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A Case For Negative & General Facts

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I: Introduction

In this paper I take a closer look at Bertrand Russell's ontology of facts, proposed in his 1918 lectures on "The Philosophy of Logical Atomism". Part II is devoted to the question what Russell considered facts to be, and what kinds of facts he assumed. In part III, the controversy over two kinds of facts Russell postulates is described; the opinions of Raphael Demos and Keith Halbasch are considered for this purpose. Following this discussion, part IV investigates the question as to what kind of analysis Russell is conducting that leads him to negative and general facts. Finally, in part V, my conclusions drawn from the combined information of parts II to IV are elaborated; the main claim being, that due to the kind of analysis Russell is conducting, he is not making a mistake when he assumes negative and general facts.

II: WHAT FACTS ARE

In his lectures on "The Philosophy of Logical Atomism" Russell introduces facts in the very first lecture. It is his first "truism", that the world consists of facts. Russell considers this to be something "so obvious that it is almost laughable to mention". At that point Russell warns, that he is not trying to give a definition of the word "fact", but only an explanation. His explanation is, that a fact is what makes a proposition true. As an example of a proposition Russell names the sentence "It is raining", and says that the proposition is that which is expressed by it. What makes this proposition true or false is a certain condition of weather, Russell writes. Consequently, a fact can be something like a condition of weather. Another example of a fact is a "physiological occurrence", which would render a proposition like "Socrates is dead" true or false.

We must not believe that an "existing thing" is a fact though, Russell warns. (The "thing") Socrates himself is not the kind of entity that makes a proposition like "Socrates is dead" true of false (according to Russell it doesn't even make a proposition like "Socrates exists" true or false, for that matter). At first sight this might sound confusing, because, strictly speaking, the aforementioned physiological occurrence is a part of Socrates, and in some sense Russell should probably be able to admit that Socrates (the person as a whole) makes the proposition true or false, because it includes the relevant physiological occurrence (but this depends on one's view of what a person is). Speaking of the physical occurrence as that which makes the proposition true or false is simply

¹Bertrand Russell, The Philosophy of Logical Atomism; Routledge 2010, p.6

more precise, especially since it is not clear how we even define the thing (or person) *Socrates*.

Facts are also a part of the objective world, or outer world.² This is quite an important idea, and we will come back to it in part V. The next "fact" about facts Russell names is, that they are divided into several kinds.³ There are, for example, particular facts, for which Russell names the example "This is white", which are the "simplest imaginable facts".⁴ The next kinds of facts he mentions are general facts like "All men are mortal", and negative facts, like "Socrates is not dead". The word "negative" does, however, not mean that the facts are false. Facts are neither true nor false, since those terms do not apply to the kind of things that are facts, but to propositions, judgments, and statements. Another important point about negative facts is made by Russell during the discussion of the 3rd lecture, namely, that the word "not" does not automatically lead to a proposition being "negative", and that one has to take the meaning of the utterances into consideration.⁵

Russell says that particular, general and negative facts are, however, just examples for kinds of facts, and that there are many more.⁶ At the beginning of lecture four he says that it is philosophical logic that serves as an "inventory [...] containing all the different forms that facts may have."

There is more to be said about facts in general though. Russell writes, that propositions are not names for facts, since there are always two propositions corresponding to a fact: one that is true and one that is false. In addition to that, Russell points out a relevant difference between names and propositions: a name that does not name is meaningless, but a proposition is not meaningless if it is false. In his 1924 essay "Logical Atomism" Russell mitigates/clarifies: "When I say "facts cannot be named", this is, strictly speaking, nonsense. What can be said without falling into nonsense is: "The symbol for a fact is not a name.""

So far I have almost entirely focused on what Russell said in his first lecture, but he also makes relevant remarks about facts in the later lectures. In the second lecture, he mentions that the things in the world have properties and stand in relations, and that it is this sort of thing (having properties and standing in relations) that are facts. He goes on to say that these things, properties and relations, are thus "[...] clearly in some sense or other components of the facts that have those qualities or relations.", especially also because of the phe-

²Ibid., p.8

³Ibid.

