

## Replies to De Rizzo & Schnieder, Tegtmeier and Vallicella

I am very grateful to Julio De Rizzo & Benjamin Schnieder, Erwin Tegtmeier and William Vallicella for their excellent commentaries. In the limited space available here, my replies often can only begin to scratch the surface of their forceful criticism. But I hope they still are useful. I would also like to thank the editors of *Philosophia* for encouraging and facilitating this book symposium.

### 1. Reply to De Rizzo & Schnieder

De Rizzo & Schnieder present three main points of criticisms of the state of affairs ontology of *Metaphysics of States of Affairs*, which they call ‘Problems I, II and III’. In the first two of these, they concentrate on truthmaking and TM-reducibility, respectively, claiming that my conceptions of them are untenable. In the third one, they focus on fundamentality itself, concluding that states of affairs cannot be fundamental entities. Their critique is integrated in the sense that they consider this third conclusion to already be an implication of the previous two arguments. Following this, they outline and adopt as an alternative a *factalist* ontology in the style of Jason Turner (2016) on which, in their opinion, facts (‘states’) are fundamental. In this reply, I shall respond to the critical parts only.

Problem I takes as its starting point my principle (T), which I use to characterise truthmaking. In their formulation, it is:

(T)  $x$  is a truthmaker of  $P$  iff the existence of  $x$  entails that  $P$  is true

I construe entailment here as classical entailment. As such, I restrict (T) to contingent truths, for two reasons. Firstly, classically, a necessary truth is entailed by any truth, so that the existence of any entity entails it and hence makes it true. For example,  $\langle \text{Socrates exists} \rangle$  entails  $\langle 7 + 5 = 12 \rangle$ , so that, absurdly, Socrates would be a truthmaker of this proposition; and similarly in other cases. Secondly, any truthmaker of any necessary truth would be a truthmaker of all necessary truths, which goes against the notion that truths are made true by the specific thing they are ‘about’. These problems with (T) are well known, and there is nothing very

controversial about limiting (T) to contingent truths. But De Rizzo & Schnieder seem to think that a more unified notion of truthmaking would be required to play as fundamental a role as it does in *Metaphysics of States of Affairs*, in contrast to one that appears to require ‘one central principle for contingent truths, another for necessary ones’, as they put it. While no doubt a general theory of truthmaking ought to be unified in this way, and hence should be a theory of truthmaking of both contingent and necessary truths – call it ‘unrestricted truthmaking’ – I do not think it is needed for my specific purposes.

In any event, De Rizzo & Schnieder, relying on a two-pronged argument by Greg Restall, think that truthmaking as characterised by (T) is associated with a fatal formal problem. They single out the following two principles of truthmaking (which I subscribe to):

DISJUNCTION	For every $x$ : If $x \models P \vee Q$ then $x \models P$ or $x \models Q$
CONJUNCTION	For every $x$ : If $x \models P \& Q$ then $x \models P$ and $x \models Q$

They now claim that (T) in combination with DISJUNCTION completely undermines my notion of truthmaking:

Consider an arbitrarily chosen object  $x$  and an arbitrarily chosen truth  $P$ . The disjunction  $P \vee \neg P$  will also be true, and in fact necessarily so. Hence,  $x \models P \vee \neg P$ . By principle DISJUNCTION it follows that  $x \models P$  or  $x \models \neg P$ . Since  $\neg P$  is false, it is not the case that  $x \models \neg P$ . So  $x \models P$ . Since both  $x$  and  $P$  were arbitrarily chosen, the result generalizes: Every entity is a truthmaker of every truth whatsoever.

If this argument is sound such that every entity is a truthmaker for every truth whatsoever, it is indeed a kind of *reductio* of truthmaking. Someone might suspect that the argument wrongly presupposes that (T) is unrestricted. But De Rizzo & Schnieder claim that the second part of their argument applies *even* when (T) is restricted:

[L]et  $Q$  be a necessary truth, let  $P$  be a contingent truth, and let  $x$  be its truthmaker:  $x \models P$ . Since  $P$  is contingent,  $P \& Q$  is contingent too. And since  $Q$  is necessary,  $P$  entails  $P \& Q$ . So  $x \models P \& Q$ , by the restricted version of (T). Principle CONJUNCTION then yields:  $x \models Q$ . The argument generalizes to any entity and any necessary truth. So we still can conclude that every entity makes every necessary truth true.

