

Note: Snapshot PDF is the proof copy of corrections marked in EditGenie, the layout would be different from typeset PDF and EditGenie editing view.

Author Queries & Comments:

Q1 : Please provide the missing physical address for the corresponding author.

Response: My physical address is included under my name. Please remove it from there, if necessary, and include it as this: Philosophy Department I, University of Granada, 18071 Granada, Spain.

Q2 : Please check the section "Acknowledgements" and correct if this is inaccurate.

Response: Resolved

Q3 : The disclosure statement has been inserted. Please correct if this is inaccurate.

Response: Resolved

Q4 : The reference "Kripke 1980" is listed in the references list but is not cited in the text. Please either cite the reference or remove it from the references list.

Response: Resolved

Q5 : The reference "Pears (1985) 2010" is listed in the references list but is not cited in the text. Please either cite the reference or remove it from the references list.

Response: Resolved

Q6 : The reference "Russell 1905" is listed in the references list but is not cited in the text. Please either cite the reference or remove it from the references list.

Response: Resolved

Q7 : The reference "Russell 1918" is listed in the references list but is not cited in the text. Please either cite the reference or remove it from the references list.

Response: Resolved

Q8 : The reference "Whitehead and Russell 1910–13" is listed in the references list but is not cited in the text. Please either cite the reference or remove it from the references list.

Response: Resolved


Facts of identity

Recto running head : INQUIRY

Verso running head : M. GARCÍA-ENCINAS

M. J. García-Encinas

Philosophy Department I, Granada University, Granada, Spain

CONTACT M. J. García-Encinas  encinas@ugr.es [Q1]

History : received : 2020-1-1 accepted : 2021-9-21

Copyright Line: © 2022 Informa UK Limited, trading as Taylor & Francis Group

ABSTRACT

In *The Philosophy of Logical Atomism* Russell held the view that facts in the world are formally structured complexes, the structure of which matches the logical structure of correspondent propositions. Russell also seems to have denied that there are facts of identity and of diversity. This paper argues that Identity and Diversity can be understood as purely *formal structures* in Russellian facts. It considers Russell's possible reasons for denying the existence of facts of identity and diversity

and shows how problematic these reasons are. In particular, I argue that identity statements are not tautologies, and their denial does not result into a contradiction. An important consequence of this thesis is that Metaphysics and Logic are not as tied up as Russell took them to be, *but* nevertheless these are good news for the old formal program for Metaphysics that lies at the very heart of what he called philosophical logic.

KEYWORDS

- Russell
- facts
- identity
- diversity
- tautology

1. Introduction and purpose

The purpose of this paper is to investigate whether Identity, and Diversity, can be understood as purely *formal structures* in Russellian facts, such as Russell (1918) understood facts in *The Philosophy of Logical Atomism* (PLA).¹ According to Russell, facts such as that this is red, that 9 is greater than 3, that Leibniz was an intelligent philosopher, etc., are formally structured parts of reality. This is a strong metaphysical thesis. But I want to go further still and claim that there also are Russellian facts of identity and diversity such as that Plato is Aristocles or that River Rubicon is not River Fiumicino. This is not merely a heavier metaphysical thesis, but it is also a risky one because, despite Russell's generosity concerning how many different kinds of facts exist, i.e. mathematical facts, psychological facts, physical facts, ... relational facts, general facts, negative facts, ... it is not clear at all that Russell would accept the existence of facts of identity, or diversity.

The purpose is then to argue for the reasonability of the thesis that there are facts of identity and diversity, within the framework of PLA. This is a particularized thesis of a more general one, i.e. that a Metaphysics of Facts would help in understanding fundamental metaphysical categories, e.g. Identity, Existence, Time, Beauty, Good, Space ... as *formal structures* of reality. This general thesis is not to be defended here, but it is still at the background of the project.

So there are two very different questions you can make concerning identity and facts of identity within the frame of a Metaphysics of Russellian facts. One is whether we can think of identity as a metaphysical structure conforming Russellian facts of identity. The other is whether Russell believed that there are facts of identity. One can agree with a negative answer to the latter, but still argue that the former has a positive one. I will defend this positive answer, and also consider why Russell could have denied facts of identity; this study, that's the aim, will also reinforce the positive thesis.²

The structure of the discussion is as follows. Section 2 introduces three main Russellian theses on facts and applies them (without Russell's permission) to the case of identity. The resulting idea is that facts of identity are fundamental parts of reality structured by identity. Section 3 presents a Kripkean version of the puzzle of identity where propositions with just logically proper Russellian names constitute new knowledge. Three usual 'solutions' to the puzzle, the metalinguistic, the Russellian descriptivist, and the logical one, will be rejected in section 4. A main conclusion is that Logic is not first in providing for identity and its necessity, and that the denial of a true statement of identity is not a contradiction. But the purpose is also to show how Kripkean cases count as proper discoveries of self-identity. The same idea is the object of section 5 but for diversity. Section 6 considers Russell's possible reasons for thinking of true identity statements as logical tautologies. All of them are problematic. In section 7, I claim that discoveries of identity and diversity facts reveal the formal structures of these facts given in experience.

The conclusion: identity and diversity are formal but metaphysical, rather than logical, categories. That anything is necessarily identical to itself, and necessarily diverse from any other, are not principles of Logic in the first place but of Metaphysics. As a corollary: this is a truly Russellian thesis matching the spirit – even if not the matter – of Russell's original philosophical logic.

2. Three Russellian theses on facts

'The world contains facts' (PLA, 6). Russell thought of reality as ultimately factual. Facts, which according to Russell are indefinable but can be analysed, are the ultimate constituents of the world, as well as the truth-makers of appropriate sentences. This does not mean that facts are simple units. Rather, facts are complex structures of simples. The simples that constitute facts are particulars and relations; and relations suggest a structure.³ Red, a given patch of colour, is simple. But that *this is red* is a fact, a complex not to be explained away by the simple red. Thus facts, and the sentences they make true/false, are not aggregates of simples: they are not combinatorial results but have a constitutive structure that defines them:

What I call a fact is the sort of thing that is expressed by a whole sentence, not by a single name like 'Socrates'. When a single word does come to express a fact like 'fire' or 'wolf', it is always due to an unexpressed content, and the full expression of the fact will always involve a sentence. (PLA, 7)

Just as sentences cannot express a full content with only one word (exceptions to be explained), facts are not just made of simples: there are the simples and there is the structure they form, but neither of them is separable nor constitutes a fact without the other. Simples conforming structures, that is, facts constitute the ultimate ontology of the world. Thus, a *first* fundamental thesis in Russell's *Metaphysics* is that *facts are ultimate complex structures of simples that constitute reality*.

