

Book Review

Truth and Truthmakers, by David M. Armstrong. Cambridge: Cambridge University Press, 2004. Pp. xii + 158. H/b £40.00, P/b £17.99.

David Armstrong has long been in the truthmaking business. From his early arguments against phenomenalism and behaviourism, through his realism about universals to his embracing of states of affairs, truthmaker arguments have played an important role in his campaign in favour of 'a scientific Realism about universals' (*Nominalism & Realism, Universals and Scientific Realism, Vol. I*, Cambridge: Cambridge University Press, 1978, p. xiii). David Lewis said in 1992 that we 'can scarcely exaggerate the importance of the demand for truthmakers throughout Armstrong's writings' and that 'it would be a helpful thing for him to give it a much fuller and more explicit discussion' (*Papers in Metaphysics and Epistemology*, Cambridge: Cambridge University Press, 1999, p. 202). He now has done so. In his latest, admirably clear and highly readable book, *Truth and Truthmakers*, he offers us not just one, but two accounts of the truthmaking relation and its relata. Both are maximalist and necessitarian, in that they provide truthmakers for all the truths and identify the truthmaking relation with (cross-categorical) necessitation: the truthbearer made true by a truthmaker is true in every world in which this truthmaker exists. Armstrong thus defends the following 'theory of the nature of truth': ' p (a proposition) is true if and only if there exists a T (some entity in the world) such that T necessitates that p and p is true in virtue of T ' (p. 17). While I am in full agreement with Armstrong's vigorous case in favour of the correspondence theory of truth in general and the truthmaker requirement in particular, there is much to be said against the rationalist flavour of the two theories he advocates.

On Armstrong's first account, a systematization of the theory presented in *A World of States of Affairs* (Cambridge: Cambridge University Press, 1997), truthmakers are states of affairs: what makes it true that a is F is the state of affairs of a 's being F , non-mereologically composed of the (thin) particular a and the universal F . Unlike the joint existence of its components, the existence of this state of affairs necessitates the truth of the proposition. States of affairs provide truthmakers for negative (Ch. 5), general (Ch. 6), possible (Ch. 7), necessary (Ch. 8), mathematical (Ch. 9), and nomic truths (Ch. 10), and truths about the past (Ch. 11). On the way Armstrong argues against absences, voids, non-actual possible worlds, Platonic numbers,

and powers. Most of the work is done by so-called ‘totality states of affairs’: these have the form ‘Tot(X,F)’, where X is a mereological sum of things, F any property (not necessarily a universal) and Tot the contingent and external relation of ‘alling’ or ‘totalling’ (p. 73). The truthmaker of ‘These are all the men’ is the totalling of *being a man* by the sum of men, the truthmaker of ‘Theaetetus does not fly’ the totalling of *being a property of Theaetetus* by the sum of Theaetetus’ (positive) properties. This idea is then extended to truths of the form ‘All F s are G ’: Armstrong tells us (less clearly on p. 74, more so in his ‘Reply to Keller’, in J.-M. Monnoyer (ed.), *Metaphysics and Truthmakers*, Frankfurt am Main: Ontos Verlag, 2007, p. 160) that ‘All ravens are black’ is made true by the fusion of the totality facts that these are all the ravens and that these are all the black ravens—which contradicts his earlier statement that ‘all ravens are black’ and ‘all non-black things are non-ravens’ (presumably made true by the different totality facts that these are all the non-black things and these are all the non-ravens) ‘have the very same minimal and all other truthmakers’ (p. 25). Because truthmakers have to necessitate the truths they make true, the fusion of the ravens by itself cannot be the truthmaker for ‘all ravens are black’. Necessitarianism commits us to different truthmakers for logically equivalent truths, an uncomfortable consequence.