However, it seems to me that both parts of this ingenious argument fail, and for the same two reasons. These reasons are closely linked and have in common a charge that the argument does not seem to apply fully to restricted truthmaking if at all. Firstly, since (T), on my view, precisely is restricted to contingent truths and  $P \vee \neg P$  as well as  $Q$  are necessary truths, it is not clear how (T) as it stands can be entertained in combination with the expressions ' $x \models P \vee \neg P$ ' and ' $x \models Q$ ' to begin with. Secondly, the argument may be a kind of *ignoratio elenchi*. Specifically, it may be an argument that fails to support its two purported conclusions, as opposed to some different conclusion(s). In the quoted passages, the purported conclusions are (1) 'Every entity is a truthmaker of every truth whatsoever' and (2) 'Every entity makes every necessary truth true', respectively. If these conclusions follow, then the argument indeed 'trivialises the notion of a truthmaker', as De Rizzo & Schnieder put it. But the conclusions that the argument actually seems to support are only the qualified counterparts of these: (1\*) 'On unrestricted truthmaking, every entity is a truthmaker of every truth whatsoever' and (2\*) 'On unrestricted truthmaking, every entity makes every necessary truth true'. Fortunately for me, I think, neither of these actual conclusions concerns (T) in my limited sense.

With Problem II, De Rizzo & Schnieder again criticise my notion of truthmaking; but they target it against truthmaking-reducibility (TM-reducibility) rather than truthmaking *per se*. TM-reducibility is the chief distinguishing feature of entities that are not truthmakers (or constituents of them), which therefore, on my view, are ontologically unimportant entities. De Rizzo & Schnieder argue that TM-reducibility also reduces to absurdity. Consider, in their formulation, my principle that every entity makes true the proposition that it exists:

EXIST            For every  $x$ :  $x \models (x \text{ exists})$

They claim that this principle immediately spells trouble for me:

For consider an arbitrary existent  $a$ . By principle EXIST,  $a$  is a truthmaker of the proposition that  $a$  exists. So  $a$  is a truthmaker of that proposition. Since  $a$  was arbitrarily chosen, the reasoning generalizes. So every entity whatsoever is a truthmaker; none is TM-reducible.

This simple argument is clearly valid, and it seems to suggest that I am in deep water. Someone might think that a response would be to simply retract EXIST, but De Rizzo & Schnieder claim that this is not an option, on the grounds that this principle directly follows from (T). It seems to me, however, that just as state of affairs ontology should not welcome necessary truths, it should also bar existentials from entry. This appears to be a relatively easy task: ‘existence’ is often considered to be a dummy predicate or a non-genuine property anyway. This may or may not be a correct view, but it seems clear that existentials are an atypical kind of proposition, at least for my purposes. So even if they are nonetheless important for truthmaking in general, they seem rather marginal to my inquiry. And given that (T) already is restricted, and does not profess otherwise, I am unabashed in also excluding existentials from its domain. De Rizzo & Schnieder would no doubt beg to differ, but it seems that the onus falls on them to provide independent reasons that existentials matter to my purposes. This situation may be similar to how in other areas of philosophy independent justification is required in favour of including troublesome but atypical cases, say, including liar sentences in the domain of a theory of meaning for natural language. Some philosophers do not think it is important to include these sentence; other philosophers do – but whoever is right, the onus of proof is on the latter, precisely because they are atypical. In short, on the one hand, I now acknowledge that EXIST spells trouble; on the other, I also hold that it should not have been included in *Metaphysics of States of Affairs* in the first place.

Problem III is about fundamentality. De Rizzo & Schnieder maintain that, on my view, every entity which is a truthmaker is fundamental and that states of affairs therefore are fundamental entities. They attach great significance to this tenet, calling it a ‘cornerstone’ of my state of affairs ontology. As mentioned, they also hold that the above objections to truthmaking and TM-reducibility imply that states of affairs cannot be fundamental. Their third and final point of criticism, focuses directly on fundamentality; they argue that, *independently* of these objections, states of affairs are not, and cannot, be fundamental:

Meinertsen's states of affairs are complexes. They are built up from components. But it seems a general truth to us that whatever builds up another thing is *more fundamental* than that thing, and that a complex entity is *less fundamental* than its components. Hence the components of a state of affairs are more fundamental entities than the state of affairs. But if there is something more fundamental than a given entity then that entity is not really fundamental after all.

