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The Existence and Reality of Negative Facts

Abstract: The problem of the existence of negative facts as truthmakers for negative propositions was introduced by Bertrand Russell in 1918. In the debate since then, most writers have tended to reject their existence, Russell himself being the most conspicuous exception. Two other strategies have been offered. The first, usually called incompatibilism, actually goes back to Plato, whereas the second, the totality fact theory, was introduced by D. M. Armstrong in 1997. The aim of this paper is to show the problematic character of some of the presuppositions shared by all three of the strategies mentioned above - presuppositions that figure in most of the current discourse on the subject. First, the concept of a negative proposition is not clear: one needs to make a distinction between grammatically negative propositions and "ontologically" negative ones. Second, it turns out that propositions may be ontologically negative in many ways, each of which may call for a different specific analysis with respect to the question of the existence of what would be the corresponding negative facts. Third, at the bottomline, it is shown that we need a concept of the existence or reality of facts that is not derived solely from their function as truthmakers. Such a concept, it is argued, is furnished by a theory that I shall call "ontological consequentialism".

Keywords: facts; negativity; ontology; Russell.

DOI 10.1515/sats-2014-1002

1 Introduction

In *The Philosophy of Logical Atomism*, Russell reports how he nearly prompted a riot when, lecturing at Harvard, he argued that there were negative facts (Rus-

¹ By Russell (1918/1956, pp. 177–281). The text is based on eight lectures delivered by Russell in London in 1918.

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sell, 1918/1956, p. 211), and he later adds: "There is implanted in the human breast an almost unquenchable desire to find some way of avoiding the admission that negative facts are as ultimate as those that are positive" (Russell 1919/1956, p. 287).

Hence, either philosophers must learn to live with the frustration of this desire, as Russell attempted to do, or they must develop a theory that enables them to dispense with negative facts – one that accounts for negative truths without accepting negative truthmakers.

The latter strategy is the most usual. The two most important variants are *incompatibilism* and *totality fact theory*. Briefly, *incompatibilism* argues that particular negative claims are made true by particular positive facts. The negative proposition <Theaetetus is not flying> is made true by a fact like <Theaetetus is walking>, which is incompatible with <Theaetetus is flying>.² The truth of the negative proposition <-p> follows from the truth of a positive proposition <q>, , and <q> being contrary.³ *Totality fact theory*, meanwhile, argues that the truthmaker of any negative proposition is the totality of positive facts. The negative proposition <Theaetetus is not flying> is true insofar as <Theaetetus is flying> does not occur on the complete list of positive truths about Theaetetus (or of positive truths in general).⁴

But that is not how we *prima facie see* and *describe* things, and in the breast of many philosophers (including myself), there is a strong preference for theories that fit with ordinary human practice and experience.⁵ I do not see – need not see – that an object is not red by seeing that it is, in positive terms, yellow, blue, etc., all of which are incompatible with it being red. And I may care about not stepping on a landmine, without caring about what I step on instead. And when I say that Peter is not here, I do not *mean* that he is somewhere else (or is dead) – nor that he is not one of the persons who actually *are* here. It is an honored position in philosophy – allegedly representing a higher mode of in-

² Instead of the more usual "..." I will use <...> to pick out propositions. Unlike apostrophes, the angle brackets have no other typical functions, and you can immediately see what is a beginning and what is an end of a proposition. Armstrong, among others, makes use of this device.

³ This approach was probably first articulated by Demos (1917) in opposition to Russell's lecture at Harvard (mentioned above).

⁴ This approach goes back to Plato (in *The Sophist*), according to whom whatever is not can be specified in terms of all that is. A significant modern version is developed by Armstrong (1997, 2004).

⁵ See Sheffler and Shramko (p. 111): "the most serious argument in favour of the existence of negative facts comes from human experience and practice".

sight – to be in conflict with ordinary human experience, but there is a strong burden of proof lying on the philosopher who adopts such a position.

To this, one could add that one drive is deeply implanted in the heart of every metaphysician: the urge for *simplicity*. One of Russell's arguments against the theoretical procedures of his opponent Demos concludes: "I think you will find that it is simpler to take negative facts as facts, to assume that <Socrates is not alive> is really an objective fact in the same sense in which <Socrates is human> is a fact" (Russell, 1918/1956, p. 214). Meanwhile, modern non-believers point out that a general acceptance of negative truthmakers for negative truths is "enormously uneconomical" (Armstrong, p. 55). Both positions elevate a methodological point to the status of a metaphysical one.

My article is set out in the following way: I begin in section 2 by sketching some of the problems that are usually presented as reasons for rejecting the existence of negative facts and shortly explaining why I do not find them persuasive.

Yet, our very concept of negative facts cannot be clearer than our concept of negative propositions, and in section 3, I ask the question what negativity of a proposition means. Not many theorists have discussed that topic, probably because they have found it trivial. But, as I see it, it is not trivial. First, there is no simple correlation between the grammatical negativity of the sentence and (what I call) the "ontological" negativity of the proposition. Second, propositions may be negative in different ways. The basic distinction goes between propositions that are ontologically negative by having a negative "valence" of some type (e.g., <Peter is not sighted>, or <Peter is blind>, the valence being of the type "dysfunction"), and propositions that are negative "in the sheer sense" (e.g., <there is not a hippopotamus in this room>, the negativity solely depending on the presence of the operator "not").

In section 4, it is claimed that propositions that are ontologically negative by having some type of a negative valence universally are made true by a negative fact, whereas the existence of negative truthmakers for propositions that are negative in the sheer sense is a question that need further analysis.

In section 5, it is demonstrated that the picture is not an either-or. Some propositions that are negative in the sheer sense do take a negative truthmaker, some do not. This view opposes an assumption implicitly made by theorists whether they maintain or reject the existence of negative facts: true propositions, in principle, do *always* have or do *never* have a corresponding truthmaker according to their propositional type.

But, as shown in section 6, the question whether a proposition, in being true, does have or does not have a corresponding truthmaker, cannot (always) be decided on the linguistic level: it may sometimes be a question of the reality

in which the claimed fact is claimed to be a fact. The principle that I offer here is *ontological consequentialism*. Facts are not real facts unless they have consequences. The main part of the section then investigates what "consequences of a fact" is supposed to mean. A fact may have consequences by its very constitution, it may have casual consequences, and it may have consequences in human agency.

In section 7, further remarks are presented on the distinction between existence and reality when it is applied on facts.

Section 8 presents a summary including a schematic overview of concepts and theoretical positions dealt with in the paper.

2 Problems with Negative Facts

The shortest current definition of a negative fact says that it is a truthmaker for a negative proposition, making a negative proposition true in the same way as a positive fact makes a positive proposition true. The fact that this chalk is not red makes the proposition <this chalk is not red> true in the same way as the fact that it is white makes the proposition <this chalk is white> true. Therefore, what are the problems that are typically thought to arise when someone accepts the existence of such facts? I shall mention three.

