

On Empty Names: Russell's Theory and His Rivals

Zherui Liu^{1, *}

¹University of Sydney, Sydney, Australia

*Corresponding author: zliu8054@uni.sydney.edu.au

Abstract. Talking about non-existent beings is a great and important constituting part in ordinary languages. However, it is not as easy to make a judgement about whether a statement involving non-existent terms is true or false. Many philosophers gave their own solutions on this issue and one of the most famous theories was brought up by Russell. This article discusses several of the most prominent theories of non-existent things, centered on Russell's theory of definite descriptions. Some of vital objections to Russell would also be demonstrated. The choice of solution is very significant since it could affect not only analysis of ordinary languages but also a variety of other issues.

Keywords: Logic; Philosophy of Language; Definite Descriptions; Bertrand Russell.

1. Introduction

In *On what there is*, Quine stated the Platonic riddle of non-being, the Plato's beard, and argued that "Nonbeing must in some sense be, otherwise what is it that there is not" [1]. It is effective to understand the non-existent matters with a daily phrase. When a person sneezes, people say the Christian benediction "God bless you". But the existence of God is indefinite or in someone's belief, he does not exist at all. People do not only refer to existent matters when communicating they also mention non-existent stuffs like ghosts or characters in fictions. But this makes the analysis tough and deviate from the ordinary assessment rules of truth-value judgement. On that issue, diverse approaches were brought up to give their trials of rendering sentences with non-existent objects.

Before the prevalence of Russell's theory of definite descriptions, theories of Frege and of Meinong once were very vocal on this puzzle. Nevertheless, Russell's theory of definite descriptions has been well accepted and granted as part of philosophy of language. However, it is not the only option and there are some alternatives to solve the puzzle. Russell's solution robustly made every sentence with empty names false, which was his cost. But he made a good save on ontology and intuition. While some other philosophers provided more abundant understandings on this issue at the expense of ontology, intuition or other cost. Though these possible solutions may not be as well-accepted as Russell's one, they are still quite worth discussing.

This article starts by introducing key notions required for this topic and build a simple criterion so that these theories can be compared based on a more targeted standard. Then, it tries to demonstrate and summarize some famous solutions before Russell, say theories of Frege's and Meinong's. After that, it comes to Russell's theories of definite descriptions. During these parts, pros and cons of all approaches would be gone through as well. Two key objections towards Russell's theory would also be drawn and how they did in their goals will be illustrated.

2. Important notions as Backgrounds

2.1 Singular terms and Definite descriptions

Here in natural languages, there are generally two kinds of expressions which refer to things, say general terms and singular terms. General terms are sets of objects determined by characteristics and do not designate any particular individuals. When I say "I read a book earlier this morning" with the general term "book", I am not referring to any specific book. It might be the case that I was reading *The Brothers Karamazov*, but there is no clue in my indefinite expression of "a book". Singular terms work the opposite way by singling individuals out [2]. I am clearly denoting a particular object if I change my assertion into "I read *The Brothers Karamazov* earlier this morning".

In the previous example, the book title is used to refer to the certain masterpiece. In other words, titles are proper names of objects, just as how names are used to denote people. While this is merely one kind of singular terms, there are various other kinds of singular terms. In diverse societies, people list our personal pronouns which are also a kind of singular terms. So are demonstrative pronouns, like this and that. And here also comes the protagonist of the essay, definite descriptions which are always of the form “the x” [3].

This may seem quite similar to the example of general term. Consider the distinction between the following expressions:

I read a book.

I read the book.

In neither sentence I mentioned the book title but only in the later one I clearly knew that I was denoting to a particular book which might be known by the listener. In that sense, “the book” in the second sentence is definite and satisfies the definition of singular terms while “a book” can be any book which meets the definition of book.