For our purposes, a *second* important thesis in PLA is that structures of facts are no part of the matter of world. Simples constitute the matter of reality, but *structures of facts are purely formal*.

Facts are truth-makers of true, and false, statements; and the propositions expressed by the statements are complex symbols representing their facts. Importantly, the symbols in a proposition are not simples or facts but *correspond* to them. In this sense, a correct symbolism will reveal something structurally common in all propositions that share some of their symbols. And as propositions correspond to facts, the structure of propositions matches, or *is*, the structure of their facts:⁴

The proposition 'Socrates is mortal' may be replaced by 'Plato is mortal' or by 'Socrates is human'; in the first case we alter the subject, in the second the predicate. It is clear that all the propositions in which the word 'Socrates' occurs have something in common, and again all the propositions in which the word 'mortal' occurs have something in common (...) [S]o that you have the sense of complexity to begin with, that in fact you can get something which it may have in common with other facts, just as you may have 'Socrates is human' and 'Socrates is mortal' ... (PLA, 19)

The complexity of the fact is thus apprehended through the symbolism, but it cannot be defined, and neither it does essentially belong to the symbols or to our psychology. Rather, the complexity of propositions mirrors an objective complexity in the world. As Russell said, 'in a logically correct symbolism there will be a certain *fundamental identity of structure* between the fact and the symbol for it' (PLA, 24. My italics).

The formal structure reflected by the symbolism is not part of the material content of the proposition but of its propositional function. In xRy , x , R and y are all of them *variables*, not concepts, of individuals and of relations. Particulars and relations, Socrates and mortal, are no part of the formal structure of the fact they conform, but its simples; the fact that Frodo loves Sam has the same formal structure that Cassio loves Desdemona has. In the same way, the matter of the world is made up of simples, but they conform *complex facts whose structures are purely formal*.

Russell directly relates, or even thinks equivalent, this thesis with a *third* one that will be of interest to separate here. He thinks that *structures of facts are logical* in character. Thus, the formal structure of facts of reality is the *logical* structure of the propositions meant by corresponding true statements. Not-P is the logical form of the fact that Socrates is not alive, and xRy is the logical form of the fact that Cassio loves Desdemona. So a logically perfect language containing only syntax and one word for every simple object 'will show at a glance the *logical* structure of the facts asserted or denied' (PLA, 25. My italics). An ideal logical language will show the structure of the world.

Russell would not want to apply these three theses to identity. He would think of, say, Space-time as real form structuring facts. But identity belongs merely to the symbolism; there are no proper facts of identity. However, if we were allowed to postulate them, we would get:

- 1 Facts of identity are ultimate irreducible complex real structures of simples.
- 2 The structure of facts of identity is no part of the matter of world, but it is a purely formal structure.
- 3 Identity is a logical form.

I will agree with 1 and 2, i.e. that whatever was Russell's own view on the matter we can think of identity as a form that structures facts of identity. However, I will argue for the rejection of 3. Identity *is not a logical* form, but it is a *metaphysical* form. Thus, just as Russell thought that there is a structure of reality that he understood in logical terms, I will distinguish between Logic and Metaphysics to call metaphysical this structure. I will argue that identity statements between logically proper names are informative, and that the negation of an identity statement is not a contradiction, and neither is its affirmation a tautology; so determining distinctive characters of logical truths fail for identity. The thesis is then that identity is a formal metaphysical structure of the world.

In passing, philosophers sometimes make a difference between: (i) Identity understood (circularly) as something like what is expressed by the thesis that any entity *is* itself.⁵ They usually call this 'numerical identity' as it is also what supposedly makes entities being distinct from each other, thus allowing counting; And (ii) Identity understood as indiscernibility or sameness, i.e. as something like what is expressed by the thesis that if 'two' entities share all their properties or true predicates, then *it* is the same entity. To understand identity, and diversity, is a main object of the following discussion, but perhaps it is useful to remark that sense (i) of identity is first in consideration, although (ii) is also to be considered when (i) is understood as (ii) – Russell himself could have held this latter belief.

3. Discoveries of identity

A philosophically productive way of thinking of Identity and of facts of identity is to think about *what* it is that one discovers, learns, or comprehends, when one discovers a fact/proposition of identity. What does one discover when one discovers that Plato is Aristocles, or that Scott is Sir Walter? What would Pierre discover if he were to discover that London is Londres? If you accept that proper names are Russellian logically proper names directly referring to the same entity, these cases become perplexities, for then it really seems as if we can empirically discover a tautology. All the same, whatever Pierre would discover is a discovery of Identity; whatever the true statement that Plato is Aristocles expresses is a fact of identity. In other words, a simplified version of the Kripkean puzzle about Pierre provides a nice puzzle, not about belief but about identity.⁶

Remember Pierre. He is a Frenchman who lives in France. He has heard of a famous city in England, Londres, and when in France he says of Londres that:

```
Londres is beautiful
```

Later on in his life Pierre moves to London, to an unattractive part of the city, and there he says of London that:

```
London is not beautiful
```

Imagine that one day Pierre discovers that London is Londres. *What* does he discover?

Thus simplified Pierre's discovery is similar in form to other well-known discoveries of facts of identity. Suppose that Babylonians used to claim that:

```
Phosphorus is seen in the morning
```

But they also used to claim that:

```
Hesperus is not seen in the morning
```

One day, a Babylonian astronomer discovered that Hesperus is Phosphorus. (Most probably, the names were other at that time.) *What* did Babylonians discover when they made such a discovery?