Why should we believe in necessitarianism? Armstrong is certainly right in claiming that if a makes it true that p , then this is an intrinsic property of a —if it depended on other circumstances, these would have to be ‘added to give the full truthmaker’ (*A World of States of Affairs*, p. 116). The truthmaking relation is, in this sense, internal. But it does not follow that it is internal in Armstrong’s sense, that is, necessitated by its relata (p. 9). Armstrong may have two reasons to think otherwise. If the truthmaker requirement is our guide to ontology and the world is one of states of affairs, it is states of affairs that do the truthmaking and they do necessitate the truth of their corresponding truthbearers. But at least some truthmakers are not states of affairs, if ‘the simplest of all truthmaking relations is that which holds between any truthmaker, T , which is something in the world, and the proposition $\langle T \text{ exists} \rangle$ ’ (p. 6) and our ‘doing of ontological justice to the predicate’ (p. 24) requires universals in our ontology. So at least some claims of the form ‘ $\exists xFx$ ’ are made true by things that are not states of affairs. The second possible reason is Armstrong’s famous distinction between thin and thick particulars. It is this distinction, in my opinion, that makes the ‘cross-categorical unity’ of thin particulars and universals ‘the most puzzling unity of all’ (*A World of States of Affairs*, p. 267). For the thin particular, ‘the particularity of a particular, abstracted from its properties’ (p. 105), is only externally related to all its properties, whereas the thick particular has them by necessity (*A World of States of Affairs*, p. 125). If truthmaking is internal to thick particulars, exemplification of contingent intrinsic properties becomes a mystery. Being unconvinced by both reasons I can think of, it seems to me

Armstrong does not succeed in motivating the step from internalism to necessitarianism.

With the help of the so-called ‘Possibility Principle’, Armstrong extends his account to merely possible truths: if p is true and contingent, then its truthmaker also makes it true that $\neg p$ is possible (p. 85). The totality facts mentioned above make it true that it is possible that Theaetetus flies and that there are fewer or more men than there actually are. Armstrong argues for the Possibility Principle from the principle that truthmaking distributes across entailment and the claim that, for any contingent truth p , p entails that $\neg p$ is possible (p. 84). But this second premise is highly questionable: even if ‘it is of the essence of contingency that the contradictory of a contingent truth be a possibility’ (p. 84), this does not show that p entails ‘it is possible that $\neg p$ ’ given that p is contingent. Even if being unmarried is of the essence of bachelorhood, we cannot say that ‘Sam is happy’ entails ‘Sam is happy and unmarried’ ‘given’ that Sam is a bachelor. In response, Armstrong (‘Reply to Simons and Mumford’, *Australasian Journal of Philosophy* 83:2, 2005, pp. 271–2) points out that the truthmaker T of p is a truthmaker of *its own* contingency and claims that it follows from this that T is a truthmaker for ‘it is possible that $\neg p$ ’. But it does not: necessitarianism implies that the truthmaker of a contingent proposition is contingent, but it does not follow that this contingent truthmaker also makes it true that the proposition in question is contingent. Armstrong says that ‘if [T] is the only minimal truthmaker that p has, then the possible non-existence of [T] must be reflected at the level of propositions by it not being the case that p is true ...’ (2005, p. 272). But this is incompatible with S5, which Armstrong accepts (pp. 84–5; *A World of States of Affairs*, p. 170): if T makes true the necessary truth that it is possible that $\neg p$, then the contingency of T cannot be reflected at the level of propositions: it must be possible that something else than T may also make it true that it is possible that $\neg p$.

Armstrong’s account of necessary truths is simple: they all involve, in his view, internal relations and are thus made true by the entities involved. The truth ‘7 is a prime number’, for example, is necessitated by the number and the property, ‘a predicative tie is not required’ (p. 99). But at least some of these entities, for example some numbers (here cookie-cutting relations between mereological sums and properties) (p. 114) — and some sets (here identified with sums of ‘unit’ states of affairs) (p. 120), are merely possible but still suffice as truthmakers (p. 104). So what makes it true that κ , some merely possibly exemplified large cardinal, is a number, also makes it true that κ is possible. Because κ cannot be combinatorially built out of actually existing things, this truthmaker will be the all-inclusive totality state of affairs. But the very same all-inclusive state of affairs will also make it true that κ is not exemplified, hence does not exist. So the very same state of affairs makes it true both that κ is a number and that κ does not exist.