⁴Ibid., p.26

 $^{^5}$ Ibid., p.46

⁶Although he does not explicitly say so, this passage on page 9 shows what other kinds of facts he has in mind: "Then there are facts about the properties of single things; and facts about the relations between two things, three things, and so on; and any number of different classifications of some of the facts in the world, which are important for different purposes."; see also page 26 for a similar thought.

⁷ The Philosophy of Logical Atomism, p.47

⁸Ibid., p.13 & 38; So what though? Cannot there be several names for one and the same individual, for example (Cicero and Tully, Mark Twain and Samuel Clemens etc.)?

⁹Ibid., p.141

nomenon that we can understand sentences or propositions that we have never heard before, if we understand the components they consist of.¹⁰ (As a matter of fact, Russell believes that one does not need to understand anything about the real world in order to understand a logical proposition.)¹¹

In lecture 3 Russell gives another piece of information about facts: there are no disjunctive facts (no facts of the form "p or q"), because if a proposition is disjunctive, more than one fact is relevant for discovering the truth or falsehood of the proposition. ¹²

The following table summarises Russell's view on facts in his Philosophy of $Logical\ Atomism:^{13}$

Facts make propositions true or false	p.6
Facts can be things like	
▷ physiological occurrences	pp.6-7
Facts belong to the objective world	p.8
There are different kinds of facts, like	
⊳ particular facts	
⊳ general facts	
riangleright negative facts	pp.8-9
Facts are neither true nor false	pp.9-10
Facts cannot be named	p.14
Having properties and standing in relations are	p.18
facts	
There are no disjunctive facts	pp.38-39

III: THE CONTROVERSY OVER FACTS

a) Russell's Reasons

When Russell talks about negative and general facts, he makes some remarks as to why he believes that they exist. I will mention a few in this section, and a few more during the following two.

As his reason for accepting negative facts into his ontology, he says that there must be something which makes negative propositions true (and positive propositions false).¹⁴ And since he believes that facts are the things that assign truth or falsehood to propositions, it follows that there must be a negative fact, that makes negative propositions true.

¹⁰Ibid., pp.18–20

 $^{^{11}}$ Ibid., p.27

 $^{^{12}}$ Ibid., pp.38–39

¹³Page numbers refer to the 2010 version published by Routledge; see footnote 1.

 $^{^{14}\}mathrm{Ibid.},~\mathrm{p.41}~\&~\mathrm{p.45};$ "A thing cannot be false except because of a fact [...]"

For general facts, Russell even offers an argument which goes like this: "There again it would be a very great mistake to suppose that you could describe the world completely by means of particular facts alone. Suppose that you had succeeded in chronicling every single particular fact throughout the universe, and that there did not exist a single particular fact of any sort anywhere that you had not chronicled, you still would not have got a complete description of the universe unless you also added: "These that I have chronicled are all the particular facts there are." So you cannot hope to describe the world completely without having general facts as well as particular facts." So Russell demands that on top of mentioning every single fact, one has to mention that the facts mentioned are all the facts there are. There are commentators who find this plausible. For example Wayne A. Patterson in his book "Bertrand Russell's Philosophy of Logical Atomism" sees no problem with this view. He even says that one can go a step further and apply the idea to every sort of general proposition. But as we will see in section III c), not everyone finds this plausible.

b) Demos' Account Against Negative Facts

There are people who do not agree with Russell's account of facts. In lecture 3, Russell tells the audience that the idea of negative facts almost caused a riot when he lectured at Harvard. A member of Russell's audience at Harvard even got a paper published in the journal *Mind* on the subject, which Russell spends some time on discussing.

Russell mentions the following three points²⁰ that can be found in Demos' paper:

(1) If you assert a true negative proposition, there must be something in the world that makes it true.

With this Russell fully agrees.

