

Abstract

Here I apply broadly Russellian direct realist insights to evaluate Locke’s argument for his preferred theory of signification for general names. My approach is both logical and historical. It is logical because it develops a novel Russellian critique of this argument by focusing on the logical reasons Locke was led to adopt it. It is historical because my goal is to illuminate and to illustrate the historical connections between Russell’s realism about relations (through his use of the principle of abstraction) and early modern accounts of abstraction.

1 Introduction

Proper names and general names are better illustrated than defined. Consider the following simple sentences which motivate the distinction.

(1) Hypatia is wise.

(2) Hypatia possesses wisdom.

(3) Man is born free but is everywhere in chains.

(4) Ottoline met Russell.

(5) Winter comes before Spring.

Hypatia, Ottoline, Russell, Winter and Spring can very generally be classed under *things* or *particulars*.¹ The names (‘Hypatia’, ‘Ottoline’, ‘Russell’, ‘Winter’ and ‘Spring’) which refer to them are *proper names*. Some of the other names or words (‘wise’, ‘wisdom’, ‘Man’, ‘is’, ‘born free’, ‘met’, ‘comes’, ‘before’) are *general names*.² General names, we may say, in general refer to *qualities* or *universals* (also known as properties, adjectives or predicates).³

¹By ‘things’ and ‘particulars’ I just mean that they exhibit certain logical properties such as individuality and being able to flank an identity, for example. Grammatically, things can only occur as grammatical subjects or as direct or indirect objects in sentences that contain them — never in the two-fold way that a predicate can occur in a sentence. See (1) and (2) which show, respectively, that *wise* can occur both as a predicate and as a term of relation, i.e., a direct object.

²We can take ‘born free’ as the single adjective ‘free-born’.

³Following Russell, transitive and intransitive verbs are relations, which are universals too. My discussion in this paper draws on Russell’s earlier work in logic in Russell (1903) *Principles of Mathematics* (POM, henceforth) chapter IV and V, Russell (1905) “On Denoting” and Russell (1912) chapter “The World of Universals”.

Writing in the late 17th century, Locke recognized a similar distinction between proper names and general names. A proper name signifies its bearer — an individual or particular thing. The problem, as Locke saw it, had to do with the signification of general names.⁴ Starting with a nominalistic assumption (later endorsed by Berkeley) that all things that exist are particulars, Locke introduces his theory of signification for general names in *An Essay Concerning Human Understanding* (*Essay*, henceforth) III.iii — the Chapter *Of General Terms* — section 6:

For since all things that exist are only particulars, how come we by general terms, or where find we those general natures they are supposed to be stand for?

In pursuit of answers to this question, Locke developed a theory of signification, based on *abstract general ideas*, for general names.⁵ According to this theory, general names signify “general representatives of ideas of the same kind” or “standards to rank into sorts” (*Essay* II.ix.11). We discover the signification of general names by *abstraction*. This is a process where “the mind makes the particular ideas to become general...considering them as they are in the mind...such precise appearances as they are in mind.”⁶ Abstract general ideas are these precise appearances of general representatives of particular ideas. Here’s the key passage:

Thus, the same color being observed today in chalk or snow, which the mind yesterday received from milk, it considers that appearance alone, makes it a representative of all of that kind. [A]nd having given it the name whiteness, it by that sound signifies the same quality, wheresoever to be imagined or met with: And thus universals, whether ideas or terms, are made. (*Essay* II.xi.9)

My discussion of Lockean abstraction may strike my readers as very brief. Let me say something about

⁴It is controversial what Locke means by ‘signification’ and there is a substantial literature that has been developed to try to grasp Locke’s meaning. There are those who believe that signification is a semantic relation similar in many respects to the contemporary notion of sense, meaning or reference we have become familiar with in analytic philosophy since Frege. These scholars are represented by Kretzmann (1968), Losonsky (1994) and Losonsky (2007). Other scholars like Hacking (1975), Ashworth (1984), Ott (2003) do not believe that Locke’s signification is a semantic relation of either sense, meaning or reference. Compare with Guyer (1994) and Dawson (2007). For a recent overview and critical discussion see Lowe (2016). What I say in what follows does not depend on what the right interpretation of ‘signification’ is. Although I am in agreement with Lowe (2016, 285) that signification is an *expressive relation* (thought-to-word) not a *semantic relation* (word-to-world), I have chosen to just stick to “signification” instead of replacing it with a another word like reference or meaning whenever I am discussing Locke’s view.

