

Existence, Identity, and Empty Names *

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In a number of papers ¹ and a forthcoming book ², Alex Orenstein has argued against the modern logical orthodoxy starting from Frege. According to Orenstein, what is usually called “existential quantifier” and signified by “ \exists ” does not express existence. He rests his case on the considerations of the difficulties that the standard treatment of “existential quantification” has to face. One of the cases where such a difficulty arises for the standard treatment is that of empty names.

Orenstein’s discussions about empty names center around the following argument.

Pegasus does not exist.
So, something does not exist.

About this argument, Orenstein makes three claims.

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¹ Alex Orenstein, “Is Existence What Existential Quantification Expresses?” in *Philosophical Perspectives on Quine*, eds. Barrett and Gibson, 1990, Oxford, Blackwell; “Plato’s Beard, Quine’s Stubble and Ockahm’s Razor” in *Knowledge, Language and Logic: Questions for Quine*, eds. Orenstein and Kotatko, Boston Studies in the Philosophy of Science, 1999, Boston, Kluwer; “Existence, Identity, and an Aristotelian Tradition” in *Individuals, Essence and Identity: Themes of Analytic Metaphysics*, eds. Bottani, Carrara and Giaretta, 2002, Dordrecht, Kluwer.

² *Expressing Existence*.

1. The premise is a contingent truth.
2. The conclusion is a contingent truth.
3. The argument is valid as it stands.

These claims seem to be contrary to the usually held view; in particular, the second and third claims are usually considered to be plainly false. According to the usual view, the conclusion is not a contingent truth, but a necessary falsehood, and hence, the argument is not valid.

The reason why Orenstein can maintain such an unorthodox view is that he refuses existential import to the so-called existential quantification, which he calls “particular quantification” instead. His main point is that modern logical tradition since Frege has been wrong in interpreting the quantitative contrast of general/particular in terms of universality and existence. Thus, according to him, the conclusion of the argument is not equivalent to the existential claim such as

There exists something which does not exist.

which is indeed a self-contradiction.

I think there are some evidence that shows that “particular” quantification does not always have existential import. Consider the following argument.

John is looking for Pegasus.

So, John is looking for something.

This argument seems to be valid. Hence, the conclusion cannot be equivalent to

There exists something John is looking for.

which is false, because in spite of the validity of this argument we can claim that what John is looking for does not exist.

But it might be said that “look for” makes an intensional context and such a context must be regarded as exceptional, even though it is not clear how we should account for such exceptional cases. There is no reason to think that “exist” makes an intensional context. Moreover, there are some considerations which seem to show that it is contradictory after all to maintain that something does not exist, if we admit that there is a very close relation between existence and identity. This close relationship between two concepts can be expressed thus:

to exist is the same as to be identical with something.

If we accept this, then to claim that

(1) something does not exist

is nothing but to claim that

(2) something is not identical with anything.

But, the following is a logical truth.

(3) everything is identical with itself.

As (2) is contradictory to (3) which is a logical truth, (2) is a logical contradiction, and this shows in turn that (1) itself is a logical contradiction.

I hasten to add that Orenstein is well aware of this difficulty. His way of coping with it is to deny (3); for example, it is not true that Pegasus is identical with Pegasus. In general, non-existents would not be self-identical. Only existents are self-identical.

To see the possible alternatives more clearly, let us consider again the argument we started with. The premise was this.

(4) Pegasus does not exist.

If we grant that existence can be paraphrased in terms of identity, from this we have

(5) Pegasus is not identical with anything.

From this, by “existential generalization” we have

(6) Something is not identical with anything.

which is the same as (2) which we encountered before as a consequence of the conclusion of the original argument.

There are various ways we might take in dealing with this argument. I can think at least three such ways. Firstly, we might find nothing wrong with this argument and accept it as it is. Of course, this is the way Orenstein takes. As we saw before, if we take this course, we should deny the truth of the principle that everything is identical with itself. We should claim that only

existents are self-identical. Secondly, we might reject the step from (5) to (6) as invalid. This means that we do not consider “existential generalization” as a generally valid rule of inference. This is the way some of the free logicians take. Finally, we might question the equivalence of (4) and (5), which might result in severing the close tie between the concept of existence and that of identity.

Of these three, I find the first choice is more appealing than the rest. The second and third both seem to force us to change our logic much more drastically than we want. In the first choice, though the unrestricted form of the principle of self-identity no longer holds, a restricted form of it remains valid. We should admit that identity will be no longer a logical concept, because identity will not hold universally. But, if we retain the close tie between existence and identity, such a consequence is not at all surprising; for, if existence does not hold universally because some thing does not exist, then identity does not hold universally either.