(2) Negative propositions should not be interpreted like positive propositions; they should not be taken at "face value".

As Russell points out, Demos' reason for supposing (2) is, that he has never experienced a negative fact. He has even conducted some "experimental philosophy" on a small scale: "I once undertook a fairly systematic interrogation on the matter among intelligent acquaintances who had not given previous thought

¹⁵Ibid., pp.8-9

¹⁶Wayne A. Patterson; Bertrand Russell's Philosophy of Logical Atomism; Peter Lang Publishing (1993); pp.32-33

¹⁷Ibid., p.33; He is right in pointing out that Russell did not explicitly do that, but he most likely had it in mind.

¹⁸ The Philosophy of Logical Atomism, p.42

¹⁹Raphael Demos; A Discussion of a Certain Type of Negative Proposition; Mind, New Series, Vol. 26, No. 102 (Apr., 1917); Oxford University Press; pp.188-196

²⁰Ibid., pp.42-45. a), b) and c) in the original paper.

to the subject and hence were least apt to be biased in their reply, and they were practically unanimous in their testimony that they had never encountered a negative fact and that every case of knowledge expressed through a negative proposition was in reality of a positive nature, in a fashion which they were unable to comprehend". So the intuitions of Demos' intelligent acquaintances are on his side, but Russell does not share that intuition: "If I say "There is not a hippopotamus in this room", it is quite clear there is some way of interpreting that statement according to which there is a corresponding fact, and the fact cannot be merely that every part of this room is filled up with something that is not a hippopotamus."

(3) The element "not" is not a qualification of a part of the proposition, but of its whole content.

Demos then offers an interpretation of propositions with the element "not": The negative proposition "not-p" (the negation of the proposition p) is to be interpreted as expressing another **positive** proposition q, which is incompatible with p.

Russell mentions two reasons why he does not find this interpretation attractive:

(i) Sometimes one is more interested in the negative proposition than in any compatible positive one.

Russell illustrates this with the example that if one asserts that "this chalk is not red" one is more interested in the fact that the chalk is not red than the fact that it is white. However, it seems like Russell is missing the point here, and Demos could simply say that, as he writes, the fact that the chalk is not red (not-p) should be interpreted as the fact that the chalk is white (q) anyway. Russell does have a point though, since for something not to be red it does not matter whether it is white or blue, or any other specific colour. This means that if one asserts that something is not red, one cannot have in mind a fact that the thing is white, since one might not know what colour the thing actually is. However, it can be argued that one has in mind that it is *some* colour other than red, whichever it might be. So the focus would lie on the existence of some, admittedly unknown, positive fact. Russell has another reason to reject Demos' theory though:

(ii) Demos' interpretation of not-p takes "incompatibility" as a fundamental fact holding between proposition, which is more complicated than simply assuming negative facts, because if propositions (which, according to Russell are not real) are parts of facts (which are real) one mixes entities with different ontological statuses.

In Russell's words: "You have got to have here "That p is incompatible with

²¹ A Discussion of a Certain Type of Negative Proposition, p.189

²² The Philosophy of Logical Atomism, p.44

q" in order to reduce "not" to incompatibility, because this has got to be the corresponding fact. It is perfectly clear, whatever may be the interpretation of "not", that there is some interpretation which will give you a fact." ²³

This, however, is Russell's interpretation, and something can be said against it. Demos never actually writes that he takes incompatibility as a fundamental fact. He writes that it is a relation holding between propositions. There is not, as Russell assumes, a corresponding fact, because it is not a proposition that can be true or false, it is a logical relation that if one thing is incompatible with another, they cannot have the same truth value. Incompatibility is, in fact, similar to a disjunction in its character: it would correspond to a molecular fact, and since Russell rejects molecular facts, it appears inconsistent that he would accept facts corresponding to incompatible propositions. Furthermore, if Russell is right in saying that propositions are not real – which I believe he is – it does not make sense to accept a fact which has propositions as its parts, and Russell should not have misunderstood Demos in this way.