⁵The theory is broad enough to include a theory of signification for species names, genus names as well as natural kinds like gold. It is developed in *Essay* III.iii.11 – 15 and *Essay* III.vi.

⁶When Locke says that the abstract general idea of a man exists in the mind, he means that by a psychological act he calls abstraction we can *apprehend* (or become consciously aware of) what the signification of abstract general names are. See *Essay* II.ix.9.

this. The reason I am only giving the essential details of what Lockean abstraction involves is that my interest is not in how it works, i.e., the psychological details of the process. I am interested, instead, in the logical reasons, i.e., Locke's actual argument for why we need abstract general ideas in the first place. However, I should mention here that there are competing readings on how to read Locke on abstraction and whether Berkeley mischaracterized Locke's position while developing his criticism of it. Scholars like Ayers (1991) and Winkler (1989) take the relevant way of reading Locke to be *selective attention to* or *partial consideration of* the relevant features of an object and that if we read Locke this way, then he is immune to Berkeley's criticism. Other scholars such as Walmsley (1999), Walmsley (2000) and more recently Pearce (2019) take the position that Lockean abstraction involves *separation* (in thought) of the features of an object we wish to consider away from the features of an object we do not wish to consider in our reasoning. It is not crucial to my account which of these readings of Lockean abstraction is the right one and in what follows I will not argue that the psychological accounts of Berkeley's criticism are mistaken or that one of them is the right one.⁷ I can avoid taking a stand one way or the other because my main question is this: what can we say about Locke's argument for abstract general ideas? Specifically, did Locke *necessarily* require abstract general ideas for his theory of signification of general names to work?

The importance of my question is this. Early modern commentators and scholars (some of whom I have already cited) writing about Locke's model of abstraction and the subsequent debate between Locke on one side and Berkeley and Hume on the other have focused on at least the following questions: (1) What are abstract general ideas on Locke's account? What is their nature? Are they images or just features of particulars we selectively attend to? (2) What signification are general words supposed to have to abstract general ideas? Is the signification equivalent to what, from a contemporary view, we would describe as the meaning or reference of general terms? (3) How exactly is abstraction supposed to work? Is Locke's model of abstraction best characterized in terms of selective attention or separation? (4) Finally, what was Berkeley and Hume's critique of Locke's model of abstraction? Does the critique work? If so, how? If not, why not?

⁷In trying to understand the basis of Berkeley's criticism, most scholars have argued that Berkeley was objecting to the psychological process involved in abstraction. On these interpretations, Berkeley was arguing that introspective reflection according to Locke's model of abstraction would show that it is *impossible* to conceive of abstract general ideas. See Bolton (1987), Ott (2004) and Rickless (2012). The most explicit version of this psychological objection from Berkeley is given in the introduction to *A Treatise on the Principles of Human Knowledge* (PHK, henceforth) §10. Pearce (2017, 16) calls the argument that supports this interpretation *The Phenomenological Appeal* argument. This literature is careful to distinguish between abstraction as separation and generalizing abstraction. Scholars here argue that Berkeley was objecting to abstraction as separation since it is impossible to separate color from shape, for example.

Given the sorts of questions that are being asked here, the significance of what I am doing in this paper is that I am asking a more basic question: why did Locke need there to be abstract general ideas in the first place given that only particulars exist? None of the commentators who raise and discuss the questions above have critically discussed Locke's actual *argument* for the signification of general words found in the opening sentences of *Essay* III.iii.12.

The next thing therefore to be considered, is, what kind of signification it is, that general words have. For as it is evident, that they do not signify barely one particular thing; for then they would not be general terms, but proper names: so on the other side, it is as evident, they do not signify a plurality; for *Man* and *Men* would then signify the same; and the distinction of numbers (as Grammarians call them) would be superfluous and useless. That then which general words signify, is a sort of things; and each of them does that, by being a sign of an abstract idea in the mind, to which idea, as things existing are found to agree, so they come to be ranked under that name; or, which is all one, be of that sort.

This passage suggests that Locke's argument for his preferred theory of signification for general words turns on, among other things, considerations of *grammar*. He is led by grammar to believe that there must be a metaphysical distinction between 'Man' and 'Men'. Because 'Man' is a singular general name it must signify a definite singular thing, a precise appearance in the mind which we discover by abstraction. Locke appears to believe that it is evident that this argument can be generalized to include other general names besides 'Man'.