However, I am still not convinced that this is the only way we should take. Are there any other way to deal with singular non-existentials?

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I think we can get a hint by considering a similar argument starting from a premise which has a general term instead of a singular term like “Pegasus”. There are two versions of such arguments. One starts from the premise like

(7) A Unicorn does not exist,

and another starts from the premise with a plural noun such as

(8) Unicorns do not exist.

First, let us consider an argument which starts from (7). From this, we infer

(9) A Unicorn is not identical with anything.

If we apply the rule of “existential generalization” to a place which is forbidden in a logic textbook, we get

(10) Something is not identical with anything,

which is the same as (6).

The second version with (8) as the premise runs like this: from (8), we infer

(11) Unicorns are not identical with anything.

As before, by an “illicit” application of “existential generalization” we get

(12) Some things are not identical with anything.

Though this is slightly different from (6) (= (10)), as long as we stick to the logical orthodoxy and hold the unrestricted validity of the principle of self-identity, (12) is logically contradictory just as (6) or (10) is.

I suppose Orenstein regards this argument as valid in spite of a nonstandard application of a standard rule, as he can accept (12) with a restriction on the validity of the principle of self-identity.³ But, if there were no version of such arguments with a singular term, we would find much less appeal in

³ I also suppose that, according to Orenstein, the arguments like the following are valid.

Tame tigers do not exist. (premise)
Tame tigers are tigers. (tautology)
So, some tigers do not exist.

As he argues in Appendix C to Chapter 5 of his forthcoming book, there might be nothing wrong with such a conclusion or an argument. Even so, let us take note that in this way we would be able to prove that for any kind K it is a logical truth that some Ks do not exist; it can be done thus.

Nonexistent Ks do not exist. (tautology)
Nonexistent Ks are Ks. (tautology)
So, some Ks do not exist.

But, presumably, from “some Ks do not exist” we may infer that something does not exist; this means that the sentence “something does not exist” does not express a contingent truth but a necessary truth, contrary to what Orenstein claims.

He might object to the second premise for a reason similar to that nonexistent are not self-identical. Then, we can prove that it is logically true that some Ks exist by the following argument.

Existent Ks exist. (tautology)
Existent Ks are Ks. (tautology)
So, some Ks exist.

Now we can derive “something exists” from this. This means that we have proved that something exists as a logical truth.

accepting these arguments. We would be content to follow the way of logic textbooks and translate (7)/(8) and (9)/(11) to the formulas like

$$(7') \neg \exists x(x \text{ is a unicorn})$$

$$(9') \forall x(x \text{ is a unicorn} \rightarrow \neg \exists y(y = x))$$

and conclude that there would be no counterpart of (10) or (12) as there is no way of applying the rule of existential generalization to (9').

If you complain that such textbook translations are not faithful to the surface forms of the original English sentences, we can use a different but logically equivalent formulas as the translations; first, we construe “exist” as a first-order predicate which is true of everything, and, secondly, use restricted quantification with “**a**” as a quantifier which has the same semantics as the existential quantifier; the resulting formula is the following:

$$\neg(\mathbf{a} \text{ unicorn}(x)) \text{ exist } (x),$$

which is equivalent to

$$\neg \exists x (\text{unicorn } (x) \wedge \text{exist } (x)).$$

As “exist” is true of everything, this turns out to be equivalent to (7') as desired.

So, the thought is this: if it might be possible to hold that a singular non-existential like “Pegasus does not exist” is logically not much different from a non-existential like “Unicorns do not exist”, then we might be spared us the difficulty of getting into a conclusion like “something is not identical with anything”.

I think Quine was on the right track when he invented a predicate “pegasize”, but he might have invented a common noun instead of a predicate. Moreover, “Pegasus” itself would do as such a common noun if we spell it without the capital “P”. Then, instead of “Pegasus does not exist”, we will have as a premise

$$(13) \text{ A pegasus does not exist,}$$

or

$$(14) \text{ Pegasuses do not exist.}$$

Either of them will not have any unwanted consequences.