Except for entities with mereological existence conditions, such as mereological sums and sets, this is *prima facie* a strong argument: it does indeed seem true that entities that are built from others are less fundamental than them (cf. Bennett 2018) and that the constituents of a complex are more fundamental than it is. Furthermore, De Rizzo & Schnieder strengthen this argument by linking the notion of fundamentality with the notion of ontological dependence, adducing the fact that a state of affairs is ontologically dependent on its constituents. As they point out, this is the case, for example, on a modal understanding of ontological independence, on which  $x$  existentially depends on  $y$  if and only if necessarily, if  $x$  exists, then  $y$  exists. Moreover, as they add, it is a 'one-sided' dependence: in general, the constituents of a state of affairs can exist without the state of affairs existing.

Before assessing this objection, though, one should pause to consider exactly how my states of affairs are 'fundamental'. De Rizzo & Schnieder quote me for saying: 'Intuitively, what is TM-reducible, and hence does not exist at truthmaker level, is not ontologically fundamental'. This claim was an attempt at putting TM-reducibility and the notion of 'existence at the truthmaker level' into a broader perspective by means of a somewhat intuitive sense of ontological fundamentality. With a nod to Joseph Butler, one might call this notion of fundamentality the 'loose and popular sense', as opposed to fundamentality in the strict sense pursued by De Rizzo & Schnieder. My other uses of 'fundamental' in connection with states of affairs also invokes the former, not the latter. It would evidently be untenable to have states of affairs aspire to fundamentality in the strict sense, for precisely the reasons De Rizzo & Schnieder themselves give. States of affairs clearly *cannot* be fundamental in this sense, since, to repeat, (i) things are less fundamental than what build them; complexes are less fundamental than their constituents, and (ii) they are ontologically dependent on their constituents.

Admittedly, I still failed to make sufficiently clear that I do not consider states of affairs to be ontologically fundamental in the strict sense.

Fundamentality in the strict sense is an important matter, as is reflected by the considerable contemporary research interest in the topic. On balance, however, I do not think it is a problem for state of affairs ontology that states of affairs are not strictly fundamental. I am content with the fact that that they are only fundamental in a loose and popular sense. In line with this, I do not think the name ‘*state of affairs ontology*’ for my view is misleading. Nor, incidentally, do I think the title of Armstrong’s *A World of States of Affairs* is.<sup>1</sup> To me, the name is justified by the fact that every TM-irreducible entity is either a state of affairs or a constituent of one.

## 2. Reply to Tegtmeier

In his commentary, Tegtmeier focuses on the notion of unity. This is justified, since this notion plays an important role in *Metaphysics of States of Affairs*. More specifically, the problem of unity is the main problem for state of affairs ontology. The problem of unity is, on my terminology, the problem of complexity for states of affairs. This problem in turn is the question of what accounts for the unity of a complex, i.e. how it is one (Latin: *unis*), despite having many constituents. This problem is challenging for states of affairs, since their existence is not necessitated by the existence of their constituents: this is due to the fact that they are non-mereological complexes. This contrasts with mereological complexes, such as sets and mereological sums, whose existence does follow from the existence of their constituents. (Tegtmeier seems to be sceptical about the distinction between mereological and non-mereological complexes, but I shall not go into this aspect of his comments here.) On my relational internalist approach to dealing with this problem, I posit a unifying relation,  $U^*$ , a unifier, which links the constituents of the state of affairs together in virtue of being related to them by itself.