In what follows I will critically evaluate this argument whose conclusion Locke takes to be evident. Specifically, I will argue that given Locke's metaphysical commitments, there are reasons to think that he did not have to reject what I shall call *the plurality alternative*. Locke rejects the plurality alternative where he says, "[I]t is as evident, they do not signify a plurality." We shall see below, by drawing on some of Russell's earlier work on logic and commitment to direct realism about relations, that the account of abstract general ideas which Berkeley and Hume criticized could have been avoided by Locke if he had not dismissed the plurality alternative.

Briefly, there are two reasons that I will offer in support of my argument. First, as Russell himself recognized, Locke's model of abstraction unnecessarily *inflated* his nominalistic ontology by introducing mysterious abstract general ideas *in addition to* particulars. The thought here is that if Locke had coherently maintained his nominalism, he would have avoided signification to abstract general ideas

using *the principle of abstraction*. This principle shows how one can *directly* and *realistically* define predicates (qualities or universals) in terms of relations between particulars and classes of particulars.⁸ Second, Locke’s argument for abstract general ideas, provides an apt illustration of a failure to heed a methodological principle, which Russell was the first to emphasize in his 1905 paper “On Denoting”. This is the principle that the *grammatical form* of a sentence does not always mirror exactly (or correspond to) the *logical form* of the proposition it expresses.⁹

Both the principle of abstraction, which requires direct realism about relations (which are universals), and Russell theory of denoting phrases were crucial pillars in the development of Russell’s logical atomism. Logical atomism had a profound influence on the new American realism in the early 20th century (Russell, 1992, 125ff.). During his 1914 Lowell Lectures published as *Our Knowledge of the External World* Russell thinks that the new American realism is “very largely impregnated with [the] spirit” of logical atomism. Scholars have noted that Russell writes POM with a tone of exhilaration, triumph and liberation about how the advances in mathematical logic have finally succeeded in dispelling some of the difficulties previous systems of philosophy had when dealing with continuity and infinity (Hylton, 1992, 193). With respect to the principle of abstraction, the example that is cited by Russell himself and many scholars writing about the history of early analytic philosophy is the Frege-Russell definition of cardinal number.¹⁰ And with regard to the theory of denoting phrases, most scholars are familiar with how, beginning in 1905, Russell put this theory to work in dealing with some problems in Meinongianism and in developing the theory of incomplete symbols in *Principia Mathematica*.¹¹ My contribution here can also be read as providing further support and justification (from a different source) for Russell’s exuberant tone in POM.

Here’s how I have organized the rest of my paper. In the next section I clarify what I mean by ‘direct realism’. In section 3 I present my Russellian critique of Locke’s argument for his preferred signification of general words before concluding in section 4.

⁸See Russell (1986, 183). I return to this in section 3.1 below.

⁹I return to this in section 3.2 below.

¹⁰For Russell’s own emphasis see POM §§109 and 157. See Hylton (1992) for historical context and critical discussion and for a recent discussion of abstraction principles see Mancosu (2017).

¹¹Regarding the relationship between Russell, Meinong and the Origin of the Theory of Descriptions, see Boukema (2007). For the connection between the theory of definite descriptions and the theory of incomplete symbols, see Klement (2014)

2 What do I mean by direct realism?

Direct realism today is a view in epistemology (and perhaps philosophy of mind).¹² I don't have much to say in favor or against this contemporary view in epistemology. Nevertheless, the sense of "direct realism" that is relevant for my account in what follows can be understood by focusing on (1) what realism it is about, and (2) the kind of knowledge involved. First, it is realism about universals, but more specifically *relations*. Second, the kind of knowledge involved is, in Russellian terms, knowledge, by acquaintance, of *truths* as opposed to knowledge of things.¹³ Let me say more about these features of what I mean by direct realism in turn.