My proposal seems to violate one of the methodological principles Orenstein says we should conform to, because it involves construing a singular sentence as having an import of a non-singular sentence. However, if we were conducting this discussion in Japanese where articles are absent and a singular/plural marking of a noun is not obligatory, there are no recognizable syntactic or semantic differences between a Japanese word corresponding to “Pegasus” and that corresponding to “unicorn”.⁴ I doubt that there are singular non-existentials in distinction from non-singular ones in Japanese.⁵ This might suggest that in the case of non-existentials the singular/general distinction might not be an essential factor in getting the right logical form.

Although we might leave the matter as it is, if we were considering a language like Japanese, I feel we should supply an account for a language like English why it is all right to treat an empty name as if it is a common name. In order to do that, in the next section I am going to discuss two things; firstly, I will discuss what causes the presence of empty names in our language, and, secondly, what we should do when we realize one of the names we have been using is an empty name. I think a consideration of the latter point is what is missing in Orenstein’s treatment of empty names, and it is very important to fill this gap in order to get a fuller view on the linguistic phenomena involving empty names.

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Here I understand names to include personal names like “Socrates” and “Osian”, place names like “Tokyo” and “El Dorado”, kind names like “horse”

⁴ The literal translation into Japanese of “Pegasus does not exist” sounds a little bit unnatural to my ears. In a more colloquial expression, we tend to use “nado” or “nan’tē” which means “and the like”. And, the exactly same thing applies to “A unicorn does not exist”. So, typical Japanese non-existentials are like the following:

Pegasasu(=Pegasus) nado(=and the like) inai(=don’t exist).
Yunikon(=unicorn) nan’tē(=and the like) inai(=don’t exist).

The presence of such expressions suggests that within a non-existential there is a certain pressure to have a plural subject. This suggests, in turn, that a genuinely singular non-existential might be rare.

⁵ For that matter, the same seems to apply to existentials, too.

and “unicorn”, and the names of material substances like “oxygen” and “caloric”.

A name is used either with the presence of the named object or without it. When we address a person by her name or we put the name of the material on the bottle which contains it, we use a name with the presence of the named object. Clearly, there is no room for an empty name in such cases.

When a name is used without the presence of the named object, its main function is to introduce the named object into a discourse. The named object is introduced into a discourse as a possible subject to be talked about in the course of the discourse. In distinction from the former case, as the named object needs not be present nearby, there is no a priori guarantee that every name in use succeeds in naming an object. An empty name is the case in point. If we use an empty name without knowing that it is, then we fail to introduce any object into a discourse, and any subsequent talk involving such a name is not really about anything. How does such a situation arise? How do such empty names become part of our linguistic practice?

There are two ways in which an empty name comes to be part of a linguistic practice. In one of these, a person or group of persons introduces a new name without an awareness of the fact that it does not denote any object in reality. “Vulcan” is an example of such a case. Other examples include “caloric”, “unicorn”, and “witch”. Some of them like “Vulcan” and “caloric” are unfortunate byproducts of scientific research, and some came from mythical or religious beliefs as “unicorn” or “witch” did. Another way in which an empty name comes to be in use is when a new name is introduced into a linguistic practice with its perpetrator’s full knowledge that it denotes nothing, and sometimes this fact itself is the very reason to introduce the name. Such cases are those Orenstein classifies under the heading “deception”. You can find many fascinating examples in the real life crime stories; in them, there are the names of non-existent companies, addresses, persons, goods, and so on.

I think that the names in fiction should be distinguished from these empty names that are found in non-fictional contexts. Hence, I call a name in fiction “a fictional name” and distinguish it from an empty name. But, we should remember that there are names which were first introduced in a fictional context, and, for various reasons, came to be in use also in non-fictional contexts afterwards. They are also included in the class of empty names.

The most remarkable fact about a fictional discourse is that any reper-

toire in our linguistic practice can appear in it; even the fictional discourse itself can be embedded within a fictional discourse, as testified by numerous examples throughout the literary history. A fictional use of a name is a non-fictional use of a name embedded in a fiction. And, such a fictional use of a name itself can be embedded again in a fiction, when we encounter a name in a fiction in a fiction. As any non-fictional use of a name can be turned into a fictional one, it is also possible to have an empty name within a fiction; we can easily imagine a fiction in which a gang of criminals invents a fictitious company and puts a name on it.

Any item in our ordinary linguistic repertoire can be simply embedded into a fiction without any change; for example, we have the same variety of speech acts in a fiction, and there are no speech acts which are only used in a fiction, nor those which are never used in a fiction. The entire vocabulary of the language also can be put in use in a fiction without any changes in syntax or semantics. And, it is rare that a new word or phrase is specially invented for the use in a fiction, although such things can happen in an avant-garde novel or a science fiction.