(2a) *Negative facts are mysterious. The concept of negative facts is paradoxical.*There is, at first sight, something mysterious, or at least paradoxical, about the very concept of negative facts. I will just take here one of the many ways in which this intuition might be expressed. Supposing that we accept that "truthmakers are parts of reality; they are (proper or improper) parts of what exists" (Beall, p. 264), or that "Every true claim is made true by something that exists" (Molnar, p. 72). Now, a negative proposition says that something does *not* exist. Therefore, it might seem that it would have to be made true by something that

⁶ Even so, Russell, who introduced the term or, at least, presented the first, now canonical, discussion in his essay *The Philosophy of Logical Atomism* (Russell, 1918/1956) is actually concerned with negative facts in their role as falsemakers for positive assertions rather than as truthmakers for negative assertions. We read, for instance: "A thing cannot be false except because of a fact, so that you find it extremely difficult to say what exactly happens when you make a positive assertion that is false, unless you are going to admit negative facts" (Russell 1918/1956, p. 214). "When I speak of a fact...I mean the kind of thing that makes a proposition true or false" (Russell 1918/1956, p. 182). "[A] fact (is) the sort of thing which is the case when your statement is true and is not the case when your statement is false" (Russell 1918/1956, p. 191). Therefore, facts are truthmakers and falsemakers.

does not exist. I think this argument is wrong. Say (i) it is a fact that unicorns do not exist. Now, (ii) when something is a fact, it does – at least in some vague sense - also exist. From (i) and (ii) follows (iii): the fact that unicorns do not exist, does exist. It may sound paradoxical, but it is not. In fact, in accepting the existence of the fact that unicorns do not exist, we are not accepting the existence of non-existent unicorns. That which is claimed to exist is not the same as that which is claimed not to exist. Actually, by the same token, an equally damaging paradox arises as a consequence of not accepting the existence of the (negative) fact that unicorns do not exist. You then have (i) the fact that unicorns do not exist does not exist, since it is a negative fact and (ii) the fact that unicorns do exist does not exist, since it is not a fact. Neither the fact that unicorns do not exist nor the fact that they do exist are existent: the first because it is negative, the second because it is not a fact. Beyond these considerations, it is one thing just to argue over whether an expression like "The fact that p does not exist, does exist" leads to paradoxes or not, and quite another to actually clarify its meaning. In the next section, my aim is to accomplish the latter.

(2b) Negative facts cannot be met with in experience.

I have already outlined some thoughts about this problem in the Introduction. Nevertheless, it may be helpful for present purposes to spell out exactly what an absence "looks like".

I get home late in the afternoon, tired and thirsty. What I want is a bottle of cold beer. I go to the kitchen, open the fridge and...what could be more real than the fact – and so the existence of the fact – that there is no bottle of beer in the fridge? That is what I see, and that is how I see it. I do not see the absent beer, since it is absent; I do not see – need not see – that the fridge is filled up with things like butter, meat, cheese, and maybe a bottle of milk, each of which is not a bottle of beer; I do not see that the list of things in the fridge does not include a bottle of beer. Being sufficiently thirsty, I just see one thing: the fact that there is no beer. (Also - as a phenomenological point - I do not see the absence of beer by comparing a mental picture of a fridge with a bottle of beer with the actual one without a beer.) Beer is what I am looking for, beer is what I cannot see, and the fact that there is no beer is what I eventually - after a few seconds – do see. That is how I see the scenario, and that is how, in ordinary circumstances, we usually talk about scenarios like this. This interpretation is prima facie the simplest and thus "least" mystical one. Similarly, I do not hear a rest in music by comparing it with an imagining of the music that might have been played if there had been no rest. To hear the music is also to hear the rests in the music as music.

(2c) Accepting the existence of negative facts is bad metaphysical economy.

Say you have a proposition truly stating that the object O is at location L. From this follows the truth of the propositions <O is not at $L_1>$, <O is not at $L_2>$, etc., in principle *ad infinitum*. Should we really accept the existence of a genuine fact for each of these propositions? Of course, there is nothing wrong with infinities *per se*. There are infinitely many stars too (or so we believe), and that does not constitute a reason for rejecting the existence of stars. Yet, the stars are *discovered* one by one, whereas the "facts" that O is not at L_1 , nor at L_2 , etc, are rather *constructed* one by one. This I take to be the most serious of the problems, and I shall return to it later.

Considerations like (2a), (2b), and (2c) have led theorists to reject the existence of negative facts *altogether*, but as I shall show below, I think this is too radical a consequence to draw. I shall argue for the existence of negative facts, but not as a universal principle holding for any negative truth. Some negative propositions have a negative truthmaker, some do not.⁷

3 When is a Proposition a Negative Proposition?

Introductory remark on truths and true propositions: let it be emphasized from the very beginning: I am discussing propositions in a mode that abstracts from whether or not they are actually expressed. Theorists who are not sympathetic to this abstraction may talk about "truths" instead of "true propositions", putting the basic truthmaker question this way: "What is it that makes a truth true"

⁷ Russell himself was, after all, reluctant too: "I don't say positively that there are [negative facts], but there may be" (Russell 1918/1956, p. 212). And "on the whole I do incline to believe that there are negative facts..." (Russell 1918/1956, p. 215). (Later, in Human Knowledge: Its Scope and Limits (1948), he actually changed his position to that of a denier.) But he does not explain what the evidence would look like, that would constitute an affirmation of his belief. One of Russell's friends or students once asked the old agnostic what he would say if he died, and found himself confronted by God, demanding to know why he (Russell) had not believed in him. Russell did not hesitate for a second, but answered: "You did not give me enough evidence". So meeting God would, after all, constitute the ultimate evidence! One might say a bit provocatively, I admit - that Russell seems to have had a clearer imaginative sense of what God's existence would imply than he had of what the existence of negative facts would imply: according to Russell, you can meet God, but you cannot be acquainted with negative facts in any simple way. It is interesting that later authors also occasionally express the problem in confessional terms, as a matter of "believing" or "not believing" in negative facts. The title of a recent paper is "If You Believe in Positive Facts, You Should Believe in Negative Facts Too" (Björnsson 2007).

rather than "what is it that makes a true proposition true?" This is what Armstrong does (2004, p. 15), and I might – or maybe should – have done the same.

The very discussion of the existence of negative facts runs into trouble if we do not have a clear notion of what it is that makes negative propositions negative. In particular, if you have a theory that proposes a radical ontological differentiation between truthmakers of positive and of negative propositions, admitting the existence of positive facts but not that of negative ones, then you really need a criterion that will serve as a basis for the classification of propositions as positive or negative. According to common usage, a negative proposition is a proposition that is expressed in the form of a negative sentence. And a sentence becomes negative thanks to the presence of some negative operator – typically a "not" – that applies either to the sentence as a whole ("it is not raining") or, in cases where the sentence has a subject and a predicate, to the predicate ("this chalk is not red") or to an existential claim ("there is not a hippopotamus in this room"). The negativity of the proposition is simply projected from the grammatical form. However, a few examples will illustrate that this would not do. Compare <Peter is blind> and <Peter is sighted>. They cannot both be true. And if it is presupposed that Peter exists, they cannot both be false, either.8 Therefore, the sentences spell out a pair of "positive contradictories": both are grammatically positive, but they take opposite truth values. Other examples of this would be <The room is dirty> versus <the room is clean>, and <the diamond was false> versus <the diamond was real>.