Firstly, direct realism is realist because it is committed to the mind-independent existence of relations.¹⁴ Stated in this manner, the realism in direct realism is supposed to be distinguished from any theory which implicitly (such as conceptualism) or explicitly (such as idealism) ties the nature or existence of relations to the mind or acts of the mind.¹⁵ I should note that Russellian scholars label Russell's realistic philosophy in various ways and it is also not always clear whether Russell consistently held the same realistic metaphysical commitments throughout his career.¹⁶ Hylton uses the phrase *Platonic Atomism* to label Russell's underlying metaphysics from September 1900 to around the time he was writing and completing POM (Hylton, 1992, 105 - 237). Indeed, Russell acknowledges that his account of universals is "largely Plato's" (Russell, 1912, 89). But while Plato believed that there was a mystical access to universals in the world of *Ideas*, Russell wants his realism to be based on *logic*:

These mystical developments are very natural, but the basis of the theory is in logic, and it is as based in logic that we have to consider it (Russell, 1912, 92).

It is for this reason that another term that Russell uses for his method or approach to philosophy is *Logical Atomism*. In a lecture before the French Philosophical Society on 23rd March 1911, published in French under the title "Le Realisme Analytique", Russell begins:

The philosophy which seems to me closest to the truth can be called "analytic realism". It is realist, because it claims that there are non-mental entities and that cognitive relations are

¹²The most sophisticated and influential account is by Huemer (2001). See also BonJour (2004) for a thorough overview and critique of Huemer. I thank an anonymous referee for drawing my attention to BonJour's article.

¹³See Russell (1912, 44ff.)

¹⁴There is an on-going debate on whether Locke's ontology includes mind-independent relations. See Langton (2000), Ott (2009), Ott (2017) and Rickless (2017) for some of the views on the table.

¹⁵See Russell (1992, 125ff.) and Russell (1912) chapter "The World of Universals"

¹⁶See Eames (1967) for useful discussion of the evolution of Russell's realism.

external relations, which establish a direct link between the subject and a possibly non-mental object. (Russell, 1992, 133)

So another label for his own realistic position is “analytic realism” and it involves “direct (cognitive) links.” So we can without distortion label what I am calling direct realism as analytic realism. Regardless of how we choose to label Russell’s view, one thing is clear: Russell held a realistic ontology of relations (and thus universals).

I now turn, secondly, to the kind of knowledge involved: knowledge by acquaintance of truths. Russell uses ‘acquaintance’ to mean direct and unmediated awareness of what is before the mind. Because it is knowledge of truth, not things, Russell’s view is *not* that we have direct access to universals as *entities* existing in time (Russell, 1912, 98ff.). Rather, it is that *propositions* (which are the bearers of truth and falsity in Russell’s view and which involve universals) are validated by facts, which are independent of our awareness that they obtain. He writes:

Consider such as a proposition as ‘Edinburgh is north of London’. Here we have a relation between two places. When we come to know that Edinburgh is north of London, we come to know something which has to do only with Edinburgh and London: we do not cause the truth of the proposition by coming to know it, on the contrary we merely apprehend a fact which was there before we knew it. (Russell, 1912, 97).

But in order to determine whether or not a proposition involving a universal is true or false, we must first of all *understand* it. And we can only understand it if we are acquainted with the universals in the proposition (Russell, 1912, 58). This acquaintance must be directly from experience. It is for these reasons that Russell argues that because all sentences involve at least one universal, all truths involve universals. Therefore, all knowledge of truths involves acquaintance with universals and this is the sense in which I am justified in labeling Russell’s philosophy as direct realist about universals.

3 Do we need Lockean abstract general ideas?

I now turn to a critical evaluation of Locke’s argument for his preferred theory of signification for general words. The relevant passage is *Essay* III.iii.12, which I repeat here for convenience.

The next thing therefore to be considered, is, what kind of signification it is, that general words have. For as it is evident, that they do not signify barely one particular thing; for then

they would not be general terms, but proper names: so on the other side, it is as evident, they do not signify a plurality; for *Man* and *Men* would then signify the same; and the distinction of numbers (as Grammarians call them) would be superfluous and useless. That then which general words signify, is a sort of things; and each of them does that, by being a sign of an abstract idea in the mind, to which idea, as things existing are found to agree, so they come to be ranked under that name; or, which is all one, be of that sort. (*Essay* III.iii.12)

As mentioned earlier, this passage suggests that Locke’s argument is based on grammar. Here I can use Russell’s earlier work on logic and direct realism about relations to show that Locke’s rejection of the *plurality alternative* was too hasty. The rejection of this alternative was too quick because, first, Locke was relying upon a psychological model of abstraction. Abstraction is one of the operations of the mind.¹⁷ But there is a logical model of abstraction based on the principle of abstraction, which shows how general names can be defined in terms of the membership relation to classes, i.e., pluralities.¹⁸ Secondly, in arguing that ‘Man’ and ‘Men’ have different referents, Locke is misled by grammar by asking for the meaning of words in isolation instead of in the context of a proposition. If Locke had instead focused on the logical form of the propositions that contain ‘Man’ and ‘Men’ he would have seen that there is no metaphysical distinction implied by the grammatical distinction — both ‘Man’ and ‘Men’ can be understood in terms of variables and classes.¹⁹ Let me discuss these two reasons in more detail.

