

Much Virus

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1 Introduction

In these days of pandemic, discussions involving the word *virus* are commonplace. In a recent presentation, Klaus von Heusinger (2020) notes a fascinating phenomenon: the word is often used as a mass term, e.g. *much virus*, even though it is clearly a count noun. For example, people sometimes say something like (1), to mean that there were *many* viruses in her throat:

(1) There was much virus in her throat.

How can this be?

The word *virus* clearly has Latin origins. Therefore, many people are not sure about the correct form of the plural: is it *viruses* or, perhaps, *viri*? One may propose that this is the reason for the use of *much virus*: perhaps people are reluctant to use *many*, which forces them to pluralize the word, and use *much* instead, where the word can remain singular.

To test this possibility, we can turn to a language where the plural of *virus* is clear and unproblematic. One such language is Hebrew: *virus* is a loan word, but its plural is completely regular, using the plural suffix *-im*, resulting in *virusim*. However, in Hebrew, too, one can use the singular *virus*, yet with a count interpretation:

(2) haya harbe virus ba-garon shella
there-was much virus-SN in-the-throat her
'There was much virus in her throat.'

Therefore, we must conclude that the phenomenon cannot be explained by doubts concerning the pluralization of *virus*.

2 Reference to Kinds

To account for this use of *virus*, von Heusinger points out that when people use the word, they often refer to the kind rather than to individual viruses. Thus, when one talks about *many viruses*, this is often taken to mean 'many kinds of virus'. However, in expressions like (1), what is clearly meant is that there were actually many individual viruses in her throat. Therefore, in order to disambiguate, and make it clear that they refer to individual viruses and not kinds, people use the form in (1) instead.

How does (1) get interpreted? How can the count noun *virus* be treated as if it were mass? An attractive solution is to use Pelletier's (1975) Universal Grinder: an operation that turns a count noun into the "stuff" it is made of. This interpretation of (1) makes perfect sense and is quite convincing. However, there are other cases, for which it doesn't seem to work as well.

3 Predicate Transfer

Consider the following attested example:¹

- (3) There was (so) much virus in the community.

The most plausible interpretation of (3) is that there were many cases of the *disease* caused by the virus in the community, not many individual viruses. For example, if the virus in question is the corona virus, (3) says that the disease COVID-19 is widespread in the community. Since words for specific diseases are normally mass rather than count nouns, the modification by *much* rather than *many* is naturally explained.

But how is the word *virus* (an organism) interpreted as a disease?

One clear option presents itself: Nunberg's (1995) mechanism of Predicate Transfer. Nunberg discusses a situation in which a customer hands his key to an attendant at a parking lot and says:

- (4) I am parked out back.

Normally, (4) is interpreted as saying that the speaker has a car that is parked out back, not that the speaker herself is parked out back. Crucially, Nunberg demonstrates that it is the predicate whose meaning changes: the sense of the predicate *is parked out back* is transferred from the property of being parked out back to the property of having a car that is parked out back.

Nunberg notes that referring to a microorganism often means referring to the disease that it causes. As an example, he discusses the phrase *Peruvian virus*, which can mean 'virally-caused disease endemic to Peru' (p. 120).

Therefore, we can say that, in (3), the predicate *virus in the community* is transferred to the property *disease caused by a virus in the community*, and the sentence says that there is much of this disease, i.e. it is widespread.

It would seem, then, that we have two ways to derive an interpretation of *much virus*. Sometimes, as in (1), the interpretation is derived by the need to avoid reference to kinds and the use of the Universal Grinder, and at other times, exemplified by (3), by Predicate Transfer. Can we explain in a principled way when one reading is available and when the other one is?

4 Noteworthiness

I suggest that, in fact, there is a principled explanation, and, moreover, it comes from another study carried by Klaus von Heusinger. But to see this, we need to consider another aspect of Predicate Transfer.

Nunberg notes that, in contrast with (4), the sentences in (5) cannot undergo Predicate Transfer.

- (5) a. * I may not start.
b. *I was once driven by Jean Gabin.

These sentences cannot mean that the speaker has a car that may not start or that was once driven by Jean Gabin. To explain this fact, Nunberg proposes that Predicate Transfer is only possible when the property contributed by the new predicate is *noteworthy*. Nunberg does not

¹ <https://www.theguardian.com/australia-news/2022/jan/26/covid-has-spread-like-wildfire-703-aged-care-homes-across-australia-battle-fresh-outbreaks>

really define this notion, but says that a noteworthy property ‘offers a useful way of classifying its bearer relative to the immediate conversational interests’ (p. 114). A paper co-authored by von Heusinger (Featherston, von Heusinger, & Weiland 2011) contains a more thorough analysis of the concept and describes experimental work that demonstrates that the effect of noteworthiness is real.

5 Putting it all together

The notion of noteworthiness can be fruitfully applied to the question at hand. Nunberg notes:

while the phrase *a rare virus* can have the reading ‘disease caused by a rare microorganism’, it is harder to get an equivalent reading for the phrase *a tiny virus* to mean ‘disease caused by a tiny microorganism’. In the latter case the adjective would have to contribute the property that a disease acquires in virtue of the size of the microorganism that causes it, but this is in fact unlikely to be noteworthy, given folk-etiological assumptions (p. 131n21)

According to Nunberg, then, in the context of a discussion of diseases, the property of being a rare virus is noteworthy, but the property of being a tiny virus is not.

In a similar way, we can note that in the context of discussing how widespread the disease is (i.e., how much COVID-19 there is), the property of being a virus in the community is noteworthy: it directly affects how widespread the disease is. However, the property of being a virus in the throat is not: whether or not the disease is widespread will not depend in whether the virus is in the throat.

Hence, Predicate Transfer applies in (3). However, it cannot apply in (1), because the property does not satisfy the requirement of noteworthiness discussed by Nunberg (1995) and Featherston, von Heusinger, & Weiland (2011); in this case, the mechanism proposed by von Heusinger (2020) applies instead. Thus, Klaus von Heusinger’s earlier work complements his more recent work to provide an account of an interesting phenomenon which is particularly relevant these days.

References

- Featherston, Sam, Klaus von Heusinger & Hanna Weiland. 2011. I’m leaking oil and looking for a garage: Testing pragmatic conditions on meaning transfer. In Jeff Runner (ed.), *Experiments at the interfaces: Syntax and semantics* 37, 31–65. Bingley: Emerald.
- von Heusinger, Klaus. 2020. Die Grammatik von Corona – Vom Zählen und Messen des Virus. Invited plenary talk at the Workshop on *Kommunikationsstrategien in der Corona-Krise*, Universität Graz, December 2020.
- Nunberg, Geoffrey 1995. Transfers of meaning. *Journal of Semantics* 12(2). 109–132.
- Pelletier, Francis J. 1975. Non-singular reference: Some preliminaries. *Philosophia* 5. 451–465. [Reprinted in F. J. Pelletier (ed.), *Mass terms: Some philosophical problems*, 1–14. Dordrecht: Reidel]