In this regard, the names in a fiction seem to be an exception. Although most of the names we find in a fiction are the same in sound and spelling in those already in use in non-fictional contexts, if we think that the reference of a name is essential to its identity as a word, then we should count these fictional names as new words; for, a fictional name has never the same reference as any of the names already in use, just because it denotes nothing which exists in reality.

Although there are many interesting problems relating to fictional names, I am going to consider only those empty names used in non-fictional contexts, because I think that the problems of fictional names can be approached in a fruitful way only after we are sufficiently clear about how an empty name works in non-fictional contexts; for, as I said above, the fictional use of a name is the use of a name in non-fictional contexts embedded in a fictional context.

So, let us go back to the non-fictional contexts, and ask what will happen when we realize that one of the names we have been using has no reference and is an empty name. Clearly, it is no longer possible to use it freely as before, provided that we have no interests in prolonging the false appearance. Sometimes we will just drop the practice of using the name, and no longer bother about it. However, in many cases, we will find ourselves in a situation

where we have to use the word again; we might find that the others still believe that the name has a reference, or we may want to talk about the beliefs the others or our past selves had, and we may not be able to find the way to express these beliefs without using the name in question.

So, even after the unmasking, an empty name may not be banished from our linguistic practice; however, it does not mean that you can use it properly in every context. You can do that when you are reporting the beliefs the others have or you once had, but you cannot use it, as it were, on your own initiative. It is because you cannot intend to introduce any object into a discourse by using the name, which you know to be incapable of doing. Moreover, you will have to reexamine the arguments involving the empty name; either you have to discard them altogether, or put them in some belief context.

But there seems to be one kind of contexts where we can use the empty name on our own initiative with the full knowledge of its emptiness; they are the non-existentials, both singular and general. In uttering “Pegasus does not exist” or “A unicorn does not exist”, I do not intend to introduce an object called “Pegasus” or “unicorn” into a discourse; on the contrary, I am insisting that you can’t introduce any object by the name.

When we realize a name we have been using has no reference, we know that there must have been something wrong in the original process of introducing the name into the language. As it has no reference, it could not have been introduced by anything similar to a baptism by which we give a name to the object in its presence; it should have been done by means of certain descriptions. So, we might ask what Pegasus is, or who Ossian is, and we get answers like “it is a winged horse which the ancient Greeks thought to exist” or “he is a poet and warrior who was supposed to exist in the third century in those areas which are now Ireland or Scotland”. Thus, when we say that Pegasus does not exist or Ossian does not exist, what we are really saying is that there is nothing which satisfies the conditions which were once thought to be satisfied by a certain thing or person.

Even though we seem to be using an empty name on our own initiative when we deny the existence of its reference, we are not prepared to take the full responsibility of using it; we are covertly appealing to the others’ beliefs which have contributed to the introduction and circulation of the name. In the light of this, “Pegasus” in “Pegasus does not exist” should be paraphrased as “what the others have thought ‘Pegasus’ refers to” which, in turn, can be

cached in “a winged horse, etc.”. So, if we invent a common noun “pegasus” to express such a condition, then what we wish to say by “Pegasus does not exist” can be said by “A pegasus does not exist” as well, and I believe the latter is a better way of expressing what we wish to say.

Appendix

In this appendix I would like to show that Japanese gives a strong support to Orenstein’s claim that universal/particular quantification is closely related to conjunction/disjunction of propositions ⁶ . What is striking about Japanese is that both universal quantification and conjunction are expressed by a single word “mo”, and similarly, both particular quantification and disjunction are expressed by a single word “ka”. I doubt there might be a better example than this that illustrates Orenstein’s claim.

Let us get into details. One of the typical conjunctions in Japanese has the following form. ⁷

⁶ But, it goes without saying that to assert a close connection between quantification and propositional conjunction/disjunction is not the same as to endorse Orenstein’s view that “existential quantification” does not express existence.

⁷ A Japanese particle “to” also can be used to express a conjunction as the following example shows.

(i) A to B to C (to) ga waratta. [A, B and C laughed.]

This is equivalent to

(ii) A ga waratta \wedge B ga waratta \wedge C ga waratta.

However, “to” is ambiguous between collective and distributive readings just as English “and” is. For example,

(iii) A to B to C (to) ga atta[=met]. [A, B and C met together.]

cannot be equivalent to any conjunction formed from “A ga atta (=A met)”, “B ga atta” and “C ga atta”. Interestingly, you can use “to” and “mo” at the same time.

