a version of the correspondence theory. The point remains the same even if one thinks of it as a rival theory.

As is well known, Church's Thesis is not a definition in the strictest sense. Rather, it is intended as a formal reconstruction of the intuitive notion of effective calculability. In fact, it offers two such reconstructions, which (as Church points out) are provably equivalent. Hence, ignoring matters of style and emphasis, the following strikes us as a fair (schematic) reformulation of the above quotation:

f is effectively calculable iff f is recursive and f is effectively calculable iff f is λ -definable.

where 'f' stands for arbitrary functions on natural numbers. However, clearly, (3) and (4) are not only concerned with recursiveness and λ -definability but, crucially, also - in fact, one may say: mainly - with effective calculability. But the 'combination' of the two conjuncts of (4) - in the above sense - will yield (5), which does obviously *not* concern effective calculability:

(5) f is recursive iff f is λ -definable.

In fact, whereas (4) is an epistemological thesis (originating with Church), (5) is a mathematical theorem (due to Kleene). But there is no reason to believe that Church's Thesis (3) is not about effective calculability in the intuitive, pre-theoretic sense. The 'combination' of conjuncts in (4) obviously distorts the original thesis and even shifts the subject-matter. And this, we contend, is obviously what happens when (1) is 'combined' into (2) - a shift in subject-matter, distorting the truthmaker theory.

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⁸ Church (1936), 356; the omitted footnote concerns the origin of the thesis.

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