According to Tegtmeier, Aristotle in his *Metaphysics* distinguishes four ‘meanings of unity’: the connected, the whole, that which is one in number and that which is one in kind. He claims

---

<sup>1</sup> Ironically, from quite early on in his middle period, Armstrong occasionally – and incoherently – construed his states of affairs as if he wanted them to be fundamental in the strict sense. For example, just as De Rizzo & Schnieder consider objects and properties to be mere ‘abstractions’ from the ‘states’ of their factalism, so he would describe particulars and universals as being ‘abstractions’ from states of affairs (see e.g. 1983, p. 108).

that Aristotle discusses the first sense only with respect physical complexes, specifically, organisms and artefacts. However, he maintains that, in effect, this is the sense that I (at least in part) have in mind when I speak of the unity or a unifier of states of affairs. Since he holds that states of affairs are not physical complexes, he rejects my very notion of unity and a unifier of states of affairs. In addition, he claims that I try to join the first sense of unity with Aristotle's third sense, as it were. While he agrees with me that the third sense of unity makes sense for states of affairs, he *a fortiori* rejects my attempt to combine the two senses.

I concur that I join the first and the third sense of unity to states of affairs. But, of course, I disagree that the first one does not make sense for states of affairs. To use Tegtmeier's expression of 'connector' for my unifier, I consider U\* to be a 'connector' that connects the constituents of the states of affairs into one entity. (This combination of the two senses is rather nicely reflected etymologically in the Latin *unus*, as it were.) But Tegtmeier insists that states of affairs (which he often call 'facts') are too dissimilar to physical complexes for this to make sense: 'Seeing facts as bundles that need to be held together like pieces of wood by a string is a technomorphism, I would argue. Physical bundles are much too different from facts to serve as analogues.' However, while I agree that states of affairs are not physical complexes, and in that way are dissimilar to them, I precisely maintain that they *are* similar enough to them for Aristotle's first sense of unity to apply to them. (Or at least that they are similar enough for some highly analogous notion to apply.)

One of the main reasons – perhaps *the* main reason – that I consider states of affairs to be sufficiently similar to physical complexes is that they are concrete. For concreteness is one of the major essential features of both physical complexes and states of affairs. Now, in *Metaphysics of States of Affairs*, I do not commit myself to naturalism in Armstrong's sense, that is, the view that, roughly speaking, every entity is concrete, a view which by definition rules abstract states of affairs. Although I incline to that view, I only endorsed the decidedly more modest thesis that no non-mereological complex can have both abstract and concrete constituents. Given that the particulars in states of affairs are concrete, it follows that the universals must be concrete too, which is why I have a chapter devoted to concrete universals. Note that it does not follow, of course, that states of affairs themselves must be concrete; but to hold that states of affairs are not concrete, despite having only concrete constituents, seems to be a view that confuses them with mereological complexes, which do have this feature.

But, as is well known, quite a few philosophers think that ‘facts’ or ‘states of affairs’ are abstract. For example, aligning Wittgenstein’s notion of facts or states of affairs with his own, Tegtmeier cites Wittgenstein in *Philosophische Grammatik* for emphasising the difference between physical complexes and facts or states of affairs. I think this is entirely correct – for abstract states of affairs, or ‘propositional states of affairs’, as I call them (cf. Betti 2015). Hence, someone might suspect that our disagreement on this point is merely verbal. In fact, given that the term ‘states of affairs’ in this sense has some currency in philosophy, someone might construe Tegtmeier’s claim as a kind of argument from authority that what *I* call states of affairs should not be called that. This is not really a metaphysical argument, however.

A more charitable interpretation of Tegtmeier’s case does not construe it as merely a dispute about the *mot juste*. Instead, it sees it as something like a call for defending the concreteness of states of affairs. On this view, one might claim that the burden of proof is on me to say (more about) how states of affairs are concrete, and how their concreteness compares and contrasts with that of physical complexes. This is a reasonable demand, since states of affairs are after all very controversial entities, unlike physical complexes. Fortunately, I accept and meet this onus in Chapter 8, in the form of my discussion of concrete universals. There are two important lessons of this chapter. Firstly, several spatiotemporal features of universals (and *eo ipso* of states of affairs) indeed differ a lot from those of familiar physical complexes, such as Aristotle’s organisms and artefacts. Secondly, the arguments against them in the literature that I discuss can be shown to be begging the question or committing a category mistake. Ironically, John Heil (2012, p. 13), whom Tegtmeier approvingly quotes in personal communication, is quite right that particulars and universals ‘do not make up states of affairs like stones make up a wall’. Heil mistakenly describes this truth as a reflection of particulars and universals being ‘abstractions’ from states of affairs, in the way Armstrong occasionally misdescribes his own position (see f.n. 1).