However, we do not hesitate to say that <Peter is blind (= is not sighted)> is negative, whereas <Peter is sighted (= is not blind)> is positive. But this is not implied by the presence/absence of a negative operator (i.e., a "not"). It is a matter of the meaning of "blind" and "sighted" or of what it means to be blind or sighted, respectively. The proposition <Peter is blind> is grammatically positive, but is – so I shall put it – ontologically negative.⁹

Propositions may be ontologically negative/positive according to various criteria or types of criterion: they may - in the terminology I have suggested

⁸ Russell, in his examples, elegantly avoids having to be explicit about the existential claim. When you call something "this chalk" or "this room", it is clearly implied that the chalk and the room, respectively, are taken as existing (Russell 1918/1956, p. 213).

⁹ Sometimes we do hesitate. Consider examples like "the door is open" and "the door is closed", "the natural number N is even" and "the natural number N is odd", "today is a day of rest" and "today is a working day". Here the propositions negate each other, but none of them is the negative proposition. Furthermore, sometimes, the ontologically positive term can only be expressed in a grammatically negative sentence. For instance, if "Peter is ill" is ontologically negative, then "Peter has a toothache" is certainly ontologically negative as well. But the corresponding positive proposition can only be expressed in a sentence like "Peter does not have a toothache", since there is no positive term for the absence of toothache.

elsewhere (Kühl 2014) – have different types of positive or negative *ontological valences*. Here are some examples:

- (3a) The proposition <Peter flunked (= did not pass) the test/examination> is ontologically negative it has a negative valence according to a criterion we may call "failing (*versus* succeeding)".
- (3b) <There is no blackboard in this lecture room> has a negative valence that we may call "absence as deficiency". (A lecture room in which there is no blackboard is a lecture room *missing* a blackboard, whereas a lecture room in which there is no hippopotamus is not a lecture room missing a hippopotamus.)
- (3c) In contrast to the above, the proposition <The lecture room is dirty (*versus* clean)> has the negative valence "presence as deficiency", since it is the presence of something the dirt that constitutes the deficiency.
- (3d) The proposition <Peter is bald> has the negative valence "missing an attribute", as has the proposition <Peter has no hair on his head> so long as it is presupposed that Peter is an adult human being (in which case the two propositions then have the same meaning).

These and many other propositions are, roughly spoken, ontologically negative according to the meaning of the sentences.

4 Truthmakers for Propositions that are Negative by Valence and Truthmakers for Propositions that are Negative in the Sheer Sense

In all cases where a proposition is negative in virtue of having a negative valence, I think one must admit that the ontologically negative proposition takes a negative truthmaker in exactly the same way as the corresponding positive proposition takes a positive truthmaker. Compare the following remarks:

- (i) "<This man is sighted> is a true positive proposition, and 'this man is sighted' is a fact. Or, in analytical philosophers' terminology: the fact that this man is sighted does exist."
- (ii) "<That man is blind> is true. But the proposition is negative, so 'that man is blind' is not a fact in the same sense. The fact that the man is blind does not exist!"

You are surely justified in wondering about the meaning of this comparison. Only a *theory* could have brought us to such a point. You may feel yourself to be in a position somewhat similar to that of Aristotle, about whom it is said that

when somebody presented him with the Eleatic arguments against the existence of movement he simply walked around.

We are, nevertheless, still left with an immense number of propositions that are ontologically negative not in virtue of having a negative valence, but in virtue of *sheer* negation. If nothing is said about the meaning of "O" and "L", then the negativity of the proposition <the object O is not at the location L> is a case of sheer negativity, and so is the negativity of the proposition <there is no hippopotamus in this lecture room> – assuming that the absence of the hippopotamus in the room does not itself constitute a case of something taken as "missing". Russell's example, <this chalk is not red>, is also negative in the sheer sense, and so is his example <A does not love B> – at least as long as nothing else has been said about A and B. All the examples from Russell quoted in this article belong to that category, and they have, thanks to tradition, gained the status of paradigm cases in the discussion of negative facts. This may be a reason why propositions with ontological valences have rarely been analyzed. And this, again, may be a reason why writers rejecting the existence of negative truthmakers for negative propositions put forward their claim as a universal/ general one. Below the expression "negative proposition" means a proposition that is negative in the sheer sense (unless something else is specified), since the problem about truthmakers for negative propositions only arise when the negation is sheer negation.

I admit then that there really *is* a question we can sensibly ask, concerning whether the fact that there is no hippopotamus in a certain room, the fact that a certain piece of chalk is not red, etc., *do* or *do not* exist. At first sight, there seem to be only two theoretical positions potentially at work here: *either* we account for negative truths – *qua* negative truths, and accordingly for all negative truths – *by* accepting the existence of negative facts *or*, alternatively, we do so *without* accepting the existence of negative facts. All theoretical discourse that I know of adopts one of these two positions. Yet, in this way, they all share an assumption – one that will be explained and criticized in the next section – to the effect that whether a true proposition is made true by a corresponding fact is a matter of the *type* of the proposition (being positive or negative, being modal, being causal, etc.) The criterion then becomes a purely linguistic one. In section 5, I am going to argue against the validity of that assumption, and in section 6, I shall try to develop a third strategy.

Before doing so, however, I first wish to illustrate how each of the two prevalent positions seeks to cope with what I take to be the most serious problem connected with the acceptance of negative facts: that of "metaphysical economy". I shall make use of two examples taken from Russell (or, at least, modeled on his).

- (4a) If one proposition truly states that the distance between A and B is 439 meters, then there is an infinity of propositions as many as you like truly stating what the distance is *not*. And if one positive proposition truly states that Scott wrote *Waverley*, then there are as many true negative propositions about the authorship of that book as there are or have been or will be persons who did not or will not write it. And in any circumstances where there is one true positive proposition like <the book is on the table> there are that is, you may *construct* as many true negative propositions as there are places in the universe where the book is *not*. And so on. Is there really a unique truthmaker for each of these propositions? Do negative propositions like these correspond to negative facts in the same way as the propositions negated may be said to correspond to positive facts?
- (4b) The situation is similar with propositions like <there is not a hippopotamus in this room>, <there is no bicycle in this room>, <there is no spade in this room>, etc. Is there really a fact for each object not belonging to the room and not being present in this room?¹⁰

Let us first consider how proponents of the first of the two strategies mentioned above – that which involves accounting for negative truths *by* accepting the existence of negative facts – might be expected to proceed here. I shall examine two options.