The way Demos is really accounting for the truth or falsehood of negative propositions thus seems to work, ²⁵ and does not even go against Russell's opinion that the only way a proposition gets its truth value is through some existing fact²⁶, because negative propositions express positive facts. I think there is nothing wrong with Demos' theory, but I also believe that a case for negative propositions can still be made.

c) Halbasch's Account Against General Facts

In his paper "A Critical Examination of Russell's View of Facts"²⁷ Keith Halbasch deals with the question that if facts are needed for the truth or falsehood of propositions, which kinds of facts are actually required. More precisely, he is investigating the question whether positive atomic facts alone suffice to account for the truth or falsehood of propositions.²⁸

Early in his paper, Halbasch wonders why Russell rejects molecular facts but accepts negative and general ones. If one looks at Russell's first lecture, one can find this as his reason for rejecting disjunctive facts: "It does not look plausible that in the actual objective world there are facts going about which you could describe as "p or q" [...]" This seems quite similar to Demos' reason for rejecting negative facts: there just is no such fact to be found in the world. Russell even acknowledges that ³⁰, but it still did not lead him to reject negative facts. Halbasch points out, that molecular propositions have propositions as parts, and this makes them different in form. This still begs the question though: why

 $^{^{23}}$ Ibid.

 $^{^{24}}A$ Discussion of a Certain Type of Negative Proposition, p.190

²⁵If it does not, it has yet to be shown why.

The Philosophy of Logical Atomism, p.45

²⁷ Keith Halbasch; A Critical Examination of Russell's View of Facts; Noûs, Vol. 5, No. 4 (Nov., 1971); Wiley; pp. 395-409

 $^{^{28}}$ Ibid., 397

²⁹ The Philosophy of Logical Atomism, p.39

 $^{^{30}\}mathrm{Ibid.},\;\mathrm{pp.41\text{--}42}$

does the form of the proposition imply that there is no corresponding fact? And then we are back at Russell's reason that there just is no such fact in the world. I will come back to this question in parts IV and V of this paper.

Halbasch goes on to point out something I also mentioned earlier in this paper: that "not" should be treated like other truth-function operators ("and", "or", etc.) which would make the proposition molecular and Russell would have to accept that there is no corresponding fact. 31 So, Halbasch, too, thinks that Russell's rejection of Demos' theory is on somewhat shaky ground. Halbasch then moves on to general facts. His plan is the following "[...] one can clearly ask whether general facts and existence-facts are required to give an account of the truth conditions of the sentences of the standard modem logical languages. Then, the model-theoretic procedures are directly applicable, and if they are successful, and if these languages are adequate to describe reality, we will have explained away the need for general facts and existence-facts."32 In other words, he wants to give an argument that the truth or falsehood of general propositions can be determined with positive atomic facts alone. Halbasch then expresses this in technical terms, and says that a universally quantified proposition of the form $\lceil (\alpha) \Phi \rceil$ is true if all propositions of the form $\Phi \alpha / \beta$ are true.³³ And he adds: "[...] the truth of such a sentence does not require general facts [...]"34

Halbasch then considers Russell's argument for general facts which I have mentioned in section III a) of this paper. To refute it, he uses his earlier argument: He writes that general propositions should, like molecular ones, not correspond to a fact at all.³⁵ He also reminds the reader of his suggestion regarding the truth-value of universally quantified propositions, which does not prove that there are no general facts, but it makes their "function in a semantic theory pretty obscure" which he thinks is "very telling against them".³⁶

Halbasch then goes on suggesting that Russell might have had a second argument; an epistemological one. This second argument is very similar to the first: to know the truth of a universal proposition, one must know the truth of a universal proposition "noninferentially", i.e. through acquaintance with a general fact. This way one can avoid the epistemological problem that one would need to know a very large number of facts to know the truth-value of an universal sentence. Halbasch names three difficulties he sees with this supposed argument:

(1) It is not clear, whether this strategy is also necessary for "restricted generalisations" like "All the men in this room are mortal".