3.1 The Principle of Abstraction

One way of seeing that rejecting the plurality alternative is not as “evident” as Locke thought it was, was given by Russell in the third lecture of *Lectures on the Philosophy of Logical Atomism*:

You can define the things which are red, as all things that have color-likeness to [a] standard [red] thing. That is practically the treatment that Berkeley and Hume recommended, except that they did not recognize that they were reducing qualities to relations, but thought they were getting rid of “abstract ideas” altogether. (Russell, 1986, 183)

According to Russell, if everything that exists is a particular then this nominalism about universals (which Berkeley and Hume recommended) can be made precise using what Russell called the *principle*

¹⁷See *Essay* II.ix.9 – 11. For a good discussion of these operation see Stuart (2008).

¹⁸I discuss this in more detail in section 3.1 below.

¹⁹See section 3.2 below for more discussion.

of abstraction.²⁰ The principle of abstraction says that any symmetrical and transitive relation on its field (or what we would call today an *equivalence relation*), gives rise to a class and a new membership relation between: (a) those terms that stand in the symmetrical and transitive relation to each other, and (b) the class.²¹ By applying the principle of abstraction, one can define *common qualities* of particulars in terms of the *membership relation* of those particulars to equivalence-classes of some similarity relation to an arbitrarily chosen particular with that quality (which then serves as our standard for comparing similarity).

Using this principle, Russell thinks that Locke could have proceeded as follows. It is not necessary for general names to signify abstract general ideas rather than classes. Putative signification to abstract general ideas like *redness* can be avoided using the relation <similar in color> to a ripe tomato, for example; and the membership relation to the equivalence class of the similarity relation. Since on its field <similar in color> is a symmetrical and transitive relation, i.e., an equivalence relation; it follows by the principle of abstraction that there exists an equivalence class of those terms that bear the relation <similar in color> to a real ripe tomato. See Figure 1. We then have the definition:

O is *red* if and only if *O* is a member of the class of objects that are similar in color to a ripe tomato.

Thus, since only particular red things (tomatoes, cherries, strawberries, lobsters, etc.) exist, this is the way that the principle of abstraction allows one to “dispense with [Lockean] abstraction,” which required signification to an abstract general idea of *redness*.²² One can content themselves with classes of concrete things that bear similarity relations to chosen standards with those qualities. This is one way of showing that Locke was too quick to dismiss the plurality alternative.

3.2 Grammar and Logical Form

The second way of critically evaluating Locke’s argument for abstract general ideas is in terms of the methodological principle emphasized by Russell in the 1905 paper “On Denoting”. Fundamental to

²⁰Compare §§157 and 210 of POM.

²¹The reader may know that an equivalence relation is symmetric, transitive, and reflexive. Yet here I am only characterizing it as symmetric and transitive. One reason I am doing so is that I am just following Russell’s discussion of the principle of abstraction in POM section 157, which I cite. Another reason is that it can also be shown that reflexivity is redundant if the relation is defined on its field. “Defined on its field” means there are terms (possibly the same term) which stand in the given relation, i.e., there is at least one instance of the relation. To see why reflexivity is redundant. Suppose R is symmetric and transitive and is defined on its field. Let aRb be an instance of the relation. Then by symmetry bRa . So by transitivity aRa and R is reflexive.

²²The quotation is from Lecture II of *Our Knowledge of the External World*.