2.2 Empty terms and Plato’s Beard

Now it is time to move on to next dominant notion, empty terms. Empty terms are those terms what supports to refer non-existent matters [2]. Only existent things were discussed in instances above while in natural languages, speakers also talk about nonexistent stuffs like ghosts or characters in fictions. How do we tell the truth values of statements involving something not existing concretely? It seems too robust to give false values to all statements with empty terms. Consider the statement “The Hobbit comes from Shire”. Obviously, there is no such actual creature of Hobbit nor an actual place called Shire. Nevertheless, when I say the Hobbit, I still mean to denote something. On this point, the debate commenced.

2.3 Criteria

But before the debate, the criteria of this article shall be first built based on puzzles which have mentioned for now so that the pros and cons of all approaches which are to be discussed could be better criticized with some more clear standards.

Firstly, it is unpleasant to make all sentences involving empty terms to be meaningless so it is natural to put the preference of approaches which render statement with empty terms meaningful as the first assessment criterion.

Secondly, by Occam’s razor principle, committing to excessive ontology ought to be avoided or at least constrained to necessity.

3. Dominant theories before Russell

3.1 Frege’s theory

Frege made a distinction between sense (meaning, in Russell’s term) and reference (denotation, in Russell’s term) to provide solutions to puzzles of singular terms [3]. Frege called every designation between names and objects as a proper name. The sense of a proper name is the mode of the presentation of the referent which only reflects a single aspect of the object while the reference is the object expressions refer to [4].

For instance, consider the proper name, “Bertrand Russell”. The reference of this proper name is the certain worldly famous man whose name was Bertrand Russell. While the sense of “Bertrand Russell” might be what makes the person the person, or in other words, what people think of him when speaking of this name. It could be “one of the founders of analytic philosophy” or “the famous British mathematician, logician and philosopher who was closed to G. E. Moore”. Moreover, the sense of an object can be rather complex and able to be equipped with constituents, like multiple descriptions [3]. Case in point, the sun is defined as “the star that provides light and heat for the earth and around which the earth moves” in Cambridge Dictionary [5]. The sense of this lengthy description

might require some physics knowledge to comprehend but the reference of this proper name is simply the sun as is familiar to all. The key distinction is that the sense focus on the meaning of the proper name while the reference only cares about the object the proper name denotes to.

Under Frege's theory, the present king of France has its sense but no reference. And since that, the whole sentence has no referent and then has no truth-value. That is, the argument "the present king of France is bald" is neither true nor false.

Russell gave his critiques in his writing *On Denoting*. Firstly, Russell took the statement about the present French king being bald as plainly false. While under Frege's theory, this statement ought to be nonsense, which is a contradiction to the intuition [6]. More specifically, Frege's theory violates the Law of the Excluded Middle, according to which every proposition must be either true or false and no truth-value gap can be allowed [7]. Furthermore, Russell considered sense superfluous since his own theory can solve problems without recourse to the notion of sense [3].

3.2 Meinong's Theory

Meinong listed three statuses of matters: existence, subsistence and absistence. Concrete objects exist, like tables, computers. Objects that do not exist but have beings subsist, like abstract objects and numbers. And objects only absists have no being at all. Merely possible objects and impossible objects are both in this classification, like golden mountains and the round square [8].

In that sense, we do not have to make sure one thing exists before we refer to it. Then, the present French king absists. And the truth value is indeterminate since the present French king is an incomplete object.

While Russell did not feel like that was a good idea. First, it violates the non-contradiction law as the round square is a contradiction itself. To clarify, LNC, as one of the twin foundations of Aristotle's logic, is defined as follows, "It is impossible that the same thing can at the same time both belong and not belong to the same object and in the same respect, and all other specifications that might be made, let them be added to meet local objections" [7]. Second, it conceives existence as a property which leads to a problem of inconsistency of properties. For instance, round, square and existence cannot be equipped by the same object simultaneously. Also, it commits to an unacceptable ontology to non-existent objects-Meinong's jungle [3]. And that violates the principle of Occam's razor.

4. Russell's theory of descriptions

Russell gave an analysis of definite descriptions and showed how this analysis is extended to proper names.

