States of Affairs and Fundamentality

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§1. Introduction

In 1997, David Malet Armstrong painted us a grand picture of a world of states of affairs. Bo Meinertsen's *Metaphysics of States of Affairs* stands firmly in Armstrong's tradition. But whereas Armstrong focussed on showing what philosophical work states of affairs can do for us, Meinertsen's book continues the work by turning his attention to the very nature of states of affairs and filling in a background ontology in the spirit of Armstrong's work. Thus the book contains an in-depth discussion of the metaphysics of states of affairs, motivating and developing the author's own theory. In course of the rich study, Meinertsen assesses the existing scholarly debate, works out underdeveloped elements from that debate, and contributes several original ideas which render his account a unique one. His monograph thereby becomes a worthwhile read for any philosopher working in Armstrong's tradition. For other readers the book certainly has something to offer too, although in our view to a more limited extent. The reason is that Meinertsen starts out with a good number of substantial assumptions that are not justified in that much detail. Given his goals and priorities, this procedure seems hardly objectionable; but it means that someone who does not share the initial assumptions will have to dig a bit deeper to find out which of Meinertsen's ideas might be valuable in a different framework as well.

Enough being said by way of introduction. In what follows, we will present some cornerstones of Meinertsen's position (\S 2), raise problems concerning his take on the ontological fundamentality of states of affairs (\$3), and sketch an alternative position that in our view deserves attention (\$4).

§2. Meinertsen's States of Affairs

How does Meinertsen conceive of states of affairs? Here are four cornerstones of his account:

- (i) States of affairs are *complexes*; standard examples of states of affairs are composed of an object and a property (p.1f. *et passim*), plus a bit of chewing gum to stick them together: a binding relation which not only binds the object and the property together, but also binds them and itself together (ch. 9). (There are other types of states of affairs as well, as e.g. higher-order states of affairs composed of two properties, but we do not need to go into that here.)— We will henceforth designate the state of affairs that *a* has *F-ness* by '<*a*, *F-ness*>'.
- (ii) States of affairs are *non-mereological* complexes, where this title is meant to convey a message concerning the *existence conditions* of a state of affairs, namely that they do not boil down to the mere existence of its components (p. 7ff.). Thereby states of affairs differ from *mereological sums* with the same parts: that *a* and *F-ness* exist ensures that their mereological sum exists; but it does not ensure that the state of affairs <a a, F-ness > exists. The latter only exists if the object *a* instantiates the property *F-ness*.
- (iii) States of affairs are *truthmakers* of corresponding predications (ch. 2). Let's assume it is true that Trump is dumb. This truth, so Meinertsen, requires a truthmaker, an entity which makes it true. The truthmaker in question is a state of affairs, more specifically: <Trump, dumbness>.—Though note that Meinertsen does not think there is a one-onecorrespondence between truths and states of affairs; a truthmaker of a disjunction, for instance, is not a disjunctive fact but instead whatever makes one of the disjuncts true. Also, some truths are directly made true by objects, as for instance the truth that Angela Merkel exists, which is made true by Merkel herself.
- (iv) States of affairs are *ontologically fundamental* entities. This contrasts states of affairs with entities that Meinertsen calls truthmaker-reducible, or for short: TM-reducible. An entity

a is TM-reducible iff *a* is not a truthmaker of any truth (p. 34). And he holds: 'Intuitively, what is TM-reducible, and hence does not exist at truthmaker level, is not ontologically fundamental.' (p.34; compare also p. 36.) Conversely, he conceives of things that do exist at truthmaker level as ontologically fundamental.¹

§3. Problems

We think there are some problems with Meinertsen's take on the ontological fundamentality of states of affairs.

PROBLEM 1. What, in Meinertsen's view, is truthmaking? Central to his understanding is the following principle (p. 28):

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

(Where a proposition P entails a proposition Q iff it is necessary that if P is true, Q is true too.)

While Meinertsen accepts this as a core principle of truthmaking, for two reasons he leaves open whether (T) provides a proper definition of the notion of truthmaker. His first reason has nothing to do with (T) in particular: he is generally sceptical about the definability of truthmaking, since he thinks it may be a notion too fundamental to be defined. His second reason specifically targets (T): since the concept of entailment involves that of truth, he thinks that if we understand (T) as a definition, it would be a circular one (p. 28).