Halbasch rightly points out that with a general proposition that is restricted

 $^{^{31}}A$ Critical examination of Russell's View of Facts, pp.400-402

 $^{^{32}}$ Ibid., p.403

³³Ibid., pp.405–406; To rephrase his idea in a nowadays more widely-known terminology: $\forall x(Fx \to Gx)$ is true, if all interpretations (i.e. filling the logical symbols with actual content like "If Socrates is human, Socrates is mortal") of $Fx \to Gx$ are true.

 $^{^{34}}$ Ibid., p.406

 $^{^{35}}$ Ibid.

³⁶Ibid., p.407

in a sense like that (all the x in restricted area y) it is not clear whether such a strategy is necessary. One would think that with a medium-sized room as restricted area it seems plausible that one could know the relevant facts for a restricted general proposition, if the conditions for the necessary observations are favourable.

- (2) It is also not clear whether one has to be acquainted with all general facts or only with certain important general facts from which one can deduce other general facts.
- (3) Russell does not consider alternatives.

Halbasch names induction as a possible alternative, lamenting that Russell remained silent about it in his lectures on Logical Atomism. Halbasch concludes that this argument is simply too weak, and that he will be "content to point out that Russell had hardly even begun to show that our knowledge of universal truth requires the existence of general facts." At the end he again points out that the strategy of understanding general propositions in terms of atomic facts is successful and thus more attractive than Russell's opinion.

IV: Assuming Russell's Viewpoint

a) A Logical Analysis

To understand Russell's view about the different kinds of facts, I think it is vitally important to think about what kind of investigation, or analysis, he is actually conducting. He is hardly ever explicit about it in his lectures on "The Philosophy of Logical Atomism", so one has to do some "reading between the lines". He does, however, make a few clear statements, and one of the most important ones is this: "The reason that I call my doctrine logical atomism is because the atoms that I wish to arrive at as the sort of last residue in analysis are logical atoms and not physical atoms." This distinction between a physical and a logical analysis is mentioned again in the eighth lecture Russell does not want to get at little bits of matter like electrons and the like, but the smallest logical parts, or atoms. He calls these atoms "simples" and his conclusion is, that there are three different simples: particulars, qualities and relations In a logical sense, these are the smallest bits of logical matter in Russell's logical ontology. Russell also calls them "objects" and goes on saying that the only

 $^{^{37}}$ Ibid., p.409

³⁸ The Philosophy of Logical Atomism, p.3

 $^{^{39}}$ Ibid., p.113

 $^{^{40}}$ Ibid., p.21, p.31, p.111 and pp.141–143

 $^{^{41}}$ Ibid., p.111

 $^{^{42}}$ Ibid.

other object in the world are facts, which are made up of the simples. He points out, however, that they are not "properly entities" in the way that the simples are. The knowing of facts is a different kind of knowing than the knowing of simples, he says. What different kinds of knowing is he talking about? Is he speaking of the difference between knowledge by acquaintance and knowledge by description? If so, it would make no sense to doubt that one can be acquainted with simples like particulars, i.e. a white chalk mark⁴³, but would he want to say that one cannot know facts through acquaintance? Halbasch would not agree with this interpretation, and since Russell writes that one can be acquainted with things like Piccadilly⁴⁴, this makes it more likely that Russell thought that one can be acquainted with facts. What else could he have meant? Again we turn to an idea he mentions in his eighth lecture. He says that of things like chairs and people we only ever know particulars through direct experience, and that we then put these particulars together in our minds and interpret it as a persisting object⁴⁵, while they are only logical fictions, as he calls them. 46 Now facts would usually involve things like chairs and people, as we can see in Russell's own examples (Socrates is dead etc.), so it is plausible that Russell had this in mind when he spoke of the different kinds of knowing regarding facts and simples. A question worth asking is, however: what about a monadic relation that really only involves one particular and one predicate/property, like if you take the proposition expressed by "This is white". You are certainly directly acquainted with this, when you are talking about something you see at the very moment you utter the sentence. Is it still a different kind of knowing of the fact "This is white", because it just is a different kind of entity (a fact), or does one know this fact like one knows the property white, for example? This problem has two possible consequences: a) Russell meant something completely different than I thought when he spoke of the different kinds of knowing, or b) even the fact "This is white" is known differently, due to its nature (being a fact). I prefer the latter possibility for a reason which I will elaborate in the following section.