Totality facts are crucial to Armstrongian truthmaking. But they cannot exist. For if there are such facts, then there is a totality of them (because it is then true to say that there are no more of them than there actually are). But then this ‘grand totality fact’ (p. 75), the ‘limit state of affairs’ (p. 71), the totality of all totality states of affairs has to include itself as a component, which is impossible if a ‘state of affairs is “something more” than the mereological sum of its constituents’ (p. 72). So there cannot be any totality state of affairs (cf. also my ‘A World of Truthmakers’, in J.-M. Monnoyer (ed.) *Metaphysics and Truthmakers*, Frankfurt am Main: Ontos Verlag, 2007, pp. 125–6). Hence, ‘*W*, the whole world, the whole that contains absolutely every thing that exists’ (p. 122) is the biggest thing of all. This mereological sum of all things is quite a weird creature: because states of affairs are ‘ampliative’ (p. 123), it cannot have any property, not even ‘the very abstract [property] of *being a state of affairs*, a highest determinable above states of affairs’ (p. 74). Because there cannot be any totality facts, this property-less thing has to be invoked to provide a truthmaker for ‘Theatetus is not flying’ and it will be its minimal truthmaker. If ‘the candidates for unique minimal truthmakers that a particular philosopher upholds take us into the heart of that thinker’s metaphysical position’ (p. 22), then this Spinozist One should give us pause.

Armstrong’s second theory generalizes his account of necessary truths to all truths: every property is taken to be essential, there is no further need for states of affairs—they are already ‘built into [their] constituents’ (p. 49). Armstrong introduces this second theory of truthmaking by saying that he agrees with Donald Baxter (‘Instantiation as Partial Identity’, *Australasian Journal of Philosophy*, 79, 2001, pp. 449–64) that exemplification is a kind of partial identity (p. 47). But they understand this claim very differently: Baxter takes redness, for example, to be an aspect of red particulars, the red particulars counted loosely or considered to be ‘partially identical’ (‘Loose Identity and Becoming Something Else’, *Noûs* 35:4 (2001), p. 600, fn. 14). In Armstrong, on the other hand, it is the thick particular and the thick universal that (non-mereologically) intersect in a state of affairs (p. 103). Given its constituents, the state of affairs is a free lunch. Because Armstrong’s, but not Baxter’s, aspects are universals, this entanglement between particular and universals spreads: if *a* ceases to be *F*, not only *a*, but also *F* ceases to exist and hence nothing is *F* any more: *all* the previous *F*s pop out of existence (cf. David Armstrong, ‘How Do Particulars Stand to Universals?’, in D. W. Zimmerman (ed.), *Oxford Studies in Metaphysics*, vol. I, Oxford: Clarendon Press, 2004, p. 144). Necessitation becomes cheap: every single black raven makes it true that all ravens are black. If there is a universal property, not even a limit state of affairs is needed (*contra* what Armstrong says on p. 81), for it will exist if and only if all and only the actual things exist. Everything is mirrored within every monad, a very Leibnizian picture indeed.

Armstrong has already given up this second theory ('Reply to Simons and Mumford', 2005, p. 274), retreating to his 1997 picture of the world as one of states of affairs. This escapes some, but not all of the problems mentioned. I think Armstrong should give up necessitarianism and return to his more empiricist past and to his 1978 view of the world as one of particulars and universals, 'in terms of which the world's work is done' (p. 17), connected by a contingent relation of exemplification. Rather than encapsulate them into necessitating states of affairs, we should let the 'totalities speak for themselves' (John Heil 'The Legacy of Linguisticism', *Australasian Journal of Philosophy*, 84:2 (2006), p. 240). There is, after all, 'no getting away from negativity altogether' (p. 70). But to pass from negativity to negative *things* is to succumb to the headless woman illusion, so aptly diagnosed by Armstrong in 1968 ('The Headless Woman Illusion and the Defence of Materialism', *Analysis*, 29:2, pp. 48–9).

The vigour of Armstrong's work is, by itself, persuasive evidence that 'continually to raise the truthmaker question [...] makes for ontological honesty' (p. 43). We must thank David Armstrong for an important book that has dominated recent discussions of truthmaker theory and will undoubtedly continue to do so in the foreseeable future. (Work on this topic has been financed by the Swiss National Science Foundation, project 100011-113688, 'Properties and Relations'.)

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doi:10.1093/mind/fzp111*

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