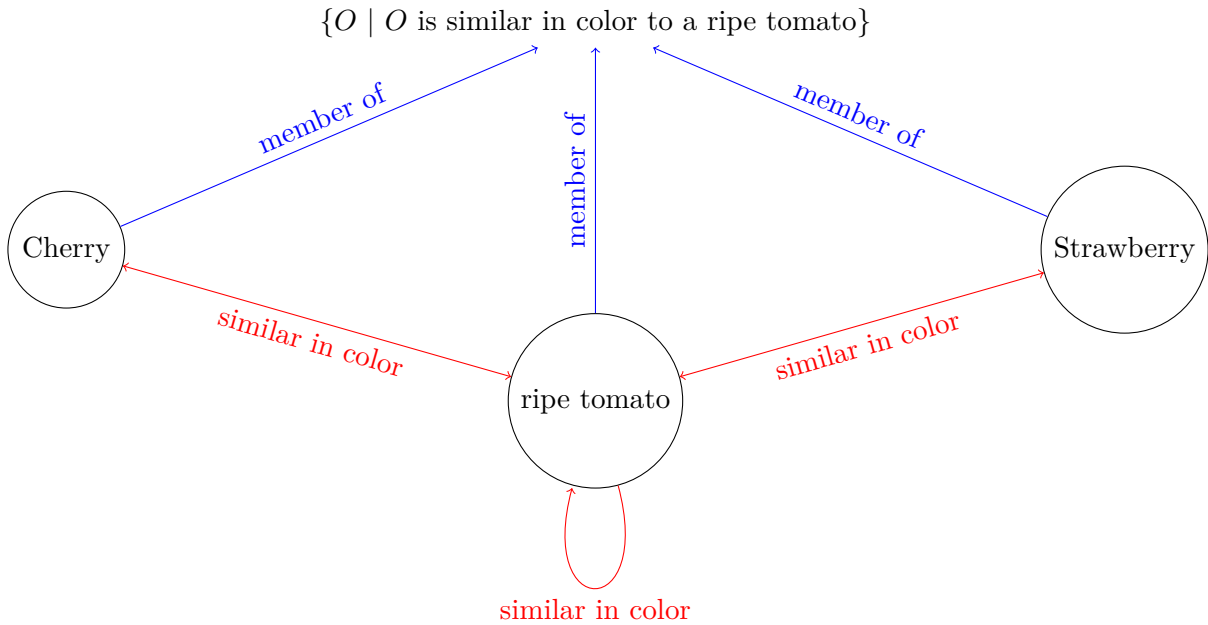


Figure 1: Diagrammatic view of the Principle of Abstraction

Russell’s theory of denoting in this paper is: (a) the notion of a variable and (b) the idea that the grammatical form of a sentence does not necessarily correspond to (or mirror) the logical form of the proposition it expresses. To illustrate the notions of grammatical form and logical form, let us consider how we can generalize from these sentences:

- (1) Hypatia is wise.
- (1.1) Cavendish is wise.
- (1.2) Hypatia is female.
- (1.3) Cavendish is female.

In order to generalize, we focus on what is common and what varies under a given variation. In (1) and (1.1) for example, what is common is the predicate *wise* and the verb *is*. What varies are the individuals *Hypatia* and *Cavendish*. So from (1) and (1.1) we can introduce variables and generalize to get $\exists x(x$ is wise) or assuming that Hypatia and Cavendish exhaust the universe of discourse $\forall x(x$ is wise). Now taking into account all four we can note that there is variation both in proper names and predicates. So we can generalize completely by introducing a variable for predicates, say P . We then say that all four sentences express propositions whose *logical form* is $P(x)$ where ‘ $P(x)$ ’ says x is P .

Now consider (2).

(2) Hypatia possesses wisdom.

(1) and (2) are semantically equivalent, which means that (1) implies (2) and (2) implies (1). But (2) has a different logical form from (1). In (1) the relation between Hypatia and wisdom is predication. If we let $W(x) =: x$ is wise, then logically (1) would be on Russell's view an atomic proposition of the form $W(h)$ where $h =: \text{Hypatia}$. In (2) however, the relation implied by the verb *possesses* is a binary relation between Hypatia and wisdom. So, the logical form of this proposition is xRy , where $R(x, y) =: x$ possesses y . So that (2) can be formalized as hRw , where $h =: \text{Hypatia}$ and $w =: \text{wisdom}$.

Now the grammatical form of (1) looks very similar to that of (3.1) below. In both there is a *grammatical subject* (Hypatia, Man) of which something is *predicated* (wisdom, free-birth). But this is where the apparent similarity in grammatical form of the two sentences can mislead as to the logical form of the propositions they express.

(1) Hypatia is wise.

(3.1) Man is born free.