(iv) A to B to C mo D to E to F mo atta.

This is equivalent to

(v) A to B to C ga atta \wedge D to E to F ga atta.

“Mo” always means the same as the distributive “and”; this is also true of quantification. Thus, “Dono gakusei mo waratta” always means that each student (or every student) laughed, in contrast to English “all” which has both distributive and collective readings.

(1) NP_1 mo NP_2 mo ... NP_k mo (ga) VP.

where “ga”, which is the nominative case marker, can be omitted. This is equivalent to

(2) $(NP_1$ ga VP) \wedge (NP_2 ga VP) \wedge ... \wedge (NP_k ga VP).

Here is an example of the form (1):

(3) Kono[=this] gakusei[=student] mo kono gakusei mo kono gakusei mo waratta[=laughed]. [This student and this student and this student laughed.]

A sentence which expresses a universal quantification corresponding to (1) has the form with the same particle “mo”:

(4) Dono NP mo (ga) VP

Here is an example of it:

(5) Dono gakusei mo waratta. [Every student laughed.]

In an exactly parallel way, a disjunction and the corresponding particular quantification have the following forms.

(6) NP_1 ka NP_2 ka ... NP_k ka (ga) VP.

(7) Dono NP ka (ga) VP

(6) is equivalent to

(8) $(NP_1$ ga VP) \vee (NP_2 ga VP) \vee ... \vee (NP_k ga VP).

Here are examples of (6) and (7) respectively:

(9) Kono gakusei ka kono gakusei ka kono gakusei ka ga waratta. [This student or this student or this student laughed.]

(10) Dono gakusei ka ga waratta. [Some student laughed.]

Thus, a conjunctive/disjunctive phrase can be simply replaced in a sentence by a universal/particular quantifier expression without any loss of well-formedness, and the sort of junction and quantification is signalled by the same word. This holds not only for the subject position but also for the direct and indirect object position, as can be seen from the following examples.

- (11) Hanako wa[=Topic] kono gakusei mo kono gakusei mo kono gakusei mo kiraida. [Hanako hates this student and this student and this student.]
- (12) Hanako wa dono gakusei mo kiraida. [Hanako hates every student.]
- (13) Hanako wa hon[=book] o[=Obj.case] kono gakusei ka kono gakusei ka kono gakusei ka ni[=Dat.case] ageta[=gave]. [Hanako gave books to this student or this student or this student.]
- (14) Hanako wa hon o dono gakusei ka ni ageta. [Hanako gave books to some student.]

Thus, the general forms of Japanese conjunction/disjunction and universal/particular quantification can be expressed schematically in the following way. Each form is accompanied by a possible formal representation.

- Conjunction: Φ (NP₁ mo NP₂ mo ... NP_k mo)
 $\Phi(\text{NP}_1) \wedge \Phi(\text{NP}_2) \wedge \dots \wedge \Phi(\text{NP}_k)$
- Universal quantification: Φ (dono NP mo)
(each NP(x)) $\Phi(x)$
- Disjunction: Φ (NP₁ ka NP₂ mo ... NP_k ka)
 $\Phi(\text{NP}_1) \vee \Phi(\text{NP}_2) \vee \dots \vee \Phi(\text{NP}_k)$
- Particular quantification: Φ (dono NP ka)
(some NP(x)) $\Phi(x)$

Japanese has also the constructions similar to English ones with “everything”, “something”, “everybody” and “somebody”. Japanese words corresponding to these are “dore mo”, “dore ka”, “dare mo” and “dare ka” respectively; note that these words are formed by postfixing the particles “mo” or “ka” to “dore” or “dare”.⁸

⁸ “dore”, “dare” and “dono NP” are also used in forming questions as shown in the following examples.

- Dore ga ookii[=big]? [Which is big?]
 Dare ga ookii? [Who is big?]
 Dono gakusei ga ookii? [Which student is big?]

Note that you get quantified sentences from these, if you put “mo” or “ka” in front of the case particle “ga”. Such facts suggest that there are close connections between quantification and question-forming in Japanese.

So, we have universally or particularly quantified sentences such as the following.

- (15) Dore mo (ga) ookii. [Everything is big.]
- (16) Dore ka ga ookii. [Something is big.]
- (17) Dare mo ga waratta. [Everybody laughed.]
- (18) Dare ka ga waratta. [Somebody laughed.]