

# 50 years of dichotomies

## Misunderstandings and the relevance of lexical semantics

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*What one sees of language, as of anything, depends on the angle of view, and different explorers approach from different directions. Unfortunately, sometimes they become so enamored of their particular approach that they incline to scoff at any other, so that instead of everybody being the richer for the variety, everybody loses.*

(Hockett 1987: 1, on the “eclipsing stance”)

1969 – First edition of the Annual Linguistics Day of the Linguistics Society of the Netherlands. Neil Armstrong sets foot on the moon. And I enroll in the program of Dutch Language and Literature at the Free University in Amsterdam, where I will discover, among many other things, that I want to be a linguist.

2019 – The board of the Free University announces the closure of the last surviving branch of this program at this university. The Dutch Annual Linguistics Day celebrates its 50th edition, definitely not the last.

A lot can change in half a century, a lot can (more or less) stay the same. Here I want to focus on some conceptual issues that demonstrate this in a particular way. The element of change is that there have been significant developments in our understanding of them, the element of permanence that they have nevertheless been the domain of theoretical controversies throughout these 5 decades. Let’s see where we are now, and how we might start overcoming them.

### Semantics and pragmatics

Ariel (2010) provides a comprehensive overview of proposals to distinguish semantics (as part of grammar) from pragmatics, and she forcefully argues that the only sensible way to do so must be based on the distinction between code and inference. Whatever is conventionally “encoded” in a linguistic form is the domain of semantics, whatever is inferred on some occasion of use is the domain of pragmatics. In this way, the phenomenon that one performs an action, i.e. *changes* the

world, by uttering 'I promise', belongs to the domain of semantics just as much as the fact that one represents something *about* the world by uttering 'Amsterdam is the capital of The Netherlands' – both are consequences of what is encoded in the items (words and constructions) of the language. The fact that this amounts to something with a truth value in the latter case and an illocutionary effect (a speech act) in the former, does not make a difference. The utterance of 'The taxi will be there in 10 minutes' may on a specific occasion of use also constitute a promise, but on another one it may count as an advice to hurry up, or simply as a prediction about the world. Here the illocutionary effect is not encoded but inferred, on the basis of knowledge of the language and knowledge of the situation of use, just as much as the reference of 'I', changing with every speaker using it (or taking responsibility for the utterance, as in signing a form), is determined by inference from a combination of linguistic and contextual knowledge.

Cutting the cake with the code vs. inference knife thus stands in contrast to the idea that semantics is about representation, the mapping between language and the/some world, and pragmatics about (inter)action, the use of language. The point is not that this distinction is useless. We can (and should) definitely construct a theory of speech acts independently of the question whether their performance depends only on what is encoded in linguistic signs or also on inferring on the basis of contextual knowledge; such a theory should account for, for example, what makes a promise different from an advice, both encoded and inferred ones. But calling such a theory a part of pragmatics because it is about language use, would make it necessary to invent other labels for the study of what is encoded and what is inferred, and how these two are linked. As linguists, we are professionally interested in the content that linguistic forms are *systematically* associated with – the everyday sense of the term "meaning" – and a priori limiting semantics to representation implies too great a distance between the scientific understanding of "meaning" and the colloquial sense. One of the best illustrations of this point comes precisely from a classic of pragmatics (Grice 1975): His representational conception of semantics forces him to say that the conjunctions 'and' and 'but' have the same meaning, while ordinary language users feel that these two words really mean quite different things. The distinction between code and inference has to be made anyway, and therefore the optimal solution for linguists to converge on is to identify these as the objects of semantics and pragmatics, respectively.

## Meaning and meaning

But what exactly does “encoded” mean? Linguists, including Ariel (2010), generally talk about “encoded and inferred meanings”, which may suggest that these are two subtypes in the same superordinate category. But here we encounter a problem caused by the English language. As Herbert Clark (1996:127) notes:

It is odd to have to explain the difference between speaker’s meaning and signal meaning. In German, they are called *Gemeintes* and *Bedeutung*, in Dutch, *bedoeling* and *betekenis*, and in French, *intention* and *signification*. For theorists working in German, Dutch, and French, they are as different as apples and oranges. Yet for theorists working in English, they are a chronic source of confusion because they have the same name – *meaning*.