b) What Russell Means By "Logical"

In a) I mainly talked about what Russell ends up with through his analysis. Now I would like to have a look at what type of analysis it actually is. In the 2010 reprint of the lectures on "The Philosophy of Logical Atomism" by Routledge which includes an introduction by David F. Pears, he writes the following about Russell's logical analysis: "The idea is that, when we analyze the words in our vocabulary, we soon reach a point at which we find that we cannot analyze them any further, and so we conclude that we have reached the bottom line where unanalyzable words correspond to unanalyzable things."⁴⁷ I do not think

⁴³Ibid., p.28

⁴⁴Ibid., p.23

 $^{^{45}\}mathrm{Ibid.}, \, \mathrm{pp.117-119}, \, \mathrm{or} \, \, \mathrm{pp.17-18}$ where he says the same about Piccadilly and a couple of other things.

 $^{^{46}}$ Ibid., p.91. I suppose it is not objectionable to be acquainted with logical fictions.

⁴⁷Ibid., p.xi

this is quite right. Russell was certainly oriented towards language, but his treatment of the sentence "The present king of France is not bald" 48 shows us, that his analysis must have went beyond language itself, because if one looks at the sentence, one would be more inclined to apply the negation to the predicate (bald). In addition to this, Russell himself points out in lectures two, seven and eight 49, that language can be misleading, and that one needs a "vivid sense of reality" to understand what entities there are in the world. 50 Later in his introduction Pears also writes: "[...] [Logical Atomism's] central claim is that everything that we ever experience can be analysed into logical atoms." 51 This goes more into the direction of how I interpret the logical analysis: more dependent on the metaphysical understanding of the world, instead of the linguistic interpretation of sentences.

In his book "Bertrand Russell's Logical Atomism"⁵² Rashidul Alam also points out the connection between logic and empiricism in Russell's Logical Atomism, he puts it metaphorically: "[In Russell's theory of logical atomism] logical entities and empirical entities are made to shake hands with one another."⁵³ he, however, also writes on the same page that Russell "invented" — as opposed to "discovered" — logical atoms for his ideal language. I do not think Russell would have agreed to having invented logical atoms, because inventing entities is not something a good metaphysicist does (this is left to science fiction authors).

But what does "logical" mean for Russell? In his book "Our Knowledge of the External World as a Field of Scientific Method in Philosophy"⁵⁴ there is a chapter entitled "Logic as the Essence of Philosophy", in which he explains his view on logic. The book was published four years before Russell delivered his lectures on logical atomism, but the parallels between the book and the lectures are extensive enough to make it quite likely that Russell did not change his mind in the meantime.

Russell starts off by saying that his logic differs from the logic of Aristotle or the logic of the medieval philosophers.⁵⁵ The first important advance in "real" logic was made by Frege and Peano (independently), Russell writes; they both discovered the difference between what Russell would call atomic propositions ("Socrates is mortal") and general propositions ("All men are mortal"), which in traditional logic were considered to be of the same form.⁵⁶ As we saw already in this paper (and of course in Russell's lectures), he works with this (and other)

 $[\]overline{^{48}}$ That the negation applies to the whole proposition; see ibid. p.43

⁴⁹Lecture two: ibid. p.17, lecture 7: ibid. p.100 & 105, lecture 8: ibid. pp.110-111

⁵⁰Ibid., p.55. At this point he says that his vivid sense or reality made him understand that no "shadowy" negative propositions are going about in the world.