Let us note in passing that we find both points unconvincing, basically for the same reason: the concept of truthmaking is compositional, involving the notion of *making* and the notion of *truth*.

¹ Note that we slightly paraphrased Meinertsen's definition of TM-reducibility. Strictly speaking, his own formulation sounds as if TM-reducibility was a relational notion, relativized to a particular proposition. On such a notion, an entity might be TM-reducible with respect to one proposition while not to another. But this sort of relativity would seem problematic for Meinertsen's way of relating TM-reducibility to ontological fundamentality and non-fundamentality, which are non-relative notions, and for the way he contrasts TM-reducible entities with those that *exist at truthmaker level* (pp. 34, 36, *et passim*). This is why in the text above, we stated a non-relational notion of TM-reducibility.

For clearly, in the same sense in which statements can be made *true*, they can be made *false*; and other things can also be made *certain ways*. Someone's courage can make her virtuous, someone's deeds can make her famous, etc. So, truthmaking is a compositional notion; but every compositional notion is definable (even if the definition may sometimes not go very deep). This is why we find Meinertsen's general scepticism concerning the definability of truthmaking unfounded. And although this is seldom made explicit, the controversy about how to define truthmaking clearly is a controversy about how to define the *making*-component in *truthmaking*. Available definitions of truthmaking do not aim at defining the notion of truth; instead, that notion is presupposed by the definitions. Hence, Meinertsen's circularity worry seems misplaced to us.

Anyway, although Meinertsen does not regard (T) as a definition, the principle still is central to his conception of truthmaking, though he holds that maybe '(T) should be restricted to contingent truths' (p. 29). His reason is that otherwise every entity would count as a truthmaker of *every* necessary truth, given that we work with the classical notion of entailment on which a necessary truth is entailed by any truth whatsoever. This is indeed a well-known problem of (T); and while some philosophers are willing to bite the bullet and accept that necessary truths are made true by everything, many think that (T) is in need of some amendment or replacement.

As we said, Meinertsen concedes that something may have to be done about (T), and his suggestion is to restrict it to contingent truths. But insofar as (T) seems essential to his understanding of truthmaking, any such restriction would raise some vexing questions, especially: Is the concept of truthmaking piecemeal or disjunctive, requiring one central principle for contingent truths, another for necessary ones? Could such a notion still play the fundamental ontological role it should play according to Meinertsen?

In any case, the problem Meinertsen sees with (T) is not the only one around. For Meinertsen also holds that a truthmaker of a disjunction must make of one of its disjuncts true, while a truthmaker of a conjunction must make both conjuncts true (pp. 31f.):

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DISJUNCTION For every x: If
$$x \models P \lor Q$$
 then $x \models P$ or $x \models Q$

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

But as Greg Restall (1996: 332ff.) showed, the combination of principles (I) and DISJUNCTION spells disaster: Consider an arbitrarily chosen object x and an arbitrarily chosen truth P. The disjunction $P \lor \neg P$ will also be true, and in fact necessarily so. Hence, $x \models P \lor \neg P$. 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. This trivializes the notion of a truthmaker. And if every entity which is a truthmaker is fundamental, as Meinertsen holds, this also trivializes the notion of fundamentality: Every entity is fundamental. Clearly, truthmaking and fundamentality could not do the important work that Meinertsen assigns them anymore.

Importantly, this problem cannot be solved by restricting (T) to contingent truths, i.e. by Meinertsen's favourite response to the problem with (T) that he himself recognized. For, let 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. In combination with DISJUNCTION we then reach the trivialization result that every entity makes *every* truth whatsoever true (the reasoning in this paragraph is taken from Restall 1996, 334f.).

Now all of the above does not mean one has to simply abandon (T). Restall himself shows how the principle can be upheld if understood in terms of a notion of relevant entailment instead of classical entailment (on which we relied in the above). In a footnote (fn. 8, p. 29), Meinertsen actually mentions such a move as an alternative to his proposal of restricting ENTAIL. But it is not a mere alternative; it is the way he has to go, if he wants to stick to both ENTAIL and DISJUNCTION. PROBLEM II. Let us turn to a second, independent problem. Meinertsen accepts the following principle:

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

Unfortunately, though, EXIST immediately spells trouble for Meinertsen's program of distinguishing between TM-reducible and TM-irreducible entities. 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. Hence every entity is fundamental.