Definite descriptions are not really referring terms. They are incomplete symbols. An incomplete symbol has no meaning in itself, but only in context. Grammatical form is the superficial form of an expression while logical form is how the expression really works [6]. So, in Russell's analysis, when people say "The F is G", they are implying that there is at least one F, there is at most one F and every F is G. In a word, what the speaker actually mean is equivalent to such a statement that "there exists exactly one F and it is G" [9]. In other words, the semantics of a definite description in a sentence consists of an existence claim, a uniqueness claim, and a maximality claim [9]. Consider "the book is *The Brothers Karamazov*." So, in the designation of "the book", this very certain book has a certain amount of exact one (the combination of at least one and at most one) and is unique in the denotation. Even though "the book" is just a copy of the most popular version of *The Brothers Karamazov* and there are countless copies which were printed at the almost same time and place as the denoted one, "the book" in the statement is uniquely referring to this book the speaker was thinking of.

Under his theory, everything gets easy. The statement about the present French king then can be divided into three minor statements.

There is at least on present French king (the existence claim).

There is at most on present French king (the maximality claim).

Every present French king is bald (the uniqueness claim).

The present French king does not exist so that it fails at the minor statement 1 (the existence claim) and the overall statement about him being bald is false!

For now, the advantages of this approach are quite obvious. It renders these statements meaningful and satisfies the Law of the Excluded Middle (LEM) and the Law of Non-Contradiction (LNC) without committing to a great ontology.

Nevertheless, the cost was also expensive. All sentences with non-referring terms are false. There are scientific cases such as Vulcan. ‘Vulcan is a planet close to the sun’ was no falser than ‘Vulcan is made of cheddar cheese’. Such claims are problematic because, at the time, it was unclear whether Vulcan existed.

Also, the negation to these statements can be really ambiguous. What would be the proper negation to “the present French king is bald”? Actually, there can be many potential negations. Intuitively, we would say the negation is “the present French king is not bald” (labelled as Negation 1). If the original statement false, does the negation of it have to be true? If that can be granted a ground rule for negation, then our intuitive negation would be in trouble. Negation 1 is false since it also implies the existence of the present French king. The other possible negation “it is not the case that the present French king is bald” outperforms at this point but it seems that the meaning of it somewhat deviates from our intension of negation.

5. Some main objections

Although Russell’s theory had been accepted by a wide range of philosophers, some famous objections arose and gave violent attack to Russell’s descriptions. Two dominant objects were from Strawson and Donnellan. However, neither of them convinced me to reject Russell’s definite descriptions. In the following parts, I will briefly introduce both objections and demonstrate where they lose their competitiveness.

5.1 Strawson’s argument

Strawson challenged Russell’s truth conditions and asserted that Russell’s solution was mistaken [10]. He argued that ‘the present King of France’ does not entail the existence of a present King of France but presupposes it. When the presupposition fails, sentences involving the descriptions are not false but truth-valueless. This clearly violates LEM although Strawson vacillated on whether to attribute the truth-valuelessness of the sentence to truth-value gap or just claim the failure of the sentence on expressing a determinate proposition. In any case, the falsity is against the intuition and unable to hold. According to Strawson, sentences with empty names are themselves incomplete. All these expressions actually fail to refer matters since these names are empty. However, these expressions still have meanings. Whether sentences are meaningful is independent of the utterance situation. In conclusion, meaningful sentences can be true, false and neither if the presupposition fails [9].

However, truth conditions of Strawson are also problematic on some intuitive examples. “The present king of France gave me a dollar today” is obviously false when we recourse to intuition while Strawson’s theory would suspend the truth value of the phrase [9].