4. Three answers on the table

A *first* answer is offered by the *metalinguistic* position. What the Babylonians, and Pierre, discover is that they had been using two names for the same entity, that is, that Plato was also called Aristocles, Londres was called London, etc. This seems to have originally been Quine's position.⁷ The Babylonians, and Pierre, do not discover a fact of identity in the first place, but a linguistic fact concerning proper names in their languages, i.e. that there were two different names for the same entity – and for the best possible logical language, you might want to choose one of them and use it only. Different linguistic proposals would then discuss the appropriate semantic relation that is established between the name and the referent in order to determine what it is that is discovered.⁸

I will take distance from this approach. Even if any answer to the discovery of identity will also involve *as a consequence* some theory about proper names, the question cannot be successfully answered exclusively in linguistic terms. For a start, it seems that the discovery is about the entity, not about its names. Moreover, identity statements are necessary,⁹ but the relation between a particular name and its bearer is contingent – London cannot fail to be Londres even if it had never been called London or Londres. So any answer to the puzzle of discovery in terms of names is going to change the subject in modal contexts unless complex devices are introduced.

I will also run over the *second* answer that is, nonetheless, Russell's own and well-known proposal (also in PLA, 29 & 77ss). This is the *descriptivist* view. It says in a nutshell that the Babylonians discovered that the morning star (or some other favourite or recognizable definite description they could use to designate Phosphorus) is the evening star (or some other favourite description of Hesperus). In a similar way, Pierre would discover that the ugly city where he now lives in is the city he had thought so beautiful when living in France. According to Russell, cases like these show that ordinary proper names are not logically proper names as they are incapable of standing for a particular. Analysis reveals that ordinary proper names are in truth abbreviations for descriptions: London is the ugly city where Pierre sees himself living, and Londres a beautiful thought of the capital of Angleterre.

One could think that this solution to the discovery question falls prey to the Kripkean modal argument: The discovery is the discovery of the fact that London is Londres, and London would be Londres even if London had not been the city that Pierre feels so ugly, or Londres were not the city that Pierre imagines so beautiful. So it cannot be that Pierre discovers something about these or those possible properties of London. However, as I made the question from Pierre's point of view, i.e. asking what it is that *Pierre* discovers, perhaps the modal difficulty does not seem obvious against the descriptivist, for whatever Pierre discovers will necessarily be related to *his* own beliefs at the moment of *his* discovery.¹⁰

Precisely Russell says (PLA, 28–29) that only using descriptions can one talk about entities which one is not directly acquainted with: you cannot name an entity you are not acquainted with, because names are symbols standing for entities but you do not have the entity, so to speak. So when you talk about, say, Socrates (or neutrinos) without being acquainted with him, you are in fact using some description or some belief (about the entity!) in substitution for the name. In a similar way, what Pierre would discover would be necessarily related to what he had in his head when he discovered that London is Londres – i.e. that the such and such is the so and so ... Moreover, as we can hardly share what each of us believes, or knows, about the same things, Russell acknowledges, as a consequence of this view, that any name (including logically proper ones) 'seldom means the same thing two moments running and does not mean the same thing to the speaker and to the hearer' (PLA, 29) (And immediately Russell mentions what will be a later main goal of Quine, the elimination of singular terms in the logical language).

Now, whether one agrees that every name should be replaced by a proper description, there is still a way of stating the difficulty against the descriptivist answer to the discovery question that makes it insurmountable. It is the fact that Pierre could have in mind the same conception for 'London' and 'Londres' when making his discovery. In a more Kripkean terminology, he could have fixed the reference of 'Londres' and of 'London' by exactly the same properties or descriptions. As Kripke writes:

The puzzle can still arise even if Pierre associates to 'Londres' and to 'London' *exactly* the same *uniquely identifying* properties. How can this be? Well, suppose that Pierre believes that London is the largest city in (and capital of) England, that it contains Buckingham Palace, the residence of the Queen of England, and he believes (correctly) that these properties, conjointly, uniquely identify the city. (...) Earlier, when he spoke nothing but French, however, he associated *exactly* the same uniquely identifying properties with 'Londres'. He believed that 'Londres', as he called it, could be uniquely identified as the capital of England, that it contained Buckingham Palace, that the Queen of England lived there, etc. Of course he expressed these beliefs in French... (1979/2011, 148. Original italics)

If this situation is possible then the descriptivist answer to the question of Pierre's discovery gets uninformative in its own terms: Pierre would discover that *the so and so is the so and so*, which would be just as discovering that London is London.

One could also say that if Pierre believes that all these properties conjointly, uniquely identify London, and if he associated previously exactly the same properties with 'Londres', it seems that Pierre is already in a position to know that Londres is London. His descriptions 'match' to such an extent that they seem to single out just one and the same entity – the city that is London alias Londres.¹¹ But then: *either* we follow the Kripkean point to its very end, and conclude that Pierre could not discover that London is Londres without also discovering that Buckingham Palace is Palais de Buckingham (which for Pierre would sound something like BOOKINKAM), that Queen Elisabeth is Reine d'Angleterre, and so on. As he could be in the same state of ignorance about any of these identities, the difficulty for the Russellian would hold all the way down. *Or*, as I said above, we follow the descriptivist intuition and, replacing again every proper name by proper beliefs in terms of descriptions, we have to conclude that there is nothing Pierre discovers; i.e. he would come to 'know' things like that the city with the most famous fog in the world is the city with the most famous fog in the world – which are uninformative tautologies according to a descriptivist such as Russell.

The last point shows why a possible *third* answer to the discovery question, which is the *logical* answer, cannot be right

either. In a highly influential piece, Paul Boghossian(1994) argued that the thesis, which he named the transparency of mental content, fails for cases such as Pierre's. The thesis of the transparency of mental content says that if two thinker's token thoughts possess the same content, the thinker must be able to know a priori that they do. Boghossian thus argues that, despite tradition to the contrary, this thesis can fail. So Pierre, this is the idea that interests us here, does not know that his thought that London is beautiful and his thought that Londres is beautiful have the same content; and this non-awareness of him explains, or is the same as, his not being aware of holding *contradictory* beliefs. Pierre is in fact contradicting himself, but we cannot really blame him of a logical mistake. His difficulty is not an incapacity for consistent reasoning – he could be a great logician. The difficulty is rather a failure of the thesis of the transparency of sameness of content of his beliefs as he does not know that London and Londres have the same content/reference.¹²

As I said, the puzzle here is not about Pierre's beliefs, but about the discovery of the fact that London is Londres. Nevertheless, both share the general intuition that the claim that,

Londres is beautiful

is *logically contradictory with* the claim that,

London is not beautiful

However, it is not obvious at all that these two claims contradict each other. If they were contradictory, say, because one predicates while the other denies the same predicate of the same *entity* (?), then, it would also be the case that it is logically self-contradictory to deny that London is Londres when 'London' and 'Londres' refer to the same entity. Thus, when Pierre discovered that London is Londres, Pierre would discover that he had been, inadvertently, contradicting himself. Somehow Pierre could, or would, then *discover the tautology* that Londres is London. But there is nothing to discover in a tautology!