This is a serious problem for Meinertsen's idea of TM-reducibility. It is no option for Meinertsen to simply retract EXIST. This principle directly follows from his central principle about truthmaking, i.e. principle (T). Nor would it help to spell out (T) in terms of a relevant entailment; EXIST would still follow.

Finally, note that Meinertsen also holds that every entity makes true that it is identical to itself; and any two entities make true that they are not identical to each other (p. 30). Which is, again, to say that every entity is a truthmaker, while none is TM-reducible.

PROBLEM III. The last problem we want to mention is independent of the first two problems; it is also independent of Meinertsen's truthmaking framework. Instead it directly concerns his contention that states of affairs are fundamental entities.

For a start, recall that 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. So in our view, the fact that Meinertsen's states of affairs are built up from components already settles the question whether those states are fundamental entities—they are not.

To further bolster our view, we might point out that a state of affairs seems to be ontologically dependent upon its components. It is so, for instance, on a modal understanding of dependence: necessarily, if the state of affairs exists, its components exist as well (on modal definitions of dependence see Simons 1987: ch. 8). Furthermore, the modal dependence is one-sided: exceptional cases set aside (e.g. a thing instantiating its essential properties), the components of a state of affairs can exist without the state of affairs existing. Thus the components of, say, the state of affairs <Socrates, wisdom> could have existed without the state of affairs (if Socrates had never acquired wisdom). But if a contingent entity stands in a relation of one-sided ontological dependence to other contingent entities then the former entity hardly qualifies as a fundamental one.

We anticipate a certain objection: In the debate about ontological dependence, different definitions or senses of dependence are distinguished (for two survey articles, see e.g. Correia 2008, Schnieder 2020). And modal senses of dependence are often regarded as somewhat weak notions that cannot do all the work that a notion of dependence could ideally do. Such skepticism can certainly be mobilized against the claim that whenever x existentially depends on y, in a modal sense of 'depend', x is less fundamental than y. Indeed, there are clear counterexamples to this claim. The simplest results from the fact that on a straightforward modal understanding of existential dependence (i.e. x depends on y iff necessarily, if x exists so does y), every entity depends on itself. Clearly this does not show that every entity is less fundamental than itself. Or consider abstract objects which arguably exist of necessity. Everything existentially depends on such objects in the modal sense of dependence; Meinertsen, for instance, modally depends on the number 42. Does this mean that he is less fundamental than the number? Hardly. In short, we agree that modal existential dependence in general does not entail non-fundamentality. But in the case of states of

affairs we have a more specific sort of modal dependence: a *one-sided* modal dependence obtaining between *contingent* entities. It is this sort of dependence that we take to be at least a good indication of the non-fundamentality of the dependent entity.

But whether this is a reliable indicator or not, we can also make our case with a stronger sense of ontological dependence. Consider the notion of essential dependence on which an entity x depends on another entity y iff y features in the very essence of x (Fine 1995). With it, a state of affairs still qualifies as dependent on its components; for it indeed seems part of the very nature of, say, that state of affairs <Socrates, wisdom> that it contains Socrates and wisdom as its components. But if the essence of a thing is defined in terms of other things then those other things seem more fundamental in the order of being. And hence the dependent thing will not be a fundamental entity.²

Time to wrap up. We laid out three problems for Meinertsen:

- PROBLEM I: Thesis ENTAIL, understood in terms of classical entailment, and thesis DISJUNCTION together result in a trivialisation of truthmaking: everything is a truthmaker of every truth. As a corollary, this hollows out the idea of TM-reducibility and correspondingly leads to a trivialisation of fundamentality, as Meinertsen understands it: Since everything is a truthmaker, everything is fundamental.
- PROBLEM II: The same result can also be reached by the principle that for every x: x ⊨ (x exists). This principle, which is inherently plausible and explicitly endorsed by Meinertsen, immediately entails that every entity is a truthmaker. Thus it renders Meinertsen's notion of TM-reducibility empty and thereby trivializes his notion of fundamentality. And whereas PROBLEM I could be countered by resorting to a non-classical notion of entailment, the same manoeuvre would not seem to work here.