- (i) One answer, applicable to all of the examples, simply accepts the infinity of infinities: that is how reality is in its full complexity. I think this is Russell's line of thought. There are (roughly spoken) as many facts in this world as there are true propositions. This answer has the advantage that it does not presuppose fully developed criteria for the distinction between positive and negative facts.
- (ii) As another option, one may pursue a more pragmatic procedure. If facts are truthmakers, and truthmakers are what make true propositions true, then there is no fact that p be it positive or negative before somebody actually cares about it and, in virtue of this, establishes a context for stating p or p. (You cannot point out a fact that does not fulfill *that* condition!) If I cannot find my book, then this *is* already a context for somebody to state that "the

¹⁰ It may be argued that the acceptance of negative facts (like these) is incompatible with the demands of good metaphysical economy in the spirit of Occam's *lex parsimoniae* Armstrong. However, Occam's razor is a methodological principle. If it is applied as a metaphysical principle it needs metaphysical justification. Facts of the types (4a) and (4b) somehow appear to have been *invented* rather than recognized (although it is certainly not up to us to decide whether or not the propositions are actually true). They bear all the distinguishing marks of a philosopher's example – or a linguist's, or a schoolteacher's.

book is not on the table". It is also easy to imagine a context where it would be relevant for somebody to state that "the book is not on the table, nor on the chair, etc." It will be a little more difficult to imagine a context in which it would be relevant to care about, ask about, and receive confirmation that "the book is not in Sam's bar", if I had never visited that place. And it would certainly be very difficult to find a context in which it would make sense to state the proposition: "The book is not on the farther side of the moon". The only one I could imagine is the philosopher wanting to illustrate what an irrelevant true proposition is. (But well, now I have done it, so it is a fact that my book is not on the farther side of the moon, unless you insist that I did not use but just mentioned the proposition!) I have not seen this line of thought being further developed, nor shall I try to develop it. But I think it might be a reasonable answer.

Now for the second of the two strategies mentioned earlier, where we seek to account for negative truths without accepting the existence of negative facts. There are two canonical procedures available as options here.

- (iii) Regarding each of the examples in (4a), the entire infinity of negative propositions follow from one positive proposition. Therefore, the fact that the distance between A and B is 439 meters will be a truthmaker for the proposition <the distance between A and B is 439 meters> as well as for any proposition stating that <the distance between A and B is not X meters>, X being any positive number different from 439. There is only one fact, the fact that the distance is 439 meters, whereas the fact that the distance is not 438 meters, the fact that it is not 6 meters, etc., do not exist. This is the theoretical procedure of incompatibilism. It works well in examples like these, provided we accept that two propositions not entailed by each other may have the same minimal truthmaker in a certain situation and yet different truth conditions in general. (The fact that the distance between A and B is 439 meters is proposed as the truthmaker of <the distance is not 438 meters> as well as <the distance is not 9 meters>. But if the distance were 438 meters, the first proposition would be false and the second true. After all, truthmakers are truth conditions that come true.)
- (iv) Regarding (4b), the incompatibilist procedure is a bit more difficult to accomplish. As Russell says: "the fact that there is not a hippopotamus in this room cannot merely be that every part of this room is filled up with something that is not a hippopotamus" (Russell, 1918/56, p. 214). The *Totality Fact* strategy works better here. The truthmaker for <there is not a hippopotamus in this room> is the totality of facts in the function of truthmakers for propositions truly stating what there actually is in the room. This totality does not include a truthmaker for the proposition <there is a hippopotamus in this room>, so that proposition is false. Accordingly the proposition <there is *not* a hippopotamus in the room> is true, at the same time as there is no such thing as the *fact* that

there is not a hippopotamus in the room. The principle may, at the end of the day, be applied to all propositions that are negative in the sheer sense (in that their negativity does not imply an ontological valence), including the examples in (4a). All of this works fine, provided we accept that the exclusion of a fact from a list of facts is not by itself a fact. Russell, at least, maintains that the exclusion *is* a fact: "The absence of a fact is itself a negative fact" (Russell, 1919/1956, p. 288).¹¹

Enough has been said, here, now, about strategies seeking to account for the truth of negative propositions (still: negative in the sheer sense) *either* by accepting the existence of negative facts or without doing so. In the remainder of this article, I shall seek to accomplish two distinct aims: (a) to defend the claim that all of these ways of dealing with truthmakers as they pertain to sheerly negative propositions - or with truthmakers in general, for that matter - share an unwarranted assumption, and (b) to develop an approach not based on that assumption.

5 The Typological Assumption

One of the most basic issues pertaining to truthmakers may be articulated in the form of the following chain of questioning: under what conditions is a true proposition p made true by a real or existing fact that p, under what conditions is it made true, instead, by some fact other than p, and under what conditions is it actually made true by something not a fact at all, or even through applying some principle other than that of truthmaking itself? The vast majority of theorists (albeit mostly implicitly) seem to share the assumption that such conditions are definable in terms of the type of the proposition. Armstrong puts it this way: besides "one's general theory of truthmaking [the question is which] particular truthmakers one postulates for particular classes of truths" (Armstrong puts)

¹¹ It is quite clear that by accepting the existence of negative facts as truthmakers for negative true propositions, we are opening Pandora's box, but some of the entities in the box simply have to be let out. A universe with positive and negative facts is only overpopulated if it includes facts that do not belong to it. So what is it that we accept when we accept that most of the purportedly negative facts in (4a) and (4b) are – in provisionally metaphorical terms – merely our own "invention", lacking some sort of "autonomy"? This is the question I intend to address in the paragraphs below.

¹² As mentioned, Armstrong consequently talks about "truths", rather than about "true propositions", but he declares that "it is *propositions* that constitute the central case for a theory of truthbearers" (Armstrong, p. 12).

strong, p. 4, my italics). Negative truths then get to be considered as constituting such a class (other classes being truth-functional truths, modal truths, causal truths, etc.), and the question goes: do negative propositions *qua* negative propositions – and accordingly either *all* negative propositions or *no* negative propositions – have a negative truthmaker?

Say <A does not love B> is a true proposition. Is it then made true by the fact that A does not love B? *Is* there really such a fact? Well, the proposition is classified as negative – negative, we should still add, in the sheer sense – and the assumption, now, is that the answer we should give will depend exclusively on the proposition being negative. Yet I think this assumption is questionable. The truth/proposition <Socrates does not love Confucius> belongs to the same class, and – no, according to any intuition, there is no such fact, since they do not (i.e., did not) even know each other. But so does the truth/proposition <Socrates does not love Xanthippe>. Yet since Socrates and Xanthippe are husband and wife, it would be strange to assign less reality to the fact – if it is a fact – that Socrates does not love her, than to the fact – if that is the fact – that he does love her. But this cannot be read from the proposition. It is a question about reality.

Or say that the distance between A and B is 429 meters. Now there are as many true propositions as you like, truly stating what the distance is *not*. It is not 430 meter, nor 431 meters, nor 10 meters, nor 2.300 kilometers, etc. Is there really an existent fact for each of these truths? Only a theory could bring it to that point. But suppose A and B are two points between which a company is going to build a bridge assuming that the distance is 430 meters. And say, that the bridge builders have made their calculations, procured the material, and maybe started on the building work itself, before realizing that the distance is *not* 430 meters after all! The proposition still belongs to the class of negative singular propositions. But the fact that the distance is not 430 meters has now no less reality than the truthmaker of the proposition stating what the distance in fact *is*. Notice also, that if A and B really are – by any standard – two arbitrary points in the universe that we just point out, then we do also intuitively hesitate to accept such a *positive* fact as a "real" fact.