⁵¹Ibid., p.vii; my emphasis.

⁵²Rashidul Alam; Bertrand Russell's Logical Atomism; Mittal Publications (1990)

⁵³Ibid., p.116. The line reminded me of what Pears wrote on page xxxvii: "The marriage arranged by Russell between logic and empiricism gives The Philosophy of Logical Atomism its special character."

⁵⁴Bertrand Russell; Our Knowledge of the External World as a Field of Scientific Method in Philosophy; Routledge (2009)

 $^{^{55}}$ Ibid., p.26

⁵⁶Ibid., pp.32–33

logical distinctions. Russell writes about the developments in logic, that they "enable us to deal easily with more abstract conceptions than merely verbal reasoning can enumerate [...]". This "going beyond verbal reasoning" can, I think, be interpreted as a sign that the logical analysis is not as strongly linguistic as Pears wrote. ⁵⁸

Russell then promises to talk about the philosophical foundations of logic. He starts by pointing out the different forms of propositions. He writes: "It is forms, in this sense, that are the proper objects of philosophical logic." and at this point as well, he speaks of different kinds of knowing/knowledge. The form of a proposition is not an existing thing, he writes, but something more abstract. He further argues for the difference in knowledge by pointing out, that one can know the constituents of a proposition, but not its form (for example in the case of a long and complex sentence) or one knows the form, but not the constituents (if it is not known what the constituents refer to). 60

The forms of propositions are of vital importance to Russell. He holds the view, that one cannot give a correct account of the world if one does not realise that not all propositions are of the subject-predicate form. So he clearly sees a close connection between the forms of propositions and the world, and the connecting piece have to be facts. Later in the chapter Russell writes: But in order to explain exactly how [relations of four terms] differ from relations of two terms, we must embark upon a classification of the logical forms of facts, which is the first business of logic, and the business in which the traditional logic has been most deficient."

V: Conclusions regarding Russell's Facts

Now that I have provided the relevant statements by Russell, I can put forward my interpretation and theory regarding the controversial negative and general facts. I will do this in the form of key questions which I will provide my

⁵⁷Ibid., p.33. And he adds on the same page, that through logical reasoning we can "clear away incredible accumulations of metaphysical lumber".

⁵⁸On page 36 we can find another reason to assume that a logical analysis is not overly linguistic, when Russell writes that *Grammar* favours a certain form, but it is philosophically not universal. Thus, language would (like in an earlier example I mentioned) mislead us in that case.

 $^{^{59}}$ Ibid., p.34

 $^{^{60}\}mathrm{Ibid.},\;\mathrm{pp.34\text{--}35}.$

 $^{^{61}\}mathrm{Ibid.},\ \mathrm{p.36}$

⁶² Ibid., p.41; my emphasis. On page 47 he is even more explicit: "Logic, we may say, consists of two parts. The first part investigates what propositions are and what form they may have; this part enumerates the different kinds of atomic propositions, or molecular propositions, of general propositions and so on. The second part consists of certain supremely general propositions which assert the truth of all propositions of certain forms. This second part merges into pure mathematics, whose propositions all turn out, on analysis, to be such general formal truths. The first part, which merely enumerates forms, is the more difficult, and philosophically the more important; and it is the recent progress in this first part, more than anything else, that has rendered a truly scientific discussion of many philosophical problems possible."

answers to:

(i.) Why does Russell not treat negative and general propositions like molecular propositions, for which he assumes that there are no corresponding facts?

We have come across this question in Demos' and Halbsch's papers. In my discussion I mention the difference in form between negative propositions and molecular ones: the latter have propositions as parts. Demos argues for an interpretation of negative facts as a relation of incompatibility between propositions, which would make their form molecular. However, that Russell did not accept this interpretation sufficiently explains the difference in treatment. In the case of general propositions, the question is less simple. As Halbasch's account shows us, it is not completely implausible to believe that the proposition "All men are mortal" includes propositions about the mortality of other men (all of them, for that matter). Russell thus provides a separate argument.