² A referee notes that Meinertsen actually does not say very much about the notion of fundamentality and might have a non-standard understanding of it in mind, although he should then have made this explicit. – We agree.

 PROBLEM III: Independently of both previous problems, the complexity of states of affairs seems to speak against their fundamentality. A state of affairs is built up from components and is ontologically dependent on them. But that seems to imply that the components are more fundamental elements in the order of being—which would mean that states of affairs are *non*-fundamental.

§4. Factalism to the Rescue

There are certainly a number of ways for Meinertsen to react to the problems pointed out in §3. On the one hand, we expect that there are possible reactions that stay true to the central tenets of Meinertsen's ontology of states of affairs. On the other hand, there certainly are solutions that give up parts of this ontology. While Meinertsen himself will naturally prefer to explore solutions of the former kind, we ourselves are not convinced the ontology is best preserved. If one wants to assign states of affairs a truly fundamental status in one's metaphysical theory then we wonder why such facts should be complexes. There is an alternative states-based metaphysics which, in our view, deserves to be taken seriously (while it is not taken into account by Meinertsen when he considers rivals to his preferred ontology in ch. 1 of his book). Of course, we do not think our short remarks will swerve Meinertsen from his overall course; but we think they may provide him with an opportunity to further explain the motivation of certain aspects of his theory.

Meinertsen provides us with a picture of a world of states of affairs *and their constituents*. The view we will now consider is more parsimonious: states-of-affairs are entities without constituents and bereft of any internal structure. Moreover, reality consists of nothing but states of affairs. Objects and properties, i.e. the constituents of Meinertsen's states of affairs, do not really exist. Only unstructured states of affairs or facts do (following Jason Turner we label this view *factalism*).

Objection: This view can be dismissed straightaway. That there are objects and properties is a most fundamental part of our experience of the world. Hence, any theory that denies the existence of

objects and properties should be rejected. *Reply*: Not so. Metaphysics is a theory of reality which must explain two things: (i) what reality is like, (ii) how reality gives rise to the appearances we experience. The latter task in particular involves explaining how ordinary statements, phrased in terms of how things appear to us, can be true or false even if reality radically differs from appearance. What metaphysics is under no obligation to do, however, is to treat any specific aspects of the appearances as part of reality. So, what factalism must explain is how a reality consisting of unstructured facts can give rise to the appearance of objects and properties; and in particular how the truth of ordinary predications such as 'Socrates is wise' can be accounted for. If a satisfactory account along these lines is given, it is no further objection to the view that it denies the reality of objects and properties.

With the initial objection out of the way, let us turn to the details of factalism; more specifically, the details of Turner's (2016) version of factalism.³ As we said, factalism must present an account of reality that explains the appearances, particularly how our ordinary statements that represent *objects* as having certain *properties* can be true or false given that reality itself does not contain objects and properties. This task is all but trivial. Take for instance truths about Socrates, e.g. that he is wise, human, and Greek. As Meinertsen's theory, factalism holds that they are made true by certain facts. But these facts neither contain the object these statements are about nor the properties ascribed to it; so the pressing question is why these facts are responsible for the truth of *these statements* and not for the truth of, say, the statements that Trump is dumb, that London is a city, and that Katie Sketch is a singer. Given that there is no object in reality to which we refer by the name 'Socrates', it may seem like a felicitous coincidence that we use the same label 'Socrates' in the presence of exactly *these* facts, and not others.

Now factalism approaches its central task guided by the following idea: While facts have no *internal* structure, they are related to each other along different dimensions. The resulting configuration

³ For a different version of factalism see Rayo (2017).

gives rise to our conception of objects and properties, which are in fact *abstractions* from facts based on this configuration.