To sum up, the typological principle says that the existence or non-existence of a that makes a true proposition true is a matter of the type or class of the proposition. This principle holds for propositions that are negative or positive by valence – they build a type and do all have a corresponding truthmaker. But it does not hold for propositions that are negative or positive in the sheer sense. Some of them are made true by a corresponding fact, some not. A different principle is called for to account for the distinction. In the following, I shall try develop such a principle.

6 Consequentialism

The principle I offer is *ontological consequentialism*. Facts are not real facts unless they have consequences.¹³ If truthmaking is the only function of a fact – if the only thing an alleged fact "does" is to make a true proposition true – then it is not a real fact. The fact that Socrates does not love Confucius does no more than making the proposition <Socrates does not love Confucius> true (which it certainly does whether or not somebody ever get the idea to *state* it). By contrast, the fact that Socrates does not love Xanthippe has a lot of consequences, since they are man and wife. Similarly, the (alleged) fact that the distance between A and B is not 429 meters will, as a starting point, do nothing more than making the proposition <the distance between A and B is not 429 meters> true. But if a company is halfway in building a bridge between A and B, having assumed that the distance is 429 meters, then that fact has great consequences.

Facts that have consequences I shall call "consequential facts". Consequential facts are real: they make "a portion of reality". Facts without consequences I shall call "stand-alone facts". If stand-alone facts may be said to "exist", they merely do so as sheer truthmakers, i.e., they are facts accepted for the sake of maintaining, for instance, a general correspondence theory of truth

Propositions necessarily pick facts out one by one, but whether or not a fact has consequences is a distinction to be drawn "in reality": i.e., on the factual level, not the linguistic one. You cannot see from any proposition taking the form A does not love A that these people know each other, nor from the proposition A distance between A and A is (or is not) 429 meters that this fact has practical significance, etc. The fact that A is defined as the truthmaker of

¹³ The truth of the proposition "A" may be seen as a consequence of the fact that A. Aristotle actually says that the existence of a man is in some manner or the other the cause (*aition*) of the truth of a proposition stating the existence of that man (Aristotle, Cat. 14b, 14–22). Terminologically, we may then distinguish between the linguistic consequence of a fact – the truth of a proposition – and factual consequences of the fact. A consequential fact, then, will be a fact that has factual consequences.

¹⁴ The question of whether some fact or other is consequential or not must be clearly distinguished from the question of the relevance of stating the proposition made true by that fact. In stating a proposition such as "there is oxygen in this room", the speaker would most likely be guilty of infringing some maxim of conversational implicature. (For instance, "do not propose a true proposition p to somebody if you believe that he already knows that p!") We would have to build up a story to make proposing such an utterance relevant, a teacher teaching his pupils about human respiration, perhaps. But insofar as it is true that there is oxygen in the room, it is also a fact, and by any standards, a most important one.

the proposition $\langle p \rangle$. That is always the starting point. The question is whether the fact that p does *more* than making $\langle p \rangle$ true and accordingly is a "real" fact.

But what then is the phrase "consequences of a fact" supposed to mean? Negatively spoken, "consequences" are not say, "implications" or "entailments". Although a fact is still *identified* by the proposition that it makes true, the presence/absence of consequences is a matter of the alleged fact, not of the proposition. If the truth of <*q*> is implied by the truth of <*p*>, then the fact that *q* is not a consequence of the fact that *p*. Positively spoken, a fact may have consequences in (at least) three ways. First, it may have consequences by its very constitution: other facts may be (what I shall call) "com-factuals" of that fact. Second, it may be the *cause* of other facts. Third, it may have consequences by its significance in human agency: *practical consequences*.

In the following paragraphs, the three categories of consequences will be discussed, but they will not be treated in the same way. Initially, it will be made clear that *almost* all facts that we would usually think of – not to say speak of by stating the propositions they make true – do have consequences within the first category, i.e., according to the principle of com-factuality. Already as such they are embedded in reality, being *real* facts. Therefore, what about the exceptions – facts without com-factuals? Not surprisingly, we will see that this group will include the paradigm cases for negative facts introduced by Russell ("this chalk is not red", "A does not love B", "there is not a hippopotamus in this room"). But – maybe more surprisingly – we shall also see that it may include positive facts.

The approach to causal and practical consequences will be different from the approach to com-factuals. Only few things will here be accounted for, say defined, in general terms. The point about introducing them is limited to the purpose of showing how facts that *do not* have com-factuals still may have other sorts of consequences and in this way nevertheless *be* real facts.

(6a) Com-factuals

In the simplest case, which is also the usual one, a fact will already have consequences by virtue of its own constitution. That is, the fact that p, defined as the truthmaker of the proposition p, already has consequences – i.e., does more than mere truthmaking – in being the fact that p. Let us work through some examples to see where this takes us to.

(i) We will start this time by taking the proposition <there *is* a hippopotamus in this room> to be true. It is made true by the fact that there is a hippopotamus in this room, precisely in its capacity as a truthmaker for the truth-bearer – and *nothing more*. But there *is* – is *necessarily* – more. When it is a fact that there is a hippopotamus in this room, it is also a fact that there is a hippopotamus of some weight, some age, some number of teeth, some gender, etc., in the

room. And there will necessarily be a story about the life of the hippopotamus up to this very point – the point where it turned up in this room. An existing hippopotamus does always more than instantiating the concept "hippopotamus". The hippopotamus' necessarily having some weight, age, number of teeth, history, etc. *ad infinitum*, we may call the *com-factual determinables* of the fact that there is a hippopotamus in the room. And the actual determinates of these determinables (2.348 kg, 16 years, 28 teeth, etc.) we may simply call the *com-factuals* of the fact. Com-factuals of a fact that initially has been defined merely in its capacity as a truthmaker may be expressed as answers to questions that we are justified in asking, in the sense that the fact warrants them to have an answer. The fact that q though is not a com-factual of the fact that p, if q > 1 simply *follows from* q > 1. Every com-factual *enriches* the original fact.

Facts like the presence of something somewhere cannot stand alone. By their very constitution, they have determinables, and accordingly, they bear the consequence *that* there are other facts: determinates. You cannot infer which particular facts, but you can say which types of facts: particular determinates of specific determinables. If a fact has com-factuals, it does not stand alone, that is, it is a real fact.

Obviously, *almost* all facts we would ever think of - if we were not philosophers - are consequential facts according to the principle of com-factuality. Let us take a look then at some exceptions:

(ii) Returning to normality, we will take it to be true that there is *not* a hippopotamus in this room. If there is no hippopotamus, then neither is there a hippopotamus having this rather than that weight, number of teeth, story, etc. But all this follows from the truth of <there is no hippopotamus in this room>. No reality is added. If the proposition may be said to correspond to a fact, this fact will be *a stand-alone* fact, typically occurring in the role of a philosopher's example, providing the seal of clarity precisely because it needs no context.

Com-factuality is basically an *asymmetrical* relationship. The fact that there is a red book on the table is a com-factual of the fact there is a book on the table. But the fact that there is a book on the table is not a com-factual of the fact there is a red book on the table, since the first simply follows from the last. A com-factual of the fact that there is a red book on the table could be the fact that the book on the table is written by Walther Scott. And so on *ad infinitum*. What com-factuality as a principle means is, roughly, this: it is a criterion of a reality that no matter how much you have specifically said about something, there will always be more to say about it that does not follow from what you have already said.