The crucial point is that encoding – in the case of a natural language, a system that has not been intentionally designed – consists in the existence of a *convention*, and that is a social, population level phenomenon, which (unlike a habit) does not exist at a strictly individual level: It is a regular pattern of using a signal that is ultimately motivated by the fact that most members of a community expect other members to use it, and know that they are expected to use it by other members. When an individual (actual or prospective) member finds out that the regular pattern of use in a community differs from what she initially thought, she will change her own use to fit that of the community (this is the process of “learning the meaning” of a linguistic item) – the regularity thus always has some degree of arbitrariness (cf. Lewis 1969[!]). Consequently, encoded meanings (the object of semantics), being population level phenomena, “live” in a different sphere than the messages (speaker’s meanings and inferred meanings, the object of pragmatics) that language users exchange in communication. Signal meanings are cultural resources that individual members of a community use as tools to (make an audience) infer messages. The two are causally connected, and linguists should thus not be surprised that some languages provide a single term for both concepts: The English term “meaning” presents a straightforward case of metonymy. This is fine in everyday language use, but for linguistics it has the unfortunate consequence that a statement like “Semantics is the study of meaning”, without further specification, is unavoidably and hopelessly confusing. At the same time, it is linguistics itself, in particular the subfield of lexical semantics that provides a basis for diagnosing and ultimately remedying this situation – the field has a high degree of external relevance!

## Rules and norms

In discussions with linguistic laymen, professional linguists since the rise of structuralism in the 20th century often use a distinction between description and prescription: The goal of the scientific study of language is then said to be to *describe* whatever systematicity is observable in a language, not to *prescribe* the “proper” use of linguistic items. The short slogan is: “Linguistics is about rules, not about norms”. A lot can be, and has been, said about the difference between these two (cf. Bartsch 1982), and one thing that Bartsch’ discussion makes clear is again the relevance of lexical semantics: The polysemy of both terms is so abundant that it is a source of confusion.

It is especially useful to relate this dichotomy to the previous one. Conventions, as population level phenomena, have an inherently normative character, in the sense that is rational, in a cost-benefit analysis, and thus in the best interest of a community member, to follow the relevant regularities of behavior in the community if s/he is to avoid adverse consequences, like miscommunication, being ignored, standing corrected, being treated as an outsider, etc. (cf. Lewis). As conventions usually emerge simply from community wide recurrence of a behavior that helps members to solve recurrent coordination problems (without any specific authority actually ever having to *invent* and enforce the convention), the term “norm” turns out to not necessarily imply the existence of an instigating agent. It *may* have that sense, but it is not the only one.

In fact, as so often with polysemy, more than one sense may be somewhat active simultaneously. When a norm is codified (to use Bartsch’ term) that may be done with a purely “descriptive” intention, but as it is still a norm, the codification may well be used as a prescription by anyone wondering about the “right” way to behave – linguistically or otherwise – in a particular community. The professional linguist’s response that such a use fails to recognize the descriptive nature of linguistics, in fact fails itself, viz. in recognizing the intrinsically normative character of linguistic conventions.