The state of affairs that Socrates is wise, for instance, stands in a specific relation to the state that Socrates is human, or also to the state that Socrates teaches Plato, in which it does not stand, for instance, to the state that Aristotle is wise. But it also stands in a specific relation to the state that Aristotle is wise, in which it does not to the state that Socrates is sitting. Once these relations are properly characterised, usual object and property talk can be accounted for, roughly, as pertaining to collections of states standing in some of those relations to one another.⁴

Now we just referred to the factalist's states via 'that'-constructions couched in natural language, e.g. 'the state that Socrates is wise'. This is a helpful tool to present the account; but it runs the risk of understating the challenge the factalist faces. For, again, to put ourselves in the factalist's shoes we must imagine starting with a pool of states devoid of any components we might count on to characterise them. That we use these and that labels for these and that states is supposed to be earned, not relied upon. The task is to endow the space of states with enough structure to account for the coordination they must exhibit if they are to function as the basis of abstraction of objects and properties.

Turner's idea is to consider states-of-affairs as bearing certain relations that are tracked down by our labelling patterns. To characterise these relations, we conceive of states as *points* disposed in different quasi-geometrical structures. ('Quasi' since no metric structure, no notion of distance between points, is in play.) Relations between facts get represented by geometrical relations

⁴ Note that talk of *relations* serves expository purposes only. It should not mislead one into thinking that the factalist must countenance relations as entities in themselves. In the official formal factalist theory, no reference is made to relations; rather, facts are ordered using primitive predicates (see below), which as such carry no ontological commitment. See Turner 2016, pp. 22, 57.

between these points.⁵ Though the 'official' account dispenses with object and property talk, we shall speak unofficially for heuristic reasons.

Let us first illustrate the idea with a simple monadic predicate, say 'is wise', and suppose our 'domain' contains only three members, Socrates, Plato and Aristotle. The *quality space* of the property of *wisdom* looks thus:



Aristotle Plato Socrates

Each point corresponds to a state-of-affairs, namely, that Aristotle is wise, that Plato is wise, and that Socrates is wise. Notice that the names are only part of our heuristics. To remain faithful to the factalist, the states themselves are to be conceived merely as represented by the points thus related. Whenever a state is such that it is expressed by a sentence p, and q is derivable from p, say that the state *licenses the derivation* of q. Sentences whose derivation is licensed this way mark aforementioned patterns between the states. The states in the example, for instance, license the derivation of 'There is someone who is wise'.

Under the same assumptions, the quality space of the relational property of *teaching* looks thus:

⁵ Turner argues at length against a simpler version of factalism couched solely in terms of similarity relations between states. See Turner 2016, pp. 57ff.



Intuitively, the lowest dot to the left represents the state that Aristotle teaches himself; the dot to the right that Plato teaches Aristotle; the dot at the center that Plato teaches himself, and so on. Notice that in this interpretation a choice is made between the horizontal axis or the vertical axis listing the individuals in the position of teachers or pupils; the relations between the states, however, are left untouched by this choice. This way, lines correspond to argument places in the corresponding predications. Each of the states on the lowest horizontal line licenses the derivation of "There is someone who teaches Aristotle'; each of the states on the low-high diagonal through the center licenses the derivation of "There is someone who self-teaches', and so on.

The number of axes in (the geometric representation of) a quality space corresponds to the predicate's arity: a line (unary), a square (binary), a cube (ternary), and so on. All lines are straight, and points in a quality space are accessible to one another in the sense that one might get from one to the other 'via' the lines. In that case, we say points are *connected*. Intuitively, connected points represent states involving the same quality. *Quality spaces* are maximal collections of connected points, and build the basis for the abstraction of properties.

To get at the objects, in turn, we need a way to specify a geometric structure that picks out all and only the states, in every quality space, that intuitively involve one and the same object. To this end, we first introduce the notion of a *subspace*. In a two-dimensional quality space, as in our second example, every point is located in two lines. Similarly, in a three-dimensional quality space, every point is located in three planes, and so on. (In general, every point in a n-dimensional quality space lies in-1 dimensional structures. In a one-dimensional quality space, as in our first example, every point lies in a 0-dimensional structure, namely, a point.) These substructures define the *subspace of a point*. Notice that some subspaces coincide with the collection of all the states involving the same individual. Objects correspond, then, to collections of subspaces, one for each quality space. Their corresponding structures are labelled by Turner *hypersurfaces*.