Tegtmeier might hold this first lesson against the concreteness of states of affairs, but without independent argument, which he does not provide, it does seem to me to beg the question. In any case, this contrasts with his stance on the second aspect of Aristotle’s first notion of unity – the idea of a connector (U-relation). There he does offer a *prima facie* good argument. He proceeds by sketching Bergman’s argument for a connector (1967) – which Bergman calls ‘the nexus of exemplification’ – and then tries to show that it leads to a vicious infinite regress. He assumes that Bergman’s nexus is similar to U\*. I shall grant him that assumption, although there are considerable differences between them (see Chaps. 9-10).



Bergman contrasts a red spot and a green spot, and first proposes that what distinguishes the two is that the nexus of exemplification connects each spot with its respective colour. ‘But then it strikes him that the presence or absence of the connector is not sufficient at all. What matters is rather the “circumstance” that the connector connects a certain spot with a certain colour or does not do that.’ However, Tegtmeier claims, this leads to a vicious regress:

To assume a “unifying” entity is not enough. The fact that it unifies is also required, more precisely, the fact that the “unifier” /connector connects as a constituent of respective fact its other constituents. It would be some relational fact with the other constituents as relata. This unifying relational fact needs another fact to connect and unify it. So a regress similar to Bradley’s is started that is vicious because the unity (connectedness) of each fact in the series depends on that of the next.

I agree with this diagnosis of a vicious infinite regress. As Tegtmeier says, it arises because the unifier itself does not secure the unifying; it is ‘not enough’. The reason of course is that it is a *contingent* fact that the unifier unifies its relata, since the states of affairs of state of affairs ontology are precisely contingent. On self-relating internalism, this is equivalent to this fact: *that* the U\*-relation relates its relata and thereby unifies the state of affairs is not something it does ‘itself’. To require that it do this would indeed lead to a vicious infinite regress – unless the self-relating of U\* could somehow ground or explain its own grounding or explanation. But, by definition, it cannot. Incidentally, it seems to me that a similar requirement is what Vallicella is in favour of (2002, p 30), and which in his view can be met if God is the unifier of states of affairs. Vallicella not only mentions God, but also ‘our own freedom’ (on a libertarian notion of free will) as candidates for this kind of self-grounding. The requirement of self-grounding or self-explanation is an interesting one, as are Vallicella’s proposed candidates but, as I have pointed out elsewhere, the problem of unity in my sense does *not* include this *explanandum* (2008, pp. 4–5, fn. 6; 2021). Without independent argument that it should, which Tegtmeier, as far as I can see, does not offer, this argument is therefore also begging the question against me.

### 3. Reply to Vallicella

In his commentary, William Vallicella argues that state of affairs ontology faces an insurmountable problem of accounting for non-substantial change of thick particulars, analogous to what basic bundle trope theory does. While I agree that this is a serious problem for basic bundle trope theory, I reject it as an objection to state of affairs ontology, for two reasons. Firstly, in my view it is the bare particular (which Vallicella mostly calls ‘the thin particular’) in a state of affairs that is the subject of non-substantial change, not the thick particular. Secondly, contrary to what Vallicella thinks, I do not construe thick particulars as states of affairs proper.

Non-substantial change is change in the accidental properties of a particular, which persists or endures through the change. One might say that the particular in case is the ‘persisting substratum’ of such change. Vallicella uses my own example of a tomato that changes from green to red. This is a case of non-substantial change, since being green and being red are accidental properties of the tomato. This leads to the problem of accounting for the diachronic identity of the tomato: what accounts for the fact that the tomato before the change is identical to the tomato after the change? Now, of course, this a serious problem on endurantism, as opposed to perdurantism. In *Metaphysics of States of Affairs*, I aimed to remain neutral on the debate between these positions (p. 6), although I probably failed to meet this goal. Nonetheless, in Chapter 3 on trope theory, I sketched the problem as an objection to basic trope theory in the bundle version, mainly because doing so is pretty standard. I agree with Vallicella that the objection is critical. Given this, it is natural to expect the same *explanandum* to be presented to state of affairs ontology.