There are at least two differences between (1) and (3.1) which imply a difference in logical form of the two propositions. First, (1) has a proper name 'Hypatia' for a definite individual. This means that the proposition can rightly be said to be *about* that individual. But in (3.1) the general name 'Man' is a proxy for a *denoting phrase* (e.g., 'Every man' or 'All men'). This means that as it occurs in (3.1) that proposition is not about a definite particular man but about what is *denoted*, namely, the entire class of humans.²³ Secondly, using variables, one can see that (3.1) is not of the logical form $P(x)$. Rather, the correct logical paraphrase shows that (3.1) is of the form $\forall x(x \text{ is } F \supset x \text{ is } G)$, for (3.1) says $\forall x(x \text{ is a man} \supset x \text{ is born free})$. But this same logical paraphrase or analysis can be given of (3.1*) below.

(3.1*) Men are born free.

Now recall that earlier we saw that Locke's argument for the signification of general names turned on considerations of grammar. Locke thought that because (3) and (3*) below seem to be grammatically of different forms — the first has a singular subject (Man) while the second has a plural subject (Men) —

²³I take for granted my readers' familiarity with notions of *aboutness*, *denoting phrases* and *denoting* I am using here. They are notoriously difficult notions to explain precisely in such limited space (See Hylton (1992, 251) and POM Chapter 5). Hence my appeal to examples from which I hope the meaning will emerge.

the general name ‘Man’ cannot refer to a class (in his own words “a plurality”) of people born free but everywhere in chains.

(3) Man is born free but is everywhere in chains.

(3*) Men are born free but are everywhere in chains.

But it is very implausible that in using ‘Man’ to say (3), Rousseau was signifying the abstract general idea of man. It is more plausible that Rousseau was signifying the *class* of men, and women, everywhere. Let me use one of Russell’s examples ((8) below) which does not involve a generic as (3) and (3*) do.

(8) I met a man.

(4) Ottoline met Russell.

The grammatical form of (8) seems very similar to (4). In both sentences there is grammatical subject (I, Ottoline) and a direct object (a man, Russell). But (8) and (4) have different logical forms. (4) is of the form oRr where o and r are constants (or proper names for individuals) while (8) is of the form $\exists x(Mx \& iRx)$ where i is a constant and x is a bound variable. Here, $Mx =: x$ is a man and $R(x, y) =: x$ met y . More importantly, in (8), there is no *definite* abstract general idea that I am signifying in using ‘man’ when I understand (8) since the variable ranges over *particular men*, i.e., a class.

4 Conclusion

What I hope to have shown in this brief paper is how the logical reasons which led Locke to adopt his preferred theory of signification of general words can be illuminated using Russell’s early work in logic, which was committed to a direct realist metaphysics of relations. The Russellian critique proceeded in two ways. One way involved using the principle of abstraction to define predicates or common qualities in terms of class membership. The other way was to notice that Locke is an example of how one can fail to heed a methodological principle that Russell later emphasized, namely, that the grammatical form of a sentence need not correspond to its logical form. The grammatical distinction between ‘Man’ and ‘Men’ does not imply a corresponding logical or metaphysical distinction in the context of a proposition. When paraphrased using mathematical logic, propositions involving denoting phrases like ‘a man’ and ‘Men’ turn out to be nothing like what their grammatical form would suggest — they involve variables (or quantifiers), which imply generality or indefiniteness. We can therefore have knowledge of the truth

of propositions that contain general names without having to apprehend any *definite* abstract general ideas as the signification of these general names.

