Pulling a pretence rabbit out of the hat

Jamie Y. Findlay (Oxford)   Sascha Bargmann (Frankfurt a.M.)   Manfred Sailer (Frankfurt a.M.)

Idioms are among the most obvious cases of form-meaning mismatches in natural language. The idiomatic meaning of an idiom is not at all identical to the literal meaning of the morphosyntactic string that the idiom consists of. Over the years, the focus of the formal study of idioms has shifted from the irregularity of idioms to the parallelisms with non-idiomatic combinations in terms of meaning composition (Nunberg et al., 1994; Kay et al., ms.; Lichte & Kallmeyer, 2016; Corver et al., 2016). These developments have made it possible to discuss cases like (1-a), where the idiom (here *pull the rabbit out of the hat*, meaning 'suddenly present something as a solution to a problem' [Oxford Idioms Dictionary, 2001]) can be decomposed, and the pronoun *it* can refer to the idiomatic interpretation of *rabbit* as a 'solution' rather than as an animal. However, one of the most intriguing aspects of idioms has not yet received a lot of attention: the simultaneous availability of the idiomatic and the literal meaning, as shown in (1-b). We will use the term *idiom extension* for these cases in which there is an elaboration on the literally described situation, but we can interpret this with respect to the idiomatic meaning.

(1)   The CEO pulled a rabbit out of the hat
    a.   but it was not elaborate enough.
    b.   but it left droppings everywhere.

Egan (2008) discusses such idiom extensions from the perspective of *pretence theory* (Walton, 1993). We will provide a concrete formalization of Egan's basic idea, and show how this can be integrated into recent formal theories of idioms.

Pretence   According to Egan (2008), every idiom is associated with a *pretence*: a fiction through which we interpret the literal meaning of the idiom. For instance, the idiom *kick the bucket* is associated with the following pretence (Egan, 2008, 387): *if someone dies, pretend that there's some salient bucket that they kicked*. Thus, if someone utters *Sandy kicked the bucket*, and we know the pretence is in force, we can infer that Sandy died.[1]

This indirect analysis runs into problems with ordinary uses of idioms, as the idiomatic meaning is usually available before the literal meaning (Gibbs, 1986), and there are idioms that lack a literal meaning (Soehn, 2006). In addition, (Egan, 2008, 397–401) only sketches how the particular idiomatic pretences are connected to the form of words used, and thus does not offer a very convincing account of the fixedness of many idioms (where reordering words or replacing them by synonyms leads to a loss of idiomaticity). If each idiom has a certain pretence associated with it, where is that association stored?

However, data such as (1-b) show that we do need a pretence-like mechanism in at least some cases.[2] To interpret (1-b), we must pretend that if someone unexpectedly presents a solution to a problem, they pull a rabbit out of a contextually salient hat – this is the pretence provided by the core use of the idiom in the first line of (1). But we must also pretend that the rabbit has left droppings everywhere. Now, what must be true in the actual world to make this true in the pretence? Droppings are conventionally perceived as something dirty and unpleasant, so when we link this back to the actual situation, it probably means that the solution under discussion, which corresponds to the rabbit, had some unpleasant side effects to it.

---

[1]All linguistic expressions have the potential to be interpreted through a pretence. Walton (1993) and others argue that this is how metaphors work, for instance. What makes idioms special is that they are associated with a conventionalised pretence, which is triggered by the words that are used.

[2]Idiom extensions, like (1-b), are different from the 'core' uses of idioms, like in the first line of (1), and continuations relying on the idiomatic rather than the literal meaning of the idiom, like in (1-a), as idiom extensions appear to involve an additional interpretive effort (cf. Egan, 2008, 408, endnote 21).

Analysis We propose a model-theoretic implementation of Egan's pretence approach to idioms in the form of a *pretence relation*, μ. This pretence relation relates situations in which the idiomatic meaning holds to situations in which the literal meaning holds. We can speak of a pretence relation iff there are situations, an actual situation s_a and a fictional situation s_f, which are related by μ in such a way that the idiomatic meaning is supported by s_a and the literal meaning is supported by s_f. We take μ to be an *analogical relation* in the sense of Structure-Mapping Theory (Gentner & Maravilla, 2018), whose core is given by the pretence associated with the idiom. This means that μ relates salient properties of the elements in the *base* (the fictional situation) and the *target* (the actual situation). In addition to the elements of the situations provided by the pretence of the idiom, μ can also contain elements that are added to the base by analogical reasoning. In that case, every such additional object, property or relation must have a correspondent in the target. The relevant pretence relation for our running example μ_{rabbit} is sketched in (2).

