

Meaning

by Bart Nooteboom

32. Meaning

published 6-9-2012

Here I start a series of items on language and meaning. In particular, I will consider meaning change.

What is meaning? It can mean different things. It may mean the purpose or importance of something, as in 'the meaning of life'. The phrase 'It means nothing to me' can mean 'I can't grasp it' or 'I am indifferent to it'. Earlier in this blog I mentioned Austin's distinction between *locutionary* statements that are intended to say something about the world, and *illocutionary* expressions that are intended to affect someone or his/her conduct, as in a request. Here I want to discuss something different. In philosophy a distinction has been maintained between *semantics*, as the logic of meaning apart from the practice of language, and *pragmatics*, as the theory of language use. I think that the separation cannot be maintained. But let me start with established semantics.

A founding father of semantics, Gottlob Frege, made the distinction between *reference* (or *denotation*, or *extension*) and *sense* (or *connotation*, or *intension*). Reference is what an expression refers to. A name refers to the corresponding individual, a general concept, say 'chair', refers to the collection of all chairs. For a proposition, reference is its truth-value: true or false. Frege characterizes *sense* as 'The manner in which it (reference) is given'. The usual interpretation is 'manner of presentation'. I make something else of it: 'the way in which we identify something as belonging to a class or being true'. Sense in this technical sense is how 'we make sense' of the world.

Now two things are important. First, in language use the features we use to recognize something are often highly personal, idiosyncratic. Second, what features are picked out depends on the context. Meaning is context dependent. Some of the things I associate with a chair are: a professorial chair, the picture I once saw of someone 'sitting in his (stuffed) cow', and granddad's chair with blue velvet upholstery and dark, polished, curved armrests. Objects are assigned to general concepts on the basis of some particular feature, triggered by the context. An advertisement for an academic function triggers the professorial chair. I will not give the full argument here but I claim that this means that pragmatics trumps semantics: one cannot meaningfully discuss meaning without regarding language use.

Sense helps not only in identification but also in the process of dissemination of meaning. By showing how something can be recognized as belonging to a category one contributes to the spread of that category. If I am to attach any meaning to the 'Higgs particle', someone will have to tell me how it is identified. Sense connects cognition and reference.

In communication the 'receiver' tries to assimilate an expression in the totality of concepts and corresponding senses that form his/her 'absorptive capacity'. In that, senses that are associated

with the expression, and corresponding connections with other concepts, will never be identical to those of the 'sender'. In fact, the terminology of 'receiver' and 'sender' is unfortunate because it suggests that in communication meaning remains unchanged, like an object that is transmitted along a 'communication channel'. This is part of the 'object bias' in our thought that I discussed earlier (in item 29 of this blog