This insight also has consequences, of course, for the concept “knowledge of language”. At the very least, this includes knowledge of conventions, i.e. social regularities with a normative character. These are not identical to habits – even though an individual’s cognitive routines may support conventional behavior. We can understand the common phrase “to know a rule of the language” as referring to this kind of social cognition, and then its object, “a rule of the language”, is very different from a regularity, let alone a “law”, in nature. Linguistic *descriptions* use “rules” to characterize relations between linguistic categories and concepts (e.g. ‘S→NP VP’), which may be of the same type as rules describing natural phenomena and relations between them (e.g. ‘ $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$ ’) or mathematical functions

( $y=f(x)$ ), but (as discussed by Bartsch) these are part of our tools for describing regularities, and it is a category mistake to equate them with the “rules of the language” that a member of a linguistic community knows and applies in processing. In the specific case of cognitive science, it is an instance of equating two separate, complementary dimensions of explanation as identified by Marr (1982): On the one hand the specification of the problem solved by some system (e.g. mapping an acoustic signal to an interpretation), and on the other hand the specific algorithm used by the system to solve the problem (the same problem can usually be solved by several, non-identical algorithms). In both dimensions, “rules” are employed, but not in the same sense – the term “rule” in ordinary language is no less polysemous than the term “meaning”, or, for that matter, “norm”. Linguistics both employs rules (in a specific sense) and is about norms (in a specific sense).

## Language and language

If polysemies creating scientific confusion are so common, we might expect that the most elementary term in linguistics, the word “language” itself, is no exception. Indeed, Tecumseh Fitch (2010: 24) writes: “I suggest that unspecified use of some terms, especially the word “language” itself, [...] is probably best avoided”. Fitch invokes the distinction introduced by Noam Chomsky between I-language (Individual, Internal) and E-language (External), and then observes (p. 32/33):

Chomsky questioned both the ontological validity of E-language as a concept, and rejected it as a useful focus of linguistic investigation. One might have expected that this would be the last mention of E-language, since Chomsky defined the term essentially to reject it. However, the term has been subtly redefined, and today receives widening use to denote a culturally shared set of utterances produced by some specific set of speakers [...].

While Fitch hints at the crucial distinction between individual and population level phenomena, he still misses an important point by calling E-languages “cultural *creations*” (my emphasis). Another dangerous ambiguity: “Creation” may suggest that E-languages like French or Dutch are the intended result of actions by some agents in a culture,<sup>1</sup> very different from the biologically *evolved* capacity to learn things like languages, as instantiated in individual brains. Had he written ‘products of cultural evolution’ (a concept not unfamiliar to Fitch), this suggestion

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1. A similar risk arises when Koster (2010) calls words, i.e. conventional symbols, “invented artifacts”. Otherwise, his view, though coming from a different tradition, is highly congenial to the one presented here, which is a hopeful sign. See also Koster (2017).

would not arise, which would have been entirely appropriate: As mentioned above, conventions are systematic regularities of behavior in a community that emerge out of recurrent responses to recurrent coordination problems without anyone having to design them, and thus nicely instantiate the concept of cultural evolution.

Fitch is right in insisting that both I-language and E-languages exist, and that it is very risky to call them by the same name, “language”. At the same time, it is also risky to make the two concepts so different that they may appear to be totally unrelated, thus failing to acknowledge that both biological and cultural evolutionary processes comprise dynamic interactions between individual and population level phenomena. Cultural evolution is concerned with patterns of behavior, not bodies, but that does not make it non-biological. Fitch recognizes this point at the end of his discussion, also referring to recent research indicating that biological and cultural evolution, I-language and E-language, interact in interesting and unintuitive ways. As with the previous pairs of concepts: Linguistics has to involve both, including their connections.

A clear awareness of differences between related concepts is a prerequisite for coherent and interesting ideas about their interaction, and this case illustrates that such awareness can, fortunately, in principle be attained.

## End (and beginning?)

The dichotomies and misunderstandings that I discussed here are not the only ones to have haunted linguistics over the decades that the Dutch Annual Linguistics Day has existed. And this discussion was very sketchy, taking all kinds of shortcuts, possibly confusing ones (each concept deserves book length treatment). In addition, the point is not (or hardly) that the relevant insights are not there, *somewhere* in the haystack of public scientific information, the issue is that they are not generally *shared*, not part of the common ground that is transmitted to all new linguists. If this discussion helps just a little bit to remedy this situation, it will have served its purpose.

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