Are apples and oranges being compared? The theoretical difference between idiomatic decomposability and transparency and its empirical investigation in English and Italian

Irene Pagliai¹,

¹ University of Göttingen, irene.pagliai@uni-goettingen.de

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Idioms are non-compositional multiword expressions which form a heterogeneous group (Bizzoni et al., 2018); they can be described as "multi-dimensional continua" (Wulff, 2013, p. 279). Two of the dimensions from which idiomatic variation can be described are decomposability and transparency; both are fundamental for characterizing idioms at the syntactic, semantic and conceptual levels. However, their definition varies considerably, as there is no agreement on what exactly the two dimensions describe (Carrol et al., 2018). The first aim of this work is precisely to provide an unambiguous theoretical description of decomposability and transparency.

Decomposability is also referred to as compositionality (Titone & Connine, 1994), analysability (Gibbs Jr & Nayak, 1989), isomorphism (Geeraerts, 1995). We align with Geeraerts (1995) and define decomposability as "a correspondence within an idiom at the syntax-semantics interface" (Maher, 2013, p.67), thanks to which it is possible to identify parts of the syntax carrying parts of the idiomatic meaning (Maher, 2013, p. 44).

Transparency is also referred to by several names: motivation (Geeraerts, 1995), relatedness (Carrol et al., 2018), semantic bridge (Dobrovol'Skij, 2016), comprehensibility (Michl, 2019). Our definition is especially akin to that of Sailer (2021): transparency refers to a synchronic relationship between literal and figurative meaning of an idiom; this relationship serves as the rationale for the figurative use of the idiom.

Following Sullivan (2013), where metaphors and metonyms are described via constructions and frames, the theoretical tools of cognitive linguistics are also ideal for the unambiguous description of dimensions of idiomatic variation. We use the typically decomposable and transparent idiom *spill the beans* as an example. Fig.1 shows that decomposability is a relationship between Construction Elements (CEs) and Frame Elements (FEs; Lee-Goldman & Petruck, 2018): the green links in the figure correspond to mappings between the syntactic (CEs) and semantic (FEs) levels. When such mapping is readily achievable, the idiom is decomposable.

Consider now Fig.2: to model the transparency of spill the beans it is necessary to add a further level of description, as transparency is a conceptual relationship between the idiom's literal and figurative frames considered as a whole. The more evident is the relationship established by the cognitive mechanisms in place, the more transparent the idiom.

The second objective of this work is to complement the theoretical analysis of decomposability and transparency with a more bottom-up perspective. The present study is in fact placed in a broader context, in which a cross-linguistic database of English and Italian idioms that share similar meanings is created (~150 per language). For each idiom, ratings on a 5-point Likert scale are collected for several variables including decomposability and transparency. Thanks to this database, it is possible to integrate qualitative and quantitative analysis, and try to answer the following questions:

- a) Is the theoretical distinction between decomposability and transparency mirrored in the participants' ratings?
- b) Based on two pilot studies conducted, a positive correlation between the two dimensions is expected: does it have the same strength in the two languages?
- c) What roles do decomposability and transparency play when included as predictors in a statistical model? Is there multicollinearity between the two?

Idioms are complex constructions to be studied at the interface between linguistics and cognitive studies: for this reason, we consider an interdisciplinary approach such as the one offered by a cognitive (psycho)linguistics (Espinal & Mateu, 2010) the preferred way to capture their eclectic nature.

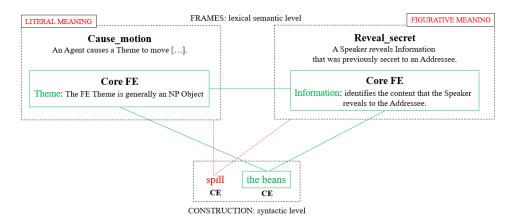


Fig. 1: decomposability of "spill the beans" modelled using CEs and FEs.

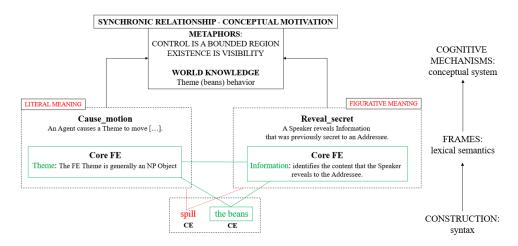


Fig. 2: transparency of "spill the beans" modelled via the cognitive mechanisms (metaphors and world knowledge) of the conceptual system.

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