Now for more examples to further flesh this out.

(iii) <The hippopotamus Hippolyte is not in this room>. This proposition may be read in two ways. *Either* you read it as <there is not a hippopotamus called Hippolyte in this room>, in which case the corresponding fact will stand alone according to arguments similar to those given in connection with example (ii) above. Or you take it that the proposition further encloses an existential claim about Hippolyte (namely, <the hippopotamus called Hippolyte is existent>). In this latter case, we then get: <the hippopotamus Hippolyte exists, and

(or but!) is not in this room. This fact, taken *in toto*, is certainly arrayed with a veritable plenitude of com-factuals, but they are all derived from the existence

of Hippolyte, not from the fact that she is not in this room.

- (iv) <This chalk is not red>. If it is a fact that this chalk is not red, then by virtue of the existential claim implicit in the use of the term "this" it is a comfactual determinable that it has a some size, that it has a some weight, etc., and positively that it has some color. But when you have filled in values for the variables 5 centimeters long, 23 grams, etc., and white then you add nothing by saying that it is not red. (This being a fact is a logical consequence of is already logically implied by the fact that it is white.) This point is not modified by the (by the way, correct) observation that you may *see* that an object is not red without seeing which color it positively is.
- (v) Compare <the winner in the 100 meters at the 1936 Olympics was Jesse Owens>, and <the winner in the 100 meters at the 1936 Olympics was not Ludwig Wittgenstein>. The propositions share the existential claims about the 1936 Olympics, about an event in the 100 meters, and about a winner in that event: consequential facts. But regarding the prize, there will necessarily be a story about how Jesse Owens won the event, but not, we assume, a story about how Ludwig Wittgenstein did not win it or did not lose it! Compare further with <the winner in the 100 meters at the 1936 Olympics was not Ralph Metcalfe>. Metcalfe participated, he held the world record, and many bet on him, but he came second. Again a negative fact an event that has not taking place: Metcalfe's win but this time with lots of consequences for Metcalfe himself, as well as for others.

The stand-alone facts (ii)–(v) are all stand-alone *negative* facts. But positive facts may also stand alone.

- (vi) <The distance between A and B is 437 meters>. The proposition, if true, is certainly made true by the fact that the distance between A and B is 437 meters. But, as with the negation (<the distance between A and B is not 437 meters>), it is also a stand-alone fact. Without further context, it is just I who take it into my head to state that proposition: i.e., to imagine a line between two points and "invent" the fact.
- (vii) <Objects A and B have the same color>. Sameness of color is by constitution i.e., outside of a specified context a fact without consequences. If the

objects are, let us suppose, each individually colored in a single uniform monochrome, then they do, necessarily, respectively, exhibit a "this-color" (e.g., object A being green, say) and a "that-color" (e.g., object B being green). The sameness adds nothing to that. This point must be clearly distinguished from the (correct) observation that it may be possible to *see* that A and B have the same color without seeing *which* color they both have.¹⁵

(viii) <There are more apples on the table than eggs in the basket> is also a stand-alone fact, yet a positive fact. The sheer difference in number between two classes has no (contingent) consequences. (Compare the arguments adduced in connection with examples (vi) and (vii).)

An overwhelming majority of truthmakers that we may be concerned with are facts that already by their constitution do more than sheer truthmaking, i.e., they have consequences in the form of com-factuals. Yet, some facts, such as examples (ii)–(viii) above, have no com-factuals. But facts in general may have consequences in (at least two) other ways: causal consequences and practical consequences. And in the following paragraphs, we shall see how some facts that were otherwise deemed to stand alone thanks to the absence of com-factuals nevertheless may become consequential facts thanks to the presence of causal or practical consequences.

(6b) Causal Consequences of a Fact

The most familiar basis for ascribing consequences to a fact is its being some sort of *cause* of other facts. The term "cause" is here to be read in a very wide and vague sense. A fact in the role of cause may be an event, a process, or simply the existence of an object and its properties and relationships to other objects. The fact then is a *factor* or, if you like, an INUS condition. We leave it there. After all, we shall only analyze the possibility of causal consequences of facts that do not have com-factuals. The point in introducing the concept of causality is simply

¹⁵ Compare the following: it is possible, and for most of us normal, to *hear* that Peter and Paul are playing the same note without hearing *which* note they both play. But if they played together in a musical performance, then the sameness would have significance in its own right and the fact would become a consequential fact. More about similar cases in the paragraphs on causal and practical consequences of a fact.

¹⁶ Cf., for instance, what Jaegwon Kim has called "Alexander's dictum": to be real is to have effects [causal power] (Kim 1992, p. 134). My considerations deviate from Kim's in three ways. First, Kim's principle is (as a starting point) not limited to facts. Second, Kim's principle applies not only to causes but to causal powers (i.e., also to causes that are not actualized). Third, in my view facts may also be real thanks to the occurrence of other sort s of consequences than effects. Alexander's dictum is sometimes also called "the Eleatic principle" (cf. Plato, *The Sophist* 247d–e). Actually, it permits that things may be real by being able to cause or to be caused.

to show how facts that would otherwise stand alone insofar as they had no comfactuals may become consequential by being the cause of some other facts.

- (i) The fact that there is no gas within an arbitrarily delimited space has no com-factuals, and is so far a stand-alone fact. But if the delimitation is provided by the wall of a container, then no gas means a vacuum, and in relation to, say, normal atmospheric pressure in the surroundings this means an underpressure. But an underpressure is a significant "factor" in physical calculations and, as such, a consequential fact. 17
- (ii) Say it is a fact F1 that there is an insect on my writing table and a fact F2 that the insect and the table have the same color. F1 already has lots of comfactuals thanks to the very presence of insect and table. F2 by contrast has no consequences by its own constitution, i.e., no com-factuals, since sameness of color, so we argued, has no consequences. Nor has F2 any further consequences when combined with F1. F2 is and remains a stand-alone fact. Now substitute the fact F1 that there is an insect on my writing table by the fact F1* that there is an insect in a flower in my garden. Now the fact F2* that the insect and the flower have the same color has the consequence that the insect is camouflaged, which has further consequences for the possibilities for survival of the insect. The fact that two objects have the same color has become a consequential fact, i.e., more than a sheer truthmaker.
- (iii) Similarly, "there are more apples on the table than eggs in the basket" was a stand-alone (and yet a positive) fact. But "the pig has more sucklings than teats" has the consequence that not all of the sucklings can suck at the same time. (Well, if you accept sucklings as "agents", this may also be seen as a "practical consequence" (see below).)
- (iv) <A was born 43 years before B>. If A was born in 1732 in Copenhagen, whereas B was born in 1775 in a village in the Amazon, this, again, is (we assume) a stand-alone fact. But let us, alternatively, say that A and B spent parts of their lives in Athens, both were philosophers, they frequently spoke to each other, and their relationship, including their age relation, had consequences for the entire history of philosophy. (Yes, I am thinking of Plato and Aristotle!)