In the same way, if the claim that Phosphorus is seen in the morning is *logically contradictory with* the claim that Hesperus is not seen in the morning, then it is logically contradictory to deny that Phosphorus is Hesperus if Phosphorus and Hesperus are proper names of the same entity. And the Babylonians would have discovered that they had been holding plenty of contradictory beliefs when one of their astronomers discovered that Hesperus is Phosphorus – or that Vesper was Lucifer. So they somehow empirically *discovered the tautology* that Phosphorus is Hesperus. But tautologies lack information!

In other words, as Pierre and the Babylonians lack the information in the statements of identity that Hesperus is Phosphorus and that London is Londres, these statements cannot be tautologies. And the general intuition *that* Londres is beautiful is logically contradictory with London is not beautiful when 'London' and 'Londres' refer to the same entity, is incorrect. It is not logically contradictory to deny that London is Londres even if it is the case that London is, and necessarily is, Londres. Thus, the denial of a true identity statement (also assuming that it is necessary) is not a logical contradiction because a true identity statement is not always a tautology but can contain information about the world.¹³

Thus, that London is Londres is not a logical truth: it does contain information. But the information is to be found, in the first place, in the relation of identity itself, not in the entity. And facts of identity are necessary for metaphysical but not for logical reasons. So one can deny some necessary truths (those that belong in Metaphysics) without logical contradiction. Necessary truths of diversity facts also belong to this set. I propose a case study in the next section. Then, sections 6 and 7, confront the question about the sort of information that one gathers when discovering these metaphysical facts.

5. Discoveries of diversity

Some years ago, you bought your Harlequin Head masterpiece to some villain art merchant. You knew the picture had been snatched from the Kunsthall museum in Rotterdam, and the amount of money you had to pay was incredible and it was irrational on your part to get into such a debt. You also knew this was a wrong act. But once given the opportunity, you were unable to deny yourself your longing for possession, and convinced yourself you would very soon return it to the Kunsthall, and then confess your crime. Only a few days ago, you discovered that Harlequin Head is safe in another museum. Picasso had never painted your painting. Your Harlequin Head and Harlequin Head are two paintings! Thus only a few days ago you discovered the necessary fact that Harlequin Head is not Harlequin Head, but another entity: a truly excellent fake.

But what has you discovered? Not that you had just one name for two distinct entities. Yes, you *also* had just one name for two distinct paintings, but that is just a contingent fact over the fact that your Harlequin Head was impossibly Harlequin Head. Thus, as there is no possible world in which at least one of them is not painted by Picasso, what you primarily discovered is that there are two, and necessarily two, paintings.

The metalinguistic philosopher cannot explain what it is that you have just discovered. He cannot explain your total

disappointment when you realize that yours is not Harlequin Head: the having of a name does not (not generally, and not in this case) cause this kind of disappointment. But the descriptivist is in no better position. There is no property, nothing in the nature of either of the paintings that is not also in the nature of the other. And there is no different emotion they produce on you before the discovery – if you never discovered that they are two, there would never be such a difference. There is absolutely no difference in colour, or in texture. Both paintings fully share, so to speak, their nature. Only they have been painted by different artists. This is of course enough to make them two numerically distinct, and necessarily other, entities. But it is not enough to make them qualitatively different, nor essentially different, as they are truly qualitatively indiscernible. If you do not agree, and you think that their actual origin is an essential property or a property that makes a *difference* in *what* they are, think instead in a possible situation where Picasso himself has made a copy of his Harlequin Head. The making of a copy by Picasso could perhaps devalue the original Harlequin Head, or revalue the copy; but not even his act would make the copy the original Harlequin Head. However, none of them could have ever been the other. Sure, you could also think that what you have discovered is that truly Harlequin Head is safe *in another museum*. Well, this is *also* something you have discovered. But this is not what made you cry.

What made you cry is the discovery of the nude fact that one is not the other; that Harlequin Head is impossibly Harlequin Head. This is not the discovery of a contradiction, but of a metaphysically necessary fact. Cases of indiscernible but distinct entities show that where facts of diversity are discovered, whatever else one might discover as well, one discovers at heart that *that* (which previously had been supposed to be one entity) is two distinct entities. In the same way, cases of sameness of reference fixing properties show that where facts of identity are discovered, whatever else one might discover, one discovers that *that* (which previously had been supposed to be two distinct entities) is one and numerically the same one entity. The only simples in these facts are particulars: one particular for the case of identity; two (indiscernible) for the case of diversity. So one does not learn anything about the material properties of these particulars. Rather, one gets acquaintance with the forms of identity and diversity that makes them the kind of facts they are. In sum these discoveries show how we can apprehend the fundamental formal complexity of the world.

I think that Russell would agree with this general picture, especially for asymmetric fundamental relations. You can reduce symmetric relations to sameness and difference of predicate. Full sameness of predicate is all there is for identity – difference for diversity. And thus, according to Russell, whenever you get a true statement of identity/diversity between logically proper names the statement *cannot be informative*. And this is where, I think, he gets wrong. He is right that the information cannot be shown in the predicate. Nevertheless, this is the counterpoint, there is still something to learn: the information, represented in the formal structure of the proposition, is the very same formal structure of the fact.

6. Russell on identity statements between proper names as tautologies

In PLA (82) Russell said, 'If "c" is a name, the proposition "Scott is c" is either false or tautologous' (PLA, 82). I can think of three possible reasons for Russell's saying this, and the three of them are problematic:

- 1 'Scott is Sir Walter', where 'Scott' and 'Sir Walter' are taken as Russellian logically proper names and is the 'is' of identity, is a tautology because you *can interchange* 'Scott' and 'Sir Walter' in any sentence without altering its truth-value.

A tautology is then a form of logical identity that is recognizable by a test of interchangeability *salva veritate*.¹⁴ If 'Scott' and 'Sir Walter' are logically proper names, then they can be interchanged in any sentence whatsoever without altering its truth-value. Suppose they can. Then, *Scott is Sir Walter* is a tautology.