In the book, I am quick to point out that it is *not* problematic for state of affairs ontology. Vallicella quotes me:

State of affairs ontology has no problem in dealing with the problem of non-substantial change. None of the properties of a particular in a state of affairs – which as we shall see in Chap. 5 is a bare particular – is included in it, as opposed to instantiated by it. Hence, it changes non-substantially if and only if it ceases to instantiate at least one of these properties or whenever it instantiates a new property. (49)

However, he rejects my view that it is the bare particular that is the substratum of non-substantial change. He holds, in contrast, that this it is the thick particular, claiming of the example that ‘it is the green tomato with all its properties that loses one or more of them and becomes a red tomato.’ This move would probably be begging the question if no independent justification were given, but Vallicella does provide a kind of phenomenological argument for it:

[W]e do not see or otherwise perceive the thin particular; we do, however, see and otherwise perceive thick particulars. What we have before us is a tomato that we see to be green and feel to be hard, etc., and that we then later see to be red and feel to be soft, etc.

In the specific context, this argument seems to be two-pronged. Its first part, which is quite explicit in the quoted passage, is that we ‘see and otherwise perceive’ the change to be in a thick particular. Vallicella thinks this is a pre-theoretical datum. The second part, which is mainly implied, is that there is something highly counterintuitive about my contrary view that perceivable change happens in a bare particular, since we do not ‘see or otherwise perceive’ bare particulars. As he puts this part on his weblog: ‘Surely it is strange and unempirical to say that a visible change is a change in an invisible substratum.’ In addition to this argument, he notes in passing that Bergman considered his bare particulars to be instantaneous entities, not persisting ones.

Vallicella nicely summarises his criticism as an aporetic sextad:

- 1) There is no change in intrinsic properties of an ordinary particular over time without a numerically self-same substratum of change. (endurantist assumption)
- 2) The green tomato changes to red. (pre-theoretical datum)
- 3) The green tomato that changes to red is an ordinary particular, a particular together with its properties. (pre-theoretical datum)
- 4) Ordinary particulars are states of affairs. (theoretical claim)
- 5) States of affairs are complexes. (true by definition)

6) Two complexes are the same iff they share all constituents. (theoretical claim)

He then ponders which of (1) through (6) I would reject. He speculates that I would reject (3), which indeed I would, and for three reasons. Firstly, in response to the first part of his two-sided argument, I would point out that since the notion of a thick particular is rather theoretical, it is far from obvious that the thick particular *qua* thick particular can enter in a pre-theoretical datum. It is true that we pre-theoretically consider ordinary objects, such as tomatoes, to ‘come along with’ their non-relational properties. That is, ordinary objects might seem to be thick particulars. However, ordinary objects, in the pre-theoretical sense at issue, are also viewed as enduring, but this is *not* the case for thick particulars *per se*. A thick particular is just a ‘substratum plus properties’ (Armstrong 1989, p. 60). Thus, it is not a pre-theoretical datum that ‘we see and otherwise perceive thick particulars’ through change. To merely assume that thick particulars are enduring is to beg the question against thick particulars on perdurantism.

My reply to the second part of the argument is that some empirically orientated philosophers maintain that we (indirectly) experience bare particulars, see e.g. Armstrong (*ibid.*, p. 61). Moreover, Edwin Allaire (1961) argued that we are acquainted with them in Russell’s sense. Thus, while it is no doubt true that we do not perceive bare particulars in the same way that we perceive thick particulars, it is *not* ‘unempirical’ to hold that they are the substrata of perceivable change. As to Vallicella’s final argument added in passing, I too shall just note in passing that not all philosophers think that Bergmanian bare particulars are, or should be construed as, momentary entities (Angelone & Torrenco 2009)

As it happens, I also reject (4) in the aporetic sextad. At first sight, this might come as a surprise, since I do say that a thick particular is a ‘*prima facie* conjunctive state of affairs’, namely, the state of affairs that is the conjunction of the atomic states of affairs of the bare particular’s instantiation of each of its simple non-relational properties (p. 70). But here the ‘first impression’ is misleading: conjunctive states of affairs are TM-reducible and hence not really states of affairs, but at most apparent states of affairs. (Equivalently, a thick particular can be construed as the bare particular’s instantiation of the conjunctive property that is the conjunction of each of its simple non-relational properties; but conjunctive properties are TM-reducible if and only if conjunctive states of affairs are.)