(6c) Practical Consequences of a Fact

Some facts that would otherwise stand alone may nevertheless turn out to have consequences by virtue of their significance in human agency. They are *practical* consequences of a fact: consequences that the fact has in being a pre-

¹⁷ Molnar argues that absences are "radically acausal": they cannot be what he calls "causally operative". His concept of "cause" is narrower than mine, and I am not sure that I would disagree with him, given his chosen terms of reference (Molnar, p. 77 f.).

mise, a condition, etc. for a project (enterprise, task, etc.), i.e., for the agent in the successful performance of the project. The agent may or must *account* for them in the performance of the project.¹⁸

- (i) <There is not a hippopotamus in this room>. Russell's paradigm example of a negative fact is also a paradigm of a stand-alone fact or at least it appears this way, in the absence of any further story. But there *might* be a further story. Say the hippopotamus has escaped from the zoo, and the staff cannot find it at any of the places where you would expect a runaway hippopotamus to go. Even Russell's lecture room has to be checked out, but unfortunately (or fortunately?) in vain: there *is* not a hippopotamus in this room. As a consequence, the staff from the zoo must carry on their search.
- (ii) <There was no earthquake yesterday>. Without a context, it is a standalone fact. But, say, the authorities two days ago had given notice of an earthquake, and people had left their houses with the most important of their transportable belongings. The fact that no earthquake occurred after all had the consequence that they could, and did, do what they wanted: safely return.
- (iii) Return again to the example <the distance between A and B is 437 meters>. You can imagine measuring the distance between any pair of points in the universe and state a true proposition for each measurement. But particular facts making the particular measurement true in each case are sheer truthmakers, not constituted with any consequences. Yet suppose again that A and B are two points on each bank of a river between which a company is going to build a bridge. Among hundreds of conditions to account for is the actual distance between A and B. The fact that the distance is 437 meters *has* consequences for planning and accomplishing the enterprise. Say next, that the bridge builders have made their calculations, procured the material, and maybe started on the building work itself, before realizing that the distance is *not* 437 meters after all! Now this negative fact has great consequences.

¹⁸ It is far beyond the scope of this paper to say something essential about the logical syntax of projects, facts, and practical consequences. Just a few, simple, examples: (a) I want to buy a certain book. But, as a matter of fact I do not have the money – which prevents me from buying it: in project P, the fact F has the consequence that P fails. (b) I want to buy a certain book. And, as a matter of fact I have the money – which (unless no other things show up that might prevent it) enables me to buy it: in project P, the fact F has the consequence that P may succeed. (c) I want to make the hut habitable. But, as a matter of fact, the hut is cold and, in this way, not habitable. Unless I heat the hut, it will not become habitable: in project P, the fact that F has the consequence that unless you do R, P will fail. (d) I want to catch the train. But as a matter of fact, the last bus to the station has just departed. Unless a cab shows up, I would not catch the train: in project P, the fact that F has the consequence that unless it is a fact that G, P will fail.

7 The Existence and the Reality of Facts

In maintaining that something is a fact, I am not just classifying it as belonging to a genus. I am also making an existential claim. Facts - if they are facts exist by definition, like God in The Ontological Argument. A proposition like <The Golden Mountain does not exist> is not equivalent to the proposition <The</p> Golden Mountain is not a mountain, whereas the proposition <the fact that p does not exist is equivalent to the proposition <the fact that p is not a fact > (i. e., $\langle it is not a fact that p \rangle$).

Yet even to just talk about the "existence" of facts is not in accordance with ordinary usage, and is confusing too. Things, animals, institutions exist. Events do not exist, but take place/happen/occur. Processes go on. And facts make their own ontological category, obtaining insofar as they are facts. However, in the debate on negative facts initiated by Russell - as well as in many other discourses within modern analytical philosophy - the term "exist" is rather used as a common denominator, taking approximately the same meaning, or function, as when a quantifier is called "existential" (cf. Quine's slogan, "To be is to be the value of a bound variable"). When an object exists, an event takes place, a process goes on, and a fact is a fact: they do all "exist" in this wider - and vaguer – sense.19

But I think we cannot leave it there. We must be more specific/explicit about the meaning of the term "existence" when applied to facts. The "thin" concept of existence applying to all ontological categories - qua ontological must be substituted by a more "fleshy" one applying specifically to facts. Since it does not follow from the truth of $\langle p \rangle$ that there exists a fact that p, we must surely be able to assign *other/further* properties than the function of truthmaking to an alleged fact to have it confirmed that it really is a fact, i.e., "exists". Which property/properties?

Truthmakers are frequently referred to as "portions of reality that makes a truth true". Thus, what may, in that sense, count as a portion of reality? That is the question I have tried to deal with above. My thesis is that a truthmaker makes a portion of reality insofar as it has consequences.

¹⁹ Actually, Russell himself does not say that negative facts "exist", but fairly consistently uses the expression "there are" negative facts. But he is not explicit about his (possible) reasons for such a preference, and none of the comments that I have come across make a point of the distinction between "existence" and "there-is-ness". However, it is noteworthy that in ordinary usage "there is" is a more proper candidate for an ontological common denominator than "exists". You do not go against any linguistic intuitions when you say that "there are" things, events, processes, facts (cf. the Heideggerian "es gibt").

It is difficult to "argue" in favor of this as a criterion: there may, after all, turn out to be other criteria of reality for facts. However, it is generally considered as being a hallmark of things in reality that they are somehow "interwoven" with each other. "X has consequences", or "X has the consequences a, b, c, etc.", in the sense developed above, represents a reading of this "interwovenness" as it applies to facts. My ambitions then may be regarded as only extending as far as the goal of showing that the distinction between consequential facts and stand-alone facts is ontologically significant. And even if your basic criterion of reality is different from mine, I think you must admit that standalone facts at best belong to reality in a deficient mode.

8 Conclusion

One of the basic questions in all truthmaker theory still goes as follows: when is a true proposition $\langle p \rangle$ true in virtue of the existence, i.e., the reality of a fact that p? In this paper, that question has mostly been addressed with reference to two sorts of proposition: negative (atomic) propositions and positive (atomic) propositions (that is, in the latter case, those propositions that the negative propositions are negations of). Beginning with some remarks on positive propositions and the truthmakers for these, let us now try to arrive at a clearer, more inclusive overview of the implications of the analysis that has been put forward.

The theorists referred to in this paper have discussed the existence of negative facts, not that of positive facts. Indeed, that was not their topic. But a conception of the positivity of positive facts is still implicit in what they have to say. The question, as analyzed by Russell, Molnar, Armstrong, etc., should really be formulated in the following way: do negative facts "exist" in the same (trivial?) sense as positive – all positive – facts exist? Most truthmaker theorists are not very explicit on this point. However, I think I am justified in attributing to them the view that any positive atomic proposition p is made true by a fact that p. You would hardly discuss the existence of negative truthmakers if you did not believe in truthmaker theory p at all. And if you subscribe to truthmaker theory in principle then propositions like p there is a hippopotamus in this room, p this chalk is red, p and the like would surely be paradigm cases.