However, this form of logical identity cannot be the proper understanding of the relation of identity that necessarily holds between any entity, like Scott, and itself. It cannot be the same relation because this form of logical identity could hold between Scott and Sir Walter when they do not stand for the same entity but they stand instead for two indiscernible entities. If Scott and Sir Walter were two distinct but wholly indiscernible entities, their proper names could be interchanged in any context *salva veritate*, *except* for contexts of identity and diversity themselves such as 'Scott is Scott', or 'Scott is not Sir Walter'. If Scott and Sir Walter were two distinct but wholly indiscernible entities, in neither of these sentences can you write 'Sir Walter' instead of 'Scott' in the subject. If you did that, both sentences, which are true as they stand, would be false. But if your aim is to account for identity in terms of interchangeability, identity and diversity cannot be the main exceptions. That they would be shows that identity and diversity are conditions for interchangeability *salva veritate* rather than the other way round.

So interchangeability *salva veritate* is no good reason for the thesis that identity sentences with proper names truly taken as names are tautological. For that, you should in the first place deny the possibility that there are indiscernibles – which by the

way Russell does deny, as we will see. But even then, you cannot say that interchangeability salva veritate shows the tautological character of identity; the most you could say is that interchangeability salva veritate is itself sustained by the belief that indiscernibility implies identity.

(2) 'Scott is Sir Walter', where 'Scott' and 'Sir Walter' are taken as Russellian proper names and *is* is the 'is' of identity, is a tautology because it is *derivable from the laws of Logic* alone. This looks very in accord with Russell, especially if the Law of the Identity of Indiscernibles, i.e. Leibniz's law $\forall x \forall y (\forall P (Px \leftrightarrow Py) \rightarrow (x = y))$, is a law of Logic. And Russell seems to have thought that LII is a law of Logic (in the *Principia* *13, [Whitehead and Russell, 1910-13](#)) because diversity and identity are relational properties of things.¹⁵

If LII is understood as a law of Logic that is allowed to include diversity and identity as instances of predicates, then 'Scott is Sir Walter' would be one of its instances, and thus a tautology. That is, it would be a property of Scott to be identical with Sir Walter, to be distinct from Jane Austen would be another of his properties, and so on. And thus, whatever (e.g. Sir Walter) has the same properties that Scott has will be Scott, according to the law.

However, on the one hand, it then seems very hard not to see a *petitio principii* in the reasoning, as it is assumed rather than derived that Sir Walter is identical with Scott.¹⁶ On the other hand, LII looks more like a metaphysical thesis than a logical one here. For if the sign between the variables in the consequent is that of identity, LII says that indiscernible entities are identical – be identity a relational property or not. But that indiscernible entities are identical is a metaphysical thesis.

(3) 'Scott is Sir Walter', where 'Scott' and 'Sir Walter' are taken to be Russellian proper names and *is* is the 'is' of identity, is a tautology because in that case whatever I am asserting is *about the person*, not about the name, so in both sides of the 'is' the content is the same, i.e. the same referent. This is what Russell held in PLA:

If I say 'Scott is Sir Walter', using these two names as names, neither 'Scott' nor 'Sir Walter' occurs in what I am asserting, but *only the person, and thus what I am asserting is a pure tautology.* (PLA, 83; my italics)

Thus, only Scott, the man himself, occurs in the assertion. This external view of reference and meaning where things in the world are part of the propositions had been consistently held by Russell for a long time. Already in his correspondence with Frege – in Frege (1980, 163 & 169) – Russell argues against the Fregean idea that to make a statement, to refer, and so on, are to be understood as intentional acts where names always have cognitive significance. For if, say, the Mont Blanc itself were no part of the proposition that the Mont Blanc is over 4000 m high, the proposition would not be true about the Mont Blanc, but about some subjective (perhaps inter-subjective) concept of the mountain.

Thus, according to Russell, Scott, the man himself, occurs – twice – in the assertion that Scott is Sir Walter. But why does this imply, or explain, that it is a tautology that Scott, the man, is Scott, the man? This is a bit more of Russell in PLA:

It is at once obvious that if 'c' [in 'Scott is c'] were 'Scott' itself, 'Scott is Scott' is just a tautology. But if you take any other name which is just a name for Scott, then if the name is being used as a name and not as a description, the proposition will still be a tautology. For the name itself is merely a means of *pointing to the thing*, and does not occur in what you are asserting... (PLA, 82; my italics)

Now, if *only* Scott the man occurs in the assertion, perhaps Russell wants to say that 'Scott is Scott/Sir Walter' is merely naming or 'pointing to' the man Scott? This cannot be. The statement is not pointing to Scott (or Sir Walter, the man), even if both names directly refer to him and the proposition includes the simple particular as its only term. An assertion of identity is not an assertion of reference. One is not merely expecting that language were to point to a man when saying 'Scott is Scott/Sir Walter'. You cannot get rid of the assertion of identity itself: the assertion is that Scott, the entity, *is* Sir Walter or that Scott *is* himself. (And this does not look like a tautology – even if it is impossibly false.)

Nevertheless, it seems unreasonable that Russell is taking the statement that 'Scott is Sir Walter' as a statement of reference. Most probably, what he means here is that the statement is a tautology because it is a *repetitive* statement, i.e. it says *the same* in both sides of *is*. Thus, even if Russell does not say this here, he seems to be implying that 'Scott is Sir Walter' is a tautology because it is *uninformative*. Let's see.

7. On the metaphysics of identity

In the Introduction to the 1985 edition of *The Philosophy of Logical Atomism* David Pears writes, on the last quote of Russell above, that:

This remarkable passage makes Kripke's point, that, when two rigid designators flank the identity-sign, the resulting statement is necessarily true, if it is true at all. For in such a case the identity will hold *in virtue of the meanings of the two rigid designators*. (PLA, xxiv; my italics)

Thus, according to Pears (1985), a true identity statement is necessarily true because it is a tautology: the *meaning* at both sides of the identity-sign provided by the names is the same because both names directly refer to the same man. Now, even if this were what Russell is stating, I do not think this is Kripke's point. According to Kripke, it is the case that when two rigid designators for the same entity flank the identity-sign the resulting statement is necessarily true. But the Kripkean *reason* for holding *the necessity* of any particular true statement of identity is not that there is the same meaning at both sides of the sign for identity. Rather, the primary reason for its necessity is that *identity is a necessary relation holding de re* of any existing entity, so that no entity can fail to be itself.¹⁷ Thus, the resulting statement is *not* a tautology – it is not an analytical truth, which would be a priori according to Kripke – but an a posteriori statement of metaphysical necessity: when you discover that Scott is Sir Walter, you discover a metaphysically necessary *fact*. Despite this, however, Kripke does not really tell us *what* it is that you discover. What does it convey to discover a fact of identity like this? – What do you discover when you discover that your Harlequin Head is not Harlequin Head?

