## The two ways to the same interpretation of a novel expression: metaphorical and metonymical categorization

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This study illustrates that, in interpretation of novel expressions, two types of categorization —metaphorical and metonymical processing— can occur even when the same meaning is conjured up in the end of processing.

When interpreting unconventional expressions, we set up analogies between the expression and already established uses (cf. Taylor 1992, 2012). In other words, linguistic interpretation can be analyzed as categorization by construction schemas applicable to the expression we are trying to understand. However, how we categorize unconventional expressions referring to our mental corpus has not been illuminated in linguistics.

In the experiment conducted here, 41 native speakers of English were asked to evaluate their familiarity (from 0 to 100) with 15 conventional uses. All the stimuli included the verb *cut* (e.g., "Aaron cut his ties with his friends") and were prepared following some dictionaries to cover the whole meaning of *cut*. In the next step, they were asked to try to interpret seven unconventional sentences including *cut* (e.g., "He cut the name"), which were attested, in the preliminary test, to be uncommon for native speakers but relatively easy to imagine the meaning. They were, then, asked to choose from the 15 conventional uses what they felt to be the most strongly connected to each unconventional sentence and to explain the reason.

As a result, there were some cases in which, although an unconventional sentence was interpreted as having the same meaning, different conventional expressions were chosen as the most strongly connected use. For example, the unconventional sentence "He cut the name" was often interpreted as <BREAKING THE CONNECTION TO THE PERSON WHO HAS THE NAME>. However, two conventional uses were mostly selected to explain the meaning. The first answer is "Oscar cut a scene from the new film" (13/41), in which *name* and *scene* are members of the same category what is eliminated from something. The relationship between the source category (i.e., conventional use: *scene*) and the target (i.e., unconventional use: *name*) can be analyzed as metaphorical processing, that is, the target is identified with the source in individuals (Glucksberg and Keysar 1990). The second is "Aaron cut his ties with his friends" (8/41). In this case, the participants would make associations such as [name -> person -> tie]. This process is considered as metonymical processing: looking for the source which is related to, but not identified with the target.

Moreover, we tagged each choice as "Metaphorical Categorization" or "Metonymical Categorization" type. In this experiment, the mean familiarity of Metaphorical Categorization's sources (89.8) is higher than that of Metonymical Categorization's sources (85.8) although there is no significant difference in statistical analysis. This would be attributed to the ceiling effect, considering that the means of familiarity in 10 conventional uses were higher than 80 points regardless of processing type. The significant difference between Metaphorical and Metonymical could be observed, employing different methods to measure the entrenchment of each use. Assuming that the source of metaphorical processing is more strongly entrenched than that of metonymical processing, it is hypothesized that metaphorical processing is followed by metonymycal processing since degree of entrenchment coincide with ease of activation (cf. Langacker 2008). When encountering a novel expression, to begin with, we look for established uses which can be identified with the target, that is, metaphorical processing; and then if the suitable uses for the interpretation cannot be found, we activate background knowledge of the target and source and attempt to carry metonymical processing out. This study shed light not only on the result of interpretation but on the procedure specifically.

## References

- Glucksberg, Sam, and Boaz Keysar. 1990. Understanding metaphorical comparisons: Beyond similarity. *Psychological review* 97(1): 3–18.
- Langacker, Ronald W. 2008. Cognitive Grammar: A Basic Introduction. Oxford: Oxford University Press.
- Taylor, John R. 1992. How many meanings does a word have? *Stellenbosch Papers in Linguistics* 25: 133–163.
- Taylor, John R. 2012. *The Mental Corpus: How Language Is Represented in the Mind*. Oxford: Oxford University Press.