5.2 Donnellan’s Argument

From Donnellan’s viewpoint, definite descriptions have two possible functions depending on the occasions of use. And the genuine referring use would be obscured without correctly dealing with the duality of function. And he suggested that it was exactly the mistake both Russell and Strawson made in their theories. Donnellan distinguished two different ways as the attributive use and the referential use [11]. On an attributive use, “the F is G” expresses “Whatever is uniquely F is G” while on a referential use, this proposition singles out a specific thing and claim it as G. Consider the sentence “the murderer of Smith is insane.” When it is uttered on the second the detective saw the damaged body, the speaker was trying to say that whoever the murderer is, the person is insane. That would be

counted as an attributive use. But what if the utterance is after the arrestation of the suspected murderer, Jones? When people pointed at Jones and shouted out the exactly same sentence, speakers were criticizing the madness of Jones no matter whether he was the killer or not. And that was an instance of a referential use. According to Donnellan, Russell's theory only captured the attributive use and lost its function when it comes to the referential use. Nevertheless, Kripke disagreed with this objection and argued that Russell's theory could actually cover both functions Donnellan mentioned [9].

6. Some possible Discussions

LEM: Are truth-valueless sentences acceptable? Or can truth-values other than true or false be tolerated?

Based on Russell, a staunch advocate of LEM, neither sentences without truth-value nor truth-values other than true or false can be allowed in logic. While philosophers holding other theories did not all follow that rule, such as Frege and Strawson [7]. Strawson's counterexample of vacuous expressions can be strong objection to the convention of LEM. Besides, there are also some non-classically-valued systems wherein sentences are not necessarily assigned a classical truth value. Instances include Lukasiewicz logic, Bochvar logic and Kleene logic [9]. Here, classical truth values are only 0 (false) and 1 (true). While many-valued logics allow other truth values which might be a number between 0 and 1 or adding "undefined" as a third truth degree [12]. Sentences involving future contingents also has a demand for other possibilities than merely classical truth-values.

But this specific point involves many relevant issues of logic and has its great impact on them. Further discussion on it is worthy in potential following research. One of the most powerful attacks towards Meinong's theory was that it committed to an extravagant ontology. According to Occam's razor, entities should not be multiplied beyond necessity [13]. But what kind of ontology is worthy? And what kind of ontology is excessive? It is indeterminate whether Meinong's jungle worth its cost.

7. Conclusions

For now, theories of neither Russell nor Meinong are pleasant enough for the ground criteria. However, in comparison with Russell's disadvantages of rendering all sentences with empty references false, Meinong's theory seems worth its price, namely the ontology. What is more, there were some other objections towards Russell's theory focusing on some possible paradox can be brought by Russell's approach and giving providing potential amendment. But they came with their own flaw as well. The core issues are that there are also some remaining questions on preference of logic. For instance, whether to accept sentences without truth-values, truth-values other truth or false or even contradictions is vital to build the whole criteria and makes great impact to other relevant issues. Answers to all questions would weigh heavily in the choice of theories.

References

- [1] Quine W V. On what there is. The review of metaphysics, 1948, 2(1): 21-38.
- [2] Lycan W G. Philosophy of language: A contemporary introduction. Routledge, 2018.
- [3] Russell B. On denoting. Mind, 2005, 114(456): 873-887.
- [4] Textor M, K., Heusinger, et al. 3 (Frege on) Sense and reference. Semantics-Foundations, History and Methods, 2019: 33-61.
- [5] Bentzen B. Frege on Referentiality and Julius Caesar in Grundgesetze Section 10. Notre Dame Journal of Formal Logic, 2019, 60(4): 617-637.
- [6] Russell B. The principles of mathematics. Routledge, 2020.
- [7] Horn L R. Contradiction[J]. Stanford Encyclopedia of Philosophy. 2006.

- [8] Marek J C. Roderick M. Chisholm. Phänomenologische und analytische Philosophie, Bausteine zur Geschichte der Philosophie an der Universität Graz. Brill, 2001: 487-519.
- [9] Readings in the Philosophy of Language. MIT Press, 1997.
- [10] Strawson P F. Freedom and resentment and other essays. Routledge, 2008.
- [11] Donnellan K S. Proper names and identifying descriptions[M]//Semantics of natural language. Springer, Dordrecht, 1972: 356-379.
- [12] Gottwald S. Many-valued logics, Philosophy of logic. North-Holland, 2007: 675-722.
- [13] Autzen B. Elliott Sober, Ockham's Razors: A User's Manual. Cambridge: Cambridge University Press, Philosophy of Science, 2016, 83(4).