For Russell, on the other hand, 'Scott is Sir Walter' is a tautology because both names *mean the same* referent:

...you make exactly *the same assertion* whichever the two names you use, provided they are really names. (PLA, 82; my italics)

The ordinary use of words is a means of getting through to things, and when you are using words in that way the statement 'Scott is Sir Walter' is a pure tautology, exactly on the same level as 'Scott is Scott'. (PLA, 83)

According to Russell, 'Scott is Sir Walter' is a tautology because both names *mean the same* referent. There is the same meaning at both sides of the 'is' so the statement is an uninformative tautology.¹⁸ If 'Scott is Sir Walter' contained any information at all, there should be some difference in meaning. And then, as we know, one or both names would not be proper names but informative descriptions. In this sense, same as Frege, Russell looked for the possible propositional content in any identity statement *at the sides* of the sign. For Frege (1892) if 'Hesperus is Hesperus' and 'Hesperus is Phosphorus' have different information the difference has to be found in the names: the different signs in the sentences must correspond to different modes of presentation of that which is designated, i.e. 'Hesperus' and 'Phosphorus' have different cognitive value. For Russell, if 'Hesperus is Hesperus' and 'Hesperus is Phosphorus' have different information the difference resides in difference of description, so 'Hesperus' and 'Phosphorus' are not proper names.

Russell's conclusion is then that true statements of identity (between logically proper names) cannot be informative. In the same sense, statements of diversity (between logically proper names) are always false, or their information resides in difference in description when the, as a consequence, *ordinary* names are properly analysed. That River Rubicon is not River Fiumicino can mean either that River Rubicon is not River Rubicon (which is always false), or that there is some property, shown by the analysis and the description, that River Fiumicino has but River Rubicon does not – so the original statement is true, but it is not a statement of diversity between proper names.

I have tried to show along the paper that true statements of identity and of diversity between proper names are informative: there is something one learns when understanding them, or when knowing the facts that make them true. But, this is point, the information is not in the semantics, but in the form of the proposition. The reason why Russell could not find them informative is that he was looking at the wrong place, i.e. at the semantics of the names in the statements, thus missing the structure. But as I quoted before, he believed that '[I]n a logically correct symbolism there will be a certain *fundamental identity of structure* between the fact and the symbol for it' (PLA, 24; my italics). In the same sense, the structure of identity gets captured in the discoveries of facts of identity. The particular in the fact is not the only worldly thing that becomes part of the proposition: there is also the structural relation. As Hager (1994, 109) underlines, simples in reality are not like building blocks in a wall; rather, they are like particular notes in a symphony that can be reinterpreted as long as its *structure* is respected. Just as the mold shows the shape of the statue, in the same way the form of the proposition mirrors the form of the fact that one gets acquainted with when learning the fact.

Thus, 'Scott is Scott' and 'Scott is Sir Walter' express the same proposition, but not in the sense that they express the same tautology understood as *equality of meaning*. They express the same proposition because they express the same (Russellian!) fact. They cannot express a tautology, i.e. an equality in meaning, because in such a case they would be necessarily true in the same sense that 'Tru is Tru' is necessarily true even if Tru is a made-up expression. But that Tru is Tru is not a *fact of identity*. If any true statement of the form a is b is equivalent to a is a , then identity statements would be trivially empty. And this must be wrong. The statements that Scott is Sir Walter, that Hesperus is Phosphorus or that London is Londres have metaphysical, not logical, import. Thus, the assertion that Scott, the entity, is Scott is not necessary because its denial is a contradiction. It cannot be false, but the reason for this impossibility is that it expresses a metaphysically necessary *fact about Scott*.

Metaphysical and logical necessity differ. But the difference is not a question of the 'quantity' of possible worlds that make logical or metaphysical statements true. That metaphysical necessity is not logical necessity means that there are statements that are necessary for *logical reasons*, and statements that are necessary for *metaphysical reasons*. It is the case, that is, if you agree with Bird's (2001) well-known example, that salt necessarily dissolves in water, but it is not contradictory to deny that it does. It is the case, if you agree with Ellis (1999), that wine is impossibly blood, but it is not logically impossible that it is. Why? Because, even if it were the case that no substance can have another essence, or that no substance can behave another way, none of these theses is derived from any logical truth. To be so, you should first *add* these theses, or some other in a similar vein, as axioms into your favourite logical system.

It is not contradictory to deny that the Earth rotates around its Sun when it does; it is not contradictory to say that it is true that it does not if it does. That p is true if p is a fact is not a principle of Logic, unless one accords so. In the same sense, in order to be possible, if ever it could be, to write the Logic of the Metaphysics of the world, you would need to introduce metaphysical principles as axioms. That any thing is necessarily identical to itself would then be one of them.

The impossibility that Scott is not Scott is also a question of Logic. But in this sense 'Scott' is no name. In this sense, it is also contradictory to deny that x is x , even when x is empty. In a sense that is wholly irrelevant to Metaphysics, it makes no harm to maintain that it is logically contradictory to deny that x is x or to deny that the actual king of France is the actual king of France. But the sense in which it would be logically contradictory to deny that x is x has nothing to do with the world. There is no *fact of the matter about x* being logically identical with x – nothing and nobody is named x . On the other hand, it is metaphysically, not logically, impossible to deny that any entity is itself. This is why in discovering that Sir Walter is Scott you do not realize that you were contradicting yourself when you thought that Sir Walter was not Scott – for you were not.