(2)   For any situations s_a and s_f: $\langle s_a, s_f \rangle \in \mu_{\text{rabbit}}$ iff μ_{rabbit} is an analogical relation such that
        $\forall x \forall y (\mathbf{solution}_{s_a}(y) \wedge \mathbf{present}_{s_a}(x,y)) \leftrightarrow (\mathbf{rabbit}_{s_f}(y) \wedge \mathbf{pull\text{-}out\text{-}of\text{-}hat}_{s_f}(x,y)))$

When we encounter an idiom extension as in (1-b), we assume that there is a fictional situation s_f in the idiom-specific pretence relation which supports the literal meaning of the full sentence. Apart from this, s_f should be minimal, i.e., include as little as necessary to support the literal meaning of the sentence. In (1-b), the rabbit left droppings in s_f, something unpleasant. With μ_{rabbit} being the analogical relation defined in (2), there is a 'solution' in s_a that is analogical to the 'rabbit' in s_f, and thus there is an unpleasant side effect of the solution in s_a, just as there is an unpleasant side effect of the rabbit in s_f.

This analysis correctly predicts that (3) contains a less felicitous extension than (1-b). In our figurative situation s_f, the relevant rabbit can be assumed to have purple ears, but without a marked context, we have a very hard time finding an analogical property in s_a that can be related to this figurative situation by μ_{rabbit}.

(3)   #The CEO pulled a rabbit out of the hat, but its ears were purple.

For core uses of idioms, and continuations relying on the idiomatic rather than literal sense such as (1-a), no reference to the pretence relation is necessary. Following the formal idiom literature, we assume that idiom parts may be associated with idiom-specific meaning and, consequently, the pronoun *it* in (1-a) can refer to the idiomatic meaning of *rabbit*, i.e., 'solution'. The lexical specification of an idiom will, however, also contain the specification of its pretence relation, making it available in idiom extensions like (1-b).

Conclusion The approach presented here is not only more concrete than the pretence-based theory of idioms in Egan (2008), but it can also be integrated into current formal analyses of idioms and thereby avoids the above-mentioned problems of Egan's account, while conserving the major insights of the pretence theory. In our approach, an idiom extension is interpreted under its literal meaning within a fictional situation. We are then able to infer, via the pretence relation made available by the idiom, how the sentence also restricts the actual situation. This permits a compositional account of these apparent form-meaning mismatches.

References ♦ Corver et al. 2016. Idioms: Phrasehood and compositionality. Ms, Leuven and Utrecht. ♦ Egan, A. 2008. Pretense for the complete idiom. *Noûs* 42(3). 381–409. ♦ Gentner, D. & F. Maravilla. 2018. Analogical reasoning. In L. J. Ball & V. A. Thompson (eds.), *International handbook of thinking & reasoning*, 186–203. Psychology Press. ♦ Gibbs, R. W., Jr. 1986. Skating on thin ice: Literal meaning and understanding idioms in context. *Discourse Processes* 9. 17–30. ♦ Kay, P., I. A. Sag & D. Flickinger. ms. A lexical theory of phrasal idioms. ♦ Lichte, T. & L. Kallmeyer. 2016. Same syntax, different semantics: A compositional approach to idiomaticity in multi-word expressions. In C. Piñón (ed.), *Empirical issues in syntax and semantics*, vol. 11, 111–140. CSSP. ♦ Nunberg, G., I. A. Sag & T. Wasow. 1994. Idioms. *Language* 70. 491–538. ♦ Soehn, J.-P. 2006. *Über Bärendienste und erstaunte Bauklötze. Idiome ohne freie Lesart in der HPSG*. Lang. ♦ Walton, K. 1993. Metaphor and prop oriented make-believe. *European Journal of Philosophy* 1(1). 39–57.