Assignment 2

Chris Potts, Ling 130a/230a: Introduction to semantics and pragmatics, Winter 2024

Distributed Jan 23; due Jan 30

1 Idioms and compositionality [3 points]

The following are common English idioms with corresponding non-idiomatic meanings for them:

(1)
  a. *kick the bucket* (‘die’)
  b. *kick the habit* (‘quit’)
  c. *touch a nerve* (‘annoy’)
  d. *leave no stone unturned* (‘be thorough’)
  e. *pull strings* (‘use one’s connections to gain an advantage’)

This question asks you to explore the relevance of idioms to the principle of compositionality.

Task 1 Look again at the start of section 11.2 of Partee (1995), paying special attention to the principle of compositionality and its associated ideas. On that basis, articulate the challenge that idioms pose for compositionality. This can be done in a few sentences, but make sure you are thorough enough that a reader who didn’t know about the principle of compositionality could understand your answer.

Task 2 Suppose we responded to the challenge by treating idioms as unanalyzed lexical items. On this analysis, *kick the bucket* would simply be an intransitive verb with presumably the same meaning as *die*. What challenge do the following examples, from Nunberg et al. 1994, pose for this response?

(2)
  a. kick the filthy habit
  b. touch a couple of nerves
  c. leave no legal stone unturned
  d. Pat got the job by pulling strings that weren’t available to anyone else.
  e. *bucket list*, a recent innovation derived from *kick the bucket* and referring to a set of things one wants to do before one dies.

Write a short paragraph (say, 7–10 sentences) explaining the nature of the challenge posed by these examples for the lexical analysis of idioms. You do not need to make reference to all of the examples in (2), and you are also free to introduce new data.

Task 3 In your view as a semanticist, how should we resolve this tension between the principle of compositionality and the existence of idioms? We’re open-minded about this and will be looking for a clear statement of your proposed response and a clear argument in favor of that response. (Expected length: 10–15 sentences, but this is not a hard restriction.)

2 What would *shrimp kale* be? [4 points]

One of the novel compounds in Levin et al.'s (2019) comprehension study is *shrimp kale*, which received the following distribution of responses:

Metarelation	Responses
Event	6 (37.5%)
Perceptual	9 (56.3%)
Location	1 (6.2%)

The responses are more evenly spread out across the categories than we might expect. Compare for, example, *swamp squash*, which received 16/16 (100%) Location responses.

Task 1 Classify the modifier and head in *shrimp kale* according to the artifact vs. natural kind distinction, as in the paper. You can look this up in the paper, so this should be straightforward, but it's an important part of the reasoning. Say also whether the entire compound would refer to an artifact or natural kind, following the expected constraints on endocentric compounds.

Task 2 Relate this response distribution to the essence-related modifier hypothesis and the event-related modifier hypothesis. Is this the expected distribution given the classifications of the parts and the statement of these hypotheses? Why or why not? This is obviously not a completely transparent judgment (as it would be for *swamp squash*), so I advise taking at least 5–7 sentences to explain and justify your reasoning.

In case it is useful, here are the raw responses with their codes (from Table 2 in the paper) and the associated metarelation. (The codes for the 'event' examples seem informative to me.)

Response	Code	Metarelation
A type of salad made with kale and shrimp.	made of	event
It is a kale with shrimp in it. A plant that has shrimp in it.	made of	event
A recipe involving the use of shrimp and kale	made of	event
a kale and seafood recipe.	made of	event
a kale and shrimp pasta dish	made of	event
kale made especially to garnish shrimp	purpose	event
A bitter green grown in the ocean	habitat	location
a variety of kale that has characteristics of shrimp (color, etc.)	color	perceptual
Abnormally small kale.	dimension	perceptual
A miniature, leafy vegetable.	dimension	perceptual
kale in the shape of a shrimp	shape	perceptual
kale that tastes like shrimp	taste/smell	perceptual
shrimp flavored kale	taste/smell	perceptual
Kale that tastes like shrimp.	taste/smell	perceptual
kale vegetable that is small and shaped liked shrimp	visual	perceptual
a shrimp that looks like a kale	visual	perceptual

3 Icy treats [3 points]

The compounds *Italian ice*, *shaved ice*, and *water ice* are all different regional names for essentially the same sweet treat of watery ice covered in usually fruity syrup.[1]

Task 1 Classify each of these compounds using the fine-grained modifier–head relation categories from Appendix A of the Levin et al. paper (the ones used by the annotators in the corpus study). Not all of these classifications are fully straightforward, so briefly explain the choices and note any indeterminacy.

Task 2 Are your classification choices consistent with the core hypotheses of the Levin et al. paper? For each one, explain why it is or is not. (If there are inconsistencies, we would love to hear potential explanations for why, but that is not required.)

References

Levin, Beth, Lelia Glass & Dan Jurafsky. 2019. Systematicity in the semantics of noun compounds: The role of artifacts vs. natural kinds. *Linguistics* 57(3). 429–471. doi:10.1515/ling-2019-0013.

Nunberg, Geoffrey, Ivan A. Sag & Thomas Wasow. 1994. Idioms. *Language* 70(3). 491–538.

Partee, Barbara H. 1995. Lexical semantics and compositionality. In Lila R. Gleitman & Mark Liberman (eds.), *Invitation to cognitive science*, vol. 1, 311–360. Cambridge, MA: MIT Press.

[1] See `https://en.wikipedia.org/wiki/Italian_ice`. My apologies if saying these are all "the same treat" offends your regional or culinary sensibilities. Of a fourth contender *shave ice*, Wikipedia is very clear: "Not to be confused with shaved ice."