8. Conclusions

If there is a sense in which 'London is Londres' is a tautology, this sense has nothing to do with the entity that Londres is. And if 'London is Londres' expresses something about the object, it expresses a necessary fact of identity. This statement has metaphysical import. But its metaphysical import is not part of the semantics of 'London', which is merely London itself. The statement expresses a fact of identity and would count as a discovery by Pierre: his discovery would be that of a new acquaintance with a metaphysical structure in a particular fact which he had been unaware of. London, the entity, is the only simple in this fact. But *that London is Londres* is a fact you can learn, a complex, as Russell would say, not to be identified with its only simple, London. Thus, just as one is acquainted with the fact that this is red when perceiving something red, so is one acquainted with other facts, including necessary ones, and their constitutive structures.

The same holds of diversity. You do not discover that you were contradicting yourself when you thought that your painting was Harlequin Head, even it is impossible that it was. You discover a particular fact of diversity with only two simples. But there is more to the fact than the simples: there is the metaphysical structure of diversity that you now grasp in the fact that Harlequin Head is not Harlequin Head.

Footnotes

1 A previous version of this paper was presented at a Workshop about Russell in *The Philosophy of Logical Atomism* in Madrid in 2019, and its main thesis was the same one as here. When re-writing the paper for *Inquiry*, I considered the possibility of also considering more recent theorists of identity, thus changing the direction of paper. I have finally decided to leave its purpose as it was because I saw in it an opportunity to decide whether there was a crucial point in history at which philosophical logic changed the subject. I think it did. ✘

2 Other important theorists of facts, such as D.M. Armstrong, also believe that there are *not* facts of identity. In a sense that affects a main background point in this paper but which I cannot consider with sufficient care here, Armstrong's

philosophy shows the progressive transformation, initiated by Quine and Carnap, of Metaphysics into a question of Ontology, and of Logic into a question of Language. Thus, where Russell and Wittgenstein had worried about the logical structure of reality – or outlined a ‘certain kind of logical doctrine, and on the basis of this a certain kind of metaphysics’ (PLA, 2)–, Armstrong proposed ontological universal relations: nomological, causal, instantiation relations, etc. holding between universal properties, or between properties and things. That he dismissed talk about strict identity, and mainly cared about identity over time (e.g., Armstrong 1997, ch. 2), is just another example of this progressive change in subject in the Metaphysics of Facts, from logical structures to universal relations. Other philosophers of facts, such as Mulligan, Simons and Barry Smith also deny facts of identity: ‘Provided we can account for the truth and falsehood of atomic sentences, we can dispense with special truth-makers [facts] for e.g., negative, conjunctive, disjunctive and *identity* sentences.’ (1984, 289; my italics); and then they significantly write that the ‘idea of a perfect parallelism of logical and ontological complexity is the misery of logical atomism’ (1984, 298). This paper is written within opposite spirit. ✘

3 As it also happens in Physics, the usual image of Russell’s atomism is a view of the world consisting ‘of many independent entities that exhibit qualities and stand in relations to one another’ (Klement 2019). Even if this is not clearly wrong, it can be misleading: one runs the risk of visualizing plenty of balls floating in empty space instead of a complex distribution of patterns of energy. In a parallel way, Russellian facts are complex structures made up by *serial* metaphysical relations, and other sorts of classes. The importance of serial relations, and of an ultimate order, constituting facts is also underlined by Paul Hager (1994). ✘

4 One referee for *Inquiry* has pointed out to me that it is wrong to say that the logical structure of propositions corresponds to the structure of the world, because Russell says that there is not a complexity in the facts corresponding to molecular propositions such as conjunction or disjunction. Russell writes: ‘I do not see any reason to suppose that there is a complexity in the facts corresponding to these molecular propositions, because, as I was saying, the correspondence of a molecular proposition with facts is of a different sort from the correspondence of an atomic proposition with a fact.’ (PLA, 41) Now, I do not think that Russell is denying that there is formal correspondence between these facts and reality. The idea, I think, is that molecular propositions can be decomposed into ontologically independent components, which are atomic facts. Atomic facts cannot be thus divided, and, therefore, they are ultimate complexities and not logical compounds. Nevertheless, if there are identity facts, they should be atomic facts. The discussion in the paper concerns these only. ✘

5 See e.g. the entry about Identity in *The Stanford*, by Noonan and Curtis (2018). ✘

6 It also seems to me that Kripke’s version of the puzzle about belief is a form of telling why the puzzle about identity (about discoveries of identity) cannot be solved in terms of beliefs about the entity in question. That is, it is another form of denying that proper names stand for descriptions or modes of presentation: their cognitive value, if any, does not explain their contribution to the proposition. ✘

7 I am following Kripke’s reading (1971/2011, 6) of Quine, and of Marcus/Barcan. For a more precise and developed analysis of this answer, and the next, see my García-Encinas (2017); the present paper attempts to develop some of the ideas there but within the Russellian framework of facts in PLA. ✘

8 For a recent summary of the advantages and difficulties of metalinguistic views on proper names, see Gray (2018). ✘

9 I will not attempt to defend the necessity of identity here. However, it is my purpose to show that the acceptance that identity is necessary does not imply that it is contradictory to deny true identity statements. In a sense, this could count as an indirect argument for the defence of its necessity, as denial of contradiction has traditionally been used against its necessity. ✘

10 This difficulty also reveals why imagination cannot be the source of modal metaphysical knowledge. It is not only that the roads of imagination would make metaphysical knowledge ultimately private, but that in its dealings imagination will use contingent descriptions or representations of things (I have considered this problem more carefully in García-Encinas 2015). ✘

11 Thanks to an anonymous referee for *Inquiry* for posing this difficulty. ✘

12 On a parallel case, where Jane is unaware that two apples are the same one and thinks of ‘one of them’ that it is wholesome at the time she denies that ‘the other’ is wholesome, Boghossian writes that: ‘Two things are true of Jane in this case. First, *her de re beliefs about the apple logically contradict each other*: the (Millian) proposition subtended by the one is p and the one subtended by the other is not-p. And, second, she cannot recover from this condition on an a priori basis; to discover that the beliefs contradict each other she would have to learn an empirical fact, namely, that the apple involved in the first thought is identical to the apple involved in the second. *That the two thoughts logically contradict each other* is not introspectively accessible to her.’ (Boghossian 1994, 41. My italics.) ✘

13 Kripke (1979, 146) also writes that is clear that Pierre 'lacks information, not logical acumen. He cannot be convicted of inconsistency.' One anonymous referee for *Inquiry* insists that Kripke's remark can be taken to mean that while Pierre is in fact entertaining logically contradictory beliefs, he is not in an epistemic situation which allows him to see that this is so. Thus, the implication is not that Pierre's denial of an identity statement isn't contradictory, but that he does not see (and cannot see) that it is contradictory. But, again, if the negation that London is Londres is logically self-contradictory, then that London is Londres must be a logical truth, which it is not. ✘