But not every collection of subspaces corresponds to a hypersurface, that is, to all and only the states intuitively involving the same object. In our second example, for instance, the subspace associated with the point on the right of the name 'Plato' on the vertical axis does not coincide with states involving any single individual (the states that Aristotle teaches Socrates and that Plato self-teaches, for instance, will be both in this subspace). This suggests that different hypersurfaces must not share lines with respect to two-dimensional quality spaces; with respect to three-dimensional ones, they must not share planes, and so on.

What about non-atomic states-of-affairs? As in more traditional non-factalist views, *factalism* need not welcome all sorts of states-of-affairs (cf. Meinertsen 31ff.). Indeed, with some liberty in truthmaking, a perspicuously economical version makes do with only atomic facts, that is, facts making only atomic sentences and their negations true. Disjunctive facts might be dispensed with via principle DISJUNCTION above: a true disjunctive proposition, say that Socrates is wise or Trump is wise, for instance, is plausibly made true simply by the fact that Socrates is wise. In turn, a conjunctive proposition, say that Socrates is wise and Trump is dumb, might be made true by two facts taken jointly (their 'plurality'), namely the fact that Socrates is wise and the fact that Trump is dumb, with no need to accept a complex fact composed from them. Quantifications are accounted for in the tractarian way: a universally quantified proposition is reduced to the conjunction of its instances; an existentially quantified proposition to the disjunction of its instances (both possibly of infinite length). As usual, vexed issues await us in the details—for

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instance, with respect to identity, or universal generalizations (Turner pp. 43ff.)—but we assume these can be worked out.

The factalist geometry developed by Turner turns, then, mainly on two kinds of structures: *quality spaces* and *hypersurfaces*. The former build the basis for abstraction of properties; the latter for abstraction of objects. These structures are axiomatically characterized with the aid of two primitive predicates on points: a binary relation R, such that two facts bear this relation whenever, unofficially, they share an object. Hypersurfaces are then, roughly, maximal collections of pairwise R-related points (p. 101). And a 4-ary relation S—such that xySwz whenever x and y are colinear; w and z are colinear; and the corresponding lines are parallel to one another—, from which one might define connection between points, and quality spaces as maximal collections of connected points (p. 86). Turner proves a representation theorem, i.e. that one might go back-and-forth, up to isomorphism, between factalism and usual objects-properties structures. (We do not enter the formal details here; see Turner 2016, ch. 3.) In essence, this shows that if states stand in these two relations, satisfying the axioms specified, one can retrieve object and property talk (and vice-versa). Though, fundamentally, there are only states of affairs, the factalist might still make good sense of the world of appearances inhabited by objects and properties.

Does factalism fare better than Meinertsen's own view with respect to the problems above? We believe it does. For one, factalism does not fall prey to problems II and III.

Start with the latter: the state postulated by factalism are not built up from components, hence they are not ontologically dependent on them. They are the fundamental entities in the theory (and moreover: the only entities that really exist).

Problem II is also neutralized. Principle EXIST can be upheld in factalism: since nothing really exists apart from states of affairs, nothing apart from states of affairs is a truthmaker. Strictly speaking, Meinertsen's notion of TM-reducibility will still be empty, since there are no entities any more to which the notion can apply. However, one could formulate a substitute playing a similar role: we can still talk about the world of appearances and the objects that appear to exist; and we can say of them that they are TM-reducible in the sense that the truths about them are made true by other things, namely unstructured states of affairs.

But factalism has further noteworthy points in its favour. Consider the principle of *Lewis's Razor*, which Meinertsen accepts, according to which 'of two competing theories that explain the explananda equally well, we should choose the one that requires the smallest number of ontological categories, kinds or types' (Meinertsen 2020: 5). Factalism clearly scores better than Meinertsen's own theory with respect to this principle. Being a one-category theory that can still explain the explananda (i.e. the data from the world of appearances), it yields the best bang for the buck. Moreover, a number of long-standing problems that troubled many philosophers, including Meinertsen himself, such as the unity problem, Bradley's regress, and similar ones, simply do not arise for the factalist: for her states, no mysterious gum is needed in order to bind components together. After all, states have no components.

In conclusion, Meinertsen sets out to devise an ontology in which states of affairs play a fundamental role; but he undermines this goal, in our view, by making them complexes built up from objects and properties. In factalism we found a promising alternative for him that renders states truly fundamental.

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