(ii.) Does Russell's argument for general facts really go through?

I mentioned his argument in section III a), and while we saw some philosophers find it plausible, some do not. In Russell's "Our Knowledge of the External World as a Field of Scientific Method in Philosophy" he says something that can be interpreted as going against the idea that a general proposition is just a conjunction of atomic facts and thus a molecular proposition. The idea is, that a proposition like "All men are mortal" has the form "If anything has a certain property, and whatever has this property has a certain other property, then the thing in question has the other property"; a form not mentioning any particular things. 63 The point hereby is, I think, that the form is independent from the question whether the things in the world actually have certain properties or not. But even if we know the properties of the things in the world, and know that the relevant conditions apply, we still need to know something of this general form (that general fact we need to add to our inventory or the world). I think we need to differentiate between the purely metaphysical and the semantic⁶⁴ plus the epistemic domain. In a purely (mind-independent) metaphysical sense, there is no need for general facts, because if all men are mortal then every single one of them is mortal and that is why they are all mortal, just because this is how the world is. It is only in the case of an epistemic agent entering the picture that a general fact gains its significance. If the epistemic agent goes around in the world to check whether every man is mortal, then it is important for him or her to be sure that he or she has determined the mortality of every man. The same applies in a semantic context. Suppose that climate change gradually kills every living being on earth, and that at some point only a giraffe, a

⁶³Ibid., p.46

⁶⁴I see a clear difference between a linguistic and a semantic approach, the former being concerned with language as it actually is, and the latter being interested in meaning, and what is expressed with language.

lizard and a koi carp are left. Now consider the two propositions: the disjunctive/molecular proposition "The giraffe, the lizard and the koi carp are living beings and animals" ($[Lg \land Ag] \land [Ll \land Al] \land [Lk \land Ak]$) and the general proposition "Every living being on earth is an animal" ($\forall x[Lx \rightarrow Ax]$). If expressed at the supposed time they have the same "outcome" in the sense that they say about the giraffe, the lizard and the koi carp that they are living beings and that they are animals. However, the latter proposition provides an information which the former does not: that the three animals are the only living beings left. So there is an epistemic (due to the additional information) and a semantic (because the meaning is different) difference between the two propositions, even if one can argue that there is no mind-independent metaphysical difference.

(iii.) But if there is no mind-independent metaphysical difference, why do general facts differ from molecular ones?

I think we have to conclude that Russell's metaphysics is not supposed to be mind-independent. He does say during the first lecture that facts belong to the objective world.⁶⁵ But when Russell explains what he means by the word "reality" (which I assume he considered to be a synonym of "objective world") he says that it is simply everything that would have to be mentioned in a complete description of the world.⁶⁶ It, of course, helps my case that he speaks of a "description of the world", because a description is an action of an agent with a mind, and this makes the distinction relevant for the reason above. Another point in favour of the idea that the epistemic and semantic domain is important is shown in the fact that Russell puts so much stress on the fact that facts are what make propositions **true**, which is clearly a notion that concerns semantics and epistemology, not only metaphysics.

(iv.) What does that mean for the existence of negative and general facts?

Nothing conclusive in the sense that it would answer the question whether they are real entities in a purely mind-independent metaphysical sense. However, what all this tells us is, that Russell should not be accused of making a mistake when we assumes negative and general facts, because if we keep in mind what kind of logical analysis he conducts (which is mind-dependent and focused on the forms of propositions), it makes perfect sense to assume those kinds of facts. I thus believe that the controversy over facts really only arises because of the different approaches: semantic and epistemic (mind-dependent) vs. purely (mind-independently) metaphysical. Demos and Halbasch both chose the latter approach, and thus came to a different conclusion. So, if a case against negative and general facts is made, it has to be done independently from Russell's logical atomism.

⁶⁵ The Philosophy of Logical Atomism, p.8

 $^{^{66}}$ Ibid., p.56