Vallicella appreciates why I hold this view, in the sense that he aptly formulates the truthmaker argument against conjunctive states of affairs, or ‘thick states of affairs’, as he calls

them. However, he interprets the ontological status of the ‘thick states of affairs’ and thick particulars on this argument completely differently from me: ‘[I]f there is no need for “thick” states of affairs, then there is no need to posit thick particulars in reality... So thick particulars are best regarded as merely apparent.’ But my claim is only that thick particulars are merely apparent *states of affairs*, not that they are merely apparent as such, i.e. merely appear to exist. There is a world of difference between holding that entity *x* is a merely apparent *F* and holding that *x* merely appears to exist. In general, I do not claim that TM-reducible entities are merely apparent entities, i.e. that they are not real. I only claim that they are not truthmakers or constituents of truthmakers. As I like to say, TM-reducible entities are real, but they do not exist at the level of truthmakers. Note that this resembles the ontological status of supervenient entities in Armstrong. He is very clear that what supervenes is not unreal, although it is ‘nothing over and above’ its base (1997, *passim*). This similarity to Armstrong is obscured a bit by the fact that he calls his supervenient ‘states of affairs’ for ‘second-class states of affairs’ (ibid., pp 44–45), implying that states of affairs come in two kinds: supervenient (second class) and non-supervenient (first class). In contrast, on my terminology, all states of affairs are truthmakers, or first class, so I reject any class divide among states of affairs, as well as the analogous distinction in Mellor (1995) between mere ‘facts’ and truthmaking facts (*facta*).

Not being mindful of this distinction between genuine states of affairs and TM-reducible ‘states of affairs’, Vallicella thus wrongly thinks that I deny the reality of thick particulars. He puts forward two objections to such a denial. One is a logico-linguistic argument that, roughly, the reality of the thick particular is presupposed by the identity of ‘its’ conjunctive properties; the other is, again roughly, that while one may well deny the reality of the thick particulars in toy examples, such as tomatoes, surely it is implausible to reject the reality of thick particulars at the microphysical level. Both objections are agreeable arguments in themselves. But, to repeat, I do not deny the reality of any thick particulars. In short, I maintain that both (3) and (4) are false.

## References

- Allaire, E. B. (1961). Bare particulars. *Philosophical Studies*, 14, 1–8.
- Angelone, L. & Torrenzo, G. (2009). Bare particulars and persistence in Bergman. In B. Langlet & J.M. Monnoyer (Eds.), *Gustav Bergman: Phenomenological realism and dialectical ontology* (pp. 139–156). Berlin: Ontos Verlag.
- Armstrong, D. M. (1983). *What is a law of nature?* Cambridge: Cambridge University Press.
- Armstrong, D. M. (1989). *Universals: An opinionated introduction*. Boulder: Westview Press.
- Armstrong, D. M. (1997). *A world of states of affairs*. Cambridge: Cambridge University Press.
- Bennett, K. (2018). *Making things up*. Oxford: Oxford University Press.
- Bergmann, G. (1967). *Realism: A critique of Brentano and Meinong*. Madison: The University of Wisconsin Press.
- Betti, A. (2015). *Against facts*. Cambridge, Mass.: MIT Press.
- Heil, J. (2012). *The universe as we find it*. Oxford: Oxford University Press.
- Meinertsen, B. (2008). A relation as the unifier of states of affairs. *Dialectica* 62, 1–19.
- Meinertsen, B. R. (2018). *Metaphysics of states of affairs: Truthmaking, universals, and a farewell to Bradley's regress*. Singapore: Springer.
- Meinertsen, B. R. (2021). Self-relating internalism: Reply to Vallicella. *Metaphysica* 22, 123–31.
- Mellor, D. H. (1995). *The facts of causation*. London: Routledge.
- Turner, J. (2016). *The facts in logical space*. Oxford: Oxford University Press
- Vallicella, W. F. (2002). Relations, monism, and the vindication of Bradley's regress. *Dialectica* 56, 3–35.