14 In 'On Denoting' Russell (1905) writes: 'If a is identical with b, whatever is true of one is true of the other, and either may be substituted for the other in any proposition without altering the truth or falsehood of that proposition.' (485) This, however, does not imply that identity is tautological for this reason. I have not really found any place where Russell accounts for the tautological character of identity in terms of substitution *salva veritate*. ✘

15 See Muehlmann's (1969) nice discussion for the thesis that Russell did hold that identity and diversity could be instances of properties in LII, thus making LII necessarily true and, thus, according to Russell, an axiom of Logic (LII would be necessarily true *because* nothing would fail to fulfil it. The difficulty is that one could ask, once more, why would nothing fail to. And to answer why, you would need to presuppose LII again). ✘

16 See a recent work by Shumener (2017) on the difficulties of grounding identity on qualitative indiscernibility. Her paper also includes a nice discussion on the im/possibility of grounding identity on existence. ✘

17 In the Preface to *Naming and Necessity* Kripke (1980) writes that (i) that identical objects are necessarily identical, and (ii) that true identity statements between rigid designators are necessary, and self-evident thesis; and (ii) roughly follows from (i) using substitution of rigid designators for universal quantifiers (4). Also in the proof, in (1971/2011), that if a is b then a is necessarily b, the thesis that every entity is necessarily identical to itself is an explicit premise. ✘

18 This does not mean that Russell identified tautologies with uninformative statements. Logical propositions such as 'If p implies q and q implies r, then p implies r' are also 'in some sense or other like a tautology,' and a priori (PLA, 76). But it is not clear that these propositions are uninformative. However it might be, Russell did believe that any uninformative statement is a tautology. ✘

Acknowledgements[Q2]

This paper was written as part of Research Project PID2019-108870GB-I00, Spanish Ministry of Science and Innovation. Thanks to the Anonymous referees for *Inquiry*, and to the audience at the Workshop on The Philosophy of Logical Atomism Madrid 2019, for their comments on previous versions. Thanks to Fernando Martínez-Manrique for always helping me with my basic English. And special thanks to Mathew McKeever, the editor for *Inquiry* who followed the arduous process leading to the publication of this paper. Thanks to the Anonymous referees for *Inquiry*, and to the audience at the Workshop on The Philosophy of Logical Atomism Madrid 2019, for their comments on previous versions. Thanks to Fernando Martínez-Manrique for always helping me with my basic English. And special thanks to Mathew McKeever, the editor for *Inquiry* that has followed the arduous process leading to the publication of this paper. Thanks!

Disclosure statement

No potential conflict of interest was reported by the author(s) [Q3].

References

- Armstrong, D. M. 1997. *A World of States of Affairs*. Cambridge: Cambridge University Press.
- Bird, A. 2001. "Necessarily, Salt Dissolves in Water." *Analysis* 61 (4): 267–274.
- Boghossian, P. 1994. "The Transparency of Mental Content." *Philosophical Perspectives* 8: 33–50.
- Ellis, B. 1999. "Causal Powers and Laws of Nature." In *Causation and Laws of Nature*, edited by H. Sankey, 19–34. Dordrecht: Kluwer.
- Frege, D. 1892. "On Sense and Reference." In *Arguing About Language*, edited by D. Byrne, and M. Kölbel, 36–56. London: Routledge.
- Frege, G. 1980. *Philosophical and Mathematical Correspondence*, edited by G. Gabriel, H. Hermes, F. Kambartel, C. Thiel, and A. Veraart. Chicago: University of Chicago Press.
- García-Encinas, M. J. 2015. "The Role of Intuition in Metaphysics." *Teorema* 34 (3): 79–99.

- García-Encinas, M. J.** 2017. "The Discovery That Phosphorus is Hesperus: A Follow-Up to Kripke on the Necessity of Identity." *Analysis and Metaphysics* 16: 52–59.
- Gray, A.** 2018. "On the Very Idea of Metalinguistic Theories of Names." *Ergo* 5: 9. doi:10.3998/ergo.12405314.0005.009.
- Hager, P.** 1994. *Continuity and Change in the Development of Russell's Philosophy*. Dordrecht: Springer.
- Klement, K.** 2019. "Russell's Logical Atomism." *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), E.N. Zalta ed. <https://plato.stanford.edu/archives/spr2020/entries/logical-atomism/>.
- Kripke, S.** (1971) 2011. *Identity and Necessity*. Reprinted in S. Kripke. *Philosophical Troubles: Collected Papers I*, 1–26. Oxford: Oxford University Press.
- Kripke, S.** (1979) 2011. *A Puzzle About Belief*. Reprinted in S. Kripke. *Philosophical Troubles: Collected Papers I*, 125–61. Oxford: Oxford University Press.
- Kripke, S.** 1980. *Naming and Necessity*. Cambridge, MA: Harvard University Press[Q4].
- Muehlmann, R.** 1969. "Russell and Wittgenstein on Identity." *The Philosophical Quarterly* 19 (6): 221–230.
- Mulligan, K., P. Simons, and B. Smith.** 1984. "Truth-Makers." *Philosophy and Phenomenological Research* 14 (3): 287–322.
- Noonan, H., and B. Curtis.** 2018. "Identity." *The Stanford Encyclopedia of Philosophy* (Summer 2018 Edition), E.N. Zalta ed. <https://plato.stanford.edu/archives/sum2018/entries/identity/>.
- Pears, D.** (1985) 2010. Introduction to *The Philosophy of Logical Atomism*. Reprint., Routledge Classics, vii–xli[Q5].
- Russell, B.** 1905. "On Denoting." *Mind* 14 (56): 479–493[Q6].
- Russell, B.** 1918. *The Philosophy of Logical Atomism*. Routledge[Q7].
- Shumener, E.** 2017. "The Metaphysics of Identity: Is Identity Fundamental?" *Philosophy Compass* 12: e12397. doi:10.1111/phc3.12397.
- Whitehead, N. S., and B. Russell.** 1910–13. *Principia Mathematica*. Cambridge: Cambridge University Press[Q8].