References

- Ashworth, E. J. 1984. "Locke on Language." *Canadian Journal of Philosophy* 14, no. 1: 45–73.
- Ayers, Michael R. 1991. *Locke*, volume 2 Vols. Routledge.
- Bolton, Martha. 1987. *Essays on The Philosophy of George Berkeley (Ernest Sosa Ed.)*, chapter Berkeley's Objection to Abstract Ideas and Unconceived Objects, 61 – 81. D. Reidel Publishing Co.
- BonJour, Laurence. 2004. "In Search of Direct Realism." *Philosophy and Phenomenological Research* 69, no. 2: 349–367.
- Boukema, Harm. 2007. "Russell, Meinong and the Origin of the Theory of Descriptions." *Russell: The Journal of Bertrand Russell Studies* 27, no. 1: 41–72.
- Dawson, Hannah. 2007. *Locke, Language and Early Modern Philosophy*. Cambridge University Press.
- Eames, Elizabeth R. 1967. "The Consistency of Russell's Realism." *Philosophy and Phenomenological Research* 27, no. 4: 502–511.
- Guyer, Paul. 1994. "Locke's Philosophy of Language." In Vere Chappell, ed., "The Cambridge Companion to Locke," 115 – 145, Cambridge University Press.
- Hacking, Ian. 1975. *Why Does Language Matter to Philosophy?* Cambridge University Press.
- Huemer, Michael. 2001. *Skepticism and the Veil of Perception*. Rowman & Littlefield.
- Hylton, Peter. 1992. *Russell, Idealism, and The Emergence of Analytic Philosophy*. Oxford University Press.
- Klement, Kevin C. 2014. "The Paradoxes and Russell's Theory of Incomplete Symbols." *Philosophical Studies* 169: 183–207.
- Kretzmann, Norman. 1968. "The Main Thesis of Locke's Semantic Theory." *The Philosophical Review* 77, no. 2: 175–196.

- Langton, Rae. 2000. "IV Locke's Relations and God's Good Pleasure." In "Proceedings of the Aristotelian Society," volume 100, 75–91.
- Losonsky, Michael. 1994. "Locke on Meaning and Signification." In G.A.J. Rogers, ed., "Locke's Philosophy: Content and Context," 123 – 141, Cambridge University Press.
- Losonsky, Michael. 2007. "Language, Meaning and Mind in Locke's Essay." In Lex Newman, ed., "The Cambridge Companion to Locke's Essay Concerning Human Understanding," 286 – 312, Cambridge University Press.
- Lowe, E.J. 2016. "Language and meaning." In Matthew Stuart, ed., "A Companion to Locke," 279 – 295, Wiley-Blackwell.
- Mancosu, Paul. 2017. *Abstraction and Infinity*. Oxford University Press.
- Ott, Walter. 2004. "The Cartesian Context of Berkeley's Attack on Abstraction." *Pacific Philosophical Quarterly* 85, no. 4: 407–424.
- Ott, Walter. 2009. *Causation and Laws of Nature in Early Modern Philosophy*. Oxford University Press, USA.
- Ott, Walter. 2017. "'Archetypes without Patterns': Locke on Relations and Mixed Modes." *Archiv für Geschichte der Philosophie* 99, no. 3: 300–325.
- Ott, Walter R. 2003. *Locke's Philosophy of Language*. Cambridge University Press.
- Pearce, K. 2019. "Locke, Arnauld, and Abstract ideas." *British Journal for the History of Philosophy* 27, no. 1: 75–94.
- Pearce, Kenneth. 2017. *Language and The Structure of Berkeley's World*. Oxford University Press.
- Rickless, Samuel. 2012. "The Relation Between Anti-abstractionism and Idealism in Berkeley's Metaphysics." *British Journal for the History of Philosophy* 20, no. 4: 723–740.
- Rickless, Samuel C. 2017. "Locke's Ontology of Relations." *Locke Studies* 17: 61–86.
- Russell, Bertrand. 1903. *Principles of Mathematics (Norton Paperback 1996 Edition)*. W.W. Norton & Company.

- Russell, Bertrand. 1905. "On Denoting." *Mind* 14, no. 56: 479–493.
- Russell, Bertrand. 1912. *The Problems of Philosophy*. Oxford University Press.
- Russell, Bertrand. 1986. *The Philosophy of Logical Atomism and Other Essays 1914 - 19 Vol. 8 of The Collected Papers of Bertrand Russell (John G. Slater Ed.)*. George Allen & Unwin (Publishers) Ltd.
- Russell, Bertrand. 1992. *Logical and Philosophical Papers 1909 - 13 Vol. 6 of The Collected Papers of Bertrand Russell (John G. Slater Ed. with the assistance of Bernd Frohmann)*. Routledge.
- Stuart, Matthew. 2008. "Lockean Operations." *British Journal for the History of Philosophy* 16, no. 3: 511–533.
- Walmsley, Jonathan. 1999. "Locke on Abstraction: A response to M. R. Ayers." *British Journal for the History of Philosophy* 7, no. 1: 123–134.
- Walmsley, Jonathan. 2000. "The Development of Lockean Abstraction." *British Journal for the History of Philosophy* 8, no. 3: 395–418.
- Winkler, Kenneth. 1989. *Berkeley : An Interpretation*. Oxford University Press.