## Manfred Kupffer QUOTATION AND COMPOSITIONALITY

I want to claim the following: there is a syntactic operation that takes any string of signs and outputs a name. The interpretation of that operation is a semantic operation that takes the very string which is the input of the syntactic operation; but it outputs the meaning of the name of the string (supposing the meaning of a name is its referent, the meaning of a quotation is the string itself).

What I have in mind is, of course, the construction of pure quotation as in

- (1) "Fuzziness" is a noun
- (2) Apricots are called "abricots" in french
- (3) "querty" is a string of six letters

There is a quotational construction and a semantics of quotation because of the productivity of the device and the systematic way in which the meanings of quotations derive. We can attach quotation marks to any string of letters, and we always obtain a name of that string. It is therefore that I proposed to treat it in terms of syntactic and semantical operations. My initial claims have the additional merit that they at least match the facts about meanings of pure quotations. Pure quotations are names of the strings of signs quoted.

On the other hand, my description of this construction may sound somewhat weird: don't syntactic operations of a language always take *expressions* of the language, rather than arbitrary strings as their inputs?—I think it is inevitable to relax this constraint, once we consider quotation as a construction, witness (2) and (3) above.

And don't semantic operations take *meanings* rather than syntactic items like expressions or strings of letters, as their inputs? Indeed this is a consequence of the principle of compositionality, the principle that the meaning of a complex expression is a function of the meanings of their parts and the way these are put together.

Now, to restore compositionality, we could try to devise meanings for expressions like "fuzziness" or "abricots" and a semantic operation on these meanings which outputs the expressions themselves. But in order for this to work, these so-called meanings would have to determine uniquely the very expressions they are meanings of. No two different expressions could have the same meaning, then. But such a notion is much too fine-grained in order to deserve the name "meaning"; of course different expressions could have the same meaning. Indeed there are synonyms within and across languages. And witness (3): there is no meaning, semantic operations could act upon here, simply because the string "qwerty" does not have any meaning.

So, the simple construction of pure quotation has impacts both for syntactic and semantic theorizing. Most importantly, according to the view defended above, semantics isn't compositional; said in technical terms: defining a semantics in terms of a homomorphism from the syntactic into the semantic algebra of the language could not be quite right. In this paper I try to devise a formal theory of semantics that is liberal enough to allow for semantic operations of the form mentioned above. The *prima facie* non-compositionality of pure quotation has often been noted in the literature. But most authors take great pains to avoid this conclusion in the end. For an overview, see e.g. Pagin and Westerståhl (2010). Other authors seem to work with revised meanings of "compositional" (see e.g. Potts (2007)). Even Pagin and Westerståhl, who admit that meaning is non-compositional, try to define a generalized notion of meaning, which is ruled by an analogue of compositionality. But why? Why stick to at least some kind of compositionality at all costs?—There are a few reasons that are usually adduced in favour of compositionality (productivity, systematicity, and the formality of logical inference), see e.g. Werning (2005) for a critical discussion. Now it is important to note, that these things could be had for less, i.e. one could have them even within a non-compositional semantics.<sup>1</sup>

Sometimes, I said, semantic operations need strings rather than meanings as their input. Of course, more often they take meanings. And probably there are mixed cases, too. Maybe mixed quotation is a case in point, and arguably, attitude contexts. I propose to generalize to the worst case and let operations be defined on strings *cum* meaning. Let an *block* be any pair  $(\sigma, m)$  of a string and a meaning, or, if the string is meaningless, a pair  $(\sigma, *)$  of a string and an indicator for meaninglessness. Blocks of the former kind will be called "expressions". A syntactico-semantical algebra is an algebra with a set of blocks as its universe.

We will define, within that framework, what it means for a *construction* to be compositional and also when a language is. Hence, I will be able to say precisely, why quotation is non-compositional, and hence English. Finally I have to address, within that framework, the properties that have been thought to require a compositional semantics.

## References

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- Werning, M. (2005). Right and Wrong Reasons for Compositionality. In M. Werning, E. Machery, and G. Schurz (Eds.), *The Compositionality of Meaning and Content*, Volume 1, pp. 285–309. Frankfurt: ontos.

<sup>&</sup>lt;sup>1</sup>The only reason to retain compositionality that Werning accepts is the interchangeability, *salva interpretatione*, of synonyms. But this interchangeability is equivalent to compositionality itself and can easily shown to break down in the context of pure quotations, given our above assumptions.