Even so, as I have argued, this view does not hold universally. A proposition like <the distance between A and B is 437 meters> is, if true, made true by the "fact" that the distance between A and B is 437 meters. But outside of any further context, this "fact" does nothing *more* than making the proposition true. It is constructed as a theoretical counterpart of the proposition's being true. It

has no consequences – it is a stand-alone fact – and, as such, is ontologically deficient.

When it comes to negative propositions, which, indeed, form the focal subject of the discussion, we encounter two canonical theoretical positions in competition with one another. According to the first (i.e., that of Russell et al.) negative propositions – all negative propositions – are made true by a negative fact. According to the second (i.e., that of Molnar, Armstrong et al.) negative propositions are not – ever – made true by a negative fact.

The first problem here, shared by the majority of adherents of either position, is that they take it for granted that we know what a negative proposition is. They do not present any criterion outside of simple grammar. But as I have shown above – and in more detail elsewhere (Kühl 2014) – this does not work. In fact, there is no simple criterion. The problem is definitely more substantial for adherents of the second position, since this is defined by its insistence on making a radical ontological differentiation between truthmakers of positive and negative propositions. Adherents of the first positions (like Russell) may, in principle, adopt a more *laissez-faire* attitude on this point, since within the terms of their theory *any* proposition p, whether identified as positive or negative, is made true by a fact that p.

The second problem is that these adherents of the two canonical positions ignore the distinction between propositions that are negative in a sheer sense (for instance, <there is not a hippopotamus in this lecture room>) and propositions that are ontologically negative because they take a negative valence (for instance, <there is not a blackboard in this lecture room>) (see section 3). The absence of a hippopotamus in a lecture room does not (or, at least, outside a specific context does not) have any consequence for the lecturing or, more generally, for the room as such, in respect of its being a fully functioning lecture room. But the absence of a board has consequences for the use of the lecture room as a lecture room. Only when you have understood the meaning of the sentence <there is no blackboard in this lecture room> - which you have not if you do not have a minimal understanding of the meaning of a blackboard being in a lecture room – can you unpack what the sentence should actually convey, in a form like <a blackboard is *missing* in this lecture room>. Similarly, the fact that a tool does work has consequences, and so does the fact that a tool does not work. Actually, a knife being blunt has no fewer consequences than a knife

²⁰ In *The Philosophy of Logical Atomism*, Russell admits that putting the word "not" into a proposition does not give it the formal character of negative. "There is no formal test...I think you must go into the meaning of the words" (Russell 1918/1956, p. 215). However, as far as I am aware he does not develop that point.

being sharp – just *other* consequences. The fact that a man did show up as agreed has consequences, and so has the fact that he did not show up, and so on. Accordingly, a truthmaker for a proposition that is negative – or positive – by valence will always have consequences. And most importantly, a proposition that is negative by valence is always made true by a corresponding negative fact. Again, this is less of a problem for Russell than for Molnar, Armstrong et al. In maintaining that all negative propositions are made true by a negative fact, Russell has certainly committed himself to accepting that, *inter alia*, this will also hold for propositions that are negative by valence.

However, both positions fail, as I see it, when it comes to propositions that are negative in the sheer sense (including those particular examples used typically by theorists in the discourse about negative propositions and negative facts: <there is no hippopotamus in this room>, <this chalk is not red>, and the like). I have tried to show that some of these are made true by a real, i.e., consequential, fact, whereas some are not. Which belong to which category may sometimes (for instance, in the case of com-factuals) be inferred from the proposition itself, sometimes not. But the distinction itself corresponds to a decision that must be made not on the propositional (i.e., linguistic) level, but on the factual one. Yet neither of the canonical theories works on that level. Hence, the list of "existent" facts proposed by Molnar, Armstrong et al. turns out to be too exclusive, whereas that put forward by Russell turns out to be too inclusive.

To furnish a more accessible overview, I will put the three lists – the ones derived from the two canonical positions, as well as my own, which I shall label "ontological consequentialism" – into the following schematic arrangement:

The fact that p as truthmaker of the proposition .
The existence or reality of different kinds of positive or negative fact as truthmakers for corresponding positive or negative propositions

Tab. 2

	Consequentialism	Russell	Molnar and Armstrong et al.
Consequential positive facts as truthmakers of propositions with a positive valence	Real	Exist	Exist
Consequential negative facts as truthmakers of propositions with a negative valence	Real	Exist	Do not exist
Consequential positive facts as truthmakers of sheerly positive propositions	Real	Exist	Exist

Consequential negative facts as truthmakers of sheerly negative propositions	Real	Exist	Do not exist
Stand-alone positive facts as truthmakers of sheerly positive propositions	Not real	Exist	Exist
Stand-alone negative facts as truthmakers of sheerly negative propositions	Not real	Exist	Do not exist

Three distinctions are operative in the characterization of the propositions in question.

- (i) Positive propositions versus negative propositions. Within the terms of the discourse as conducted by advocates of the canonical positions, this dichotomy is alone decisive, and they all agree that any positive proposition is made true by a positive fact. My claim is that positive facts are not always "real" facts. Regarding negative propositions, Russell claims that they all have a negative truthmaker, whereas Molnar and Armstrong et al. claim that none of them has. My position is that some negative propositions have a negative truthmaker, some do not.
- (ii) Propositions that are ontologically positive/negative by valence versus propositions that are positive/negative in the sheer sense. This distinction does not occur in Russell, Molnar, and Armstrong et al.²¹ To me it is significant, because all true propositions that are negative by ontological valence, i.e., according to the very meaning of the proposition, are made true by a real negative fact. I have also included in the above scheme the category "propositions with a positive valence", as I do not automatically take it that all positive propositions are made true by a real fact. The original point in introducing the concept of ontological valence was, certainly, to argue that some negative propositions necessarily - basically in terms of their meaning - are made true by a negative fact. The existence of positive truthmakers for positive propositions had not, so far, been considered an issue, so we did not in that context get as far as defining "ontologically positive valence". I think the easiest way to do so is as follows: a proposition is positive by valence insofar as its negation would make a proposition that is negative by valence, for instance, <there is a blackboard in this lecture room. And a proposition is positive in the sheer sense insofar as its

²¹ The concept of negative valence bears some similarity to steresis (in Aristotle) or privation (at least from Plotinus to Kant). There are, however, significant differences, but the project of comparing them falls outside of the scope of this paper.

negation would make a proposition that is negative in the sheer sense, for instance, <there is a hippopotamus in this lecture room>.

(iii) Propositions made true by a consequential fact *versus* propositions made true by a stand-alone fact. This distinction does not occur in the canonical theories. To me it is the ontologically decisive one. Real facts are always consequential facts, whereas stand-alone facts merely exist in a deficient mode, i.e., they are not really facts. Accordingly, the proposition p whether positive or negative — is made true by a real fact that p if and only if this fact is a consequential fact. Having said this, it should be added immediately that negative facts present themselves more frequently than positive facts as suitable candidates for being considered stand-alone facts (see, for instance, the initial paragraphs on com-factuals in section 6). Yet, at the end of the day, we need not care too much about which propositions should count as negative or positive, as the decisive ontological distinction has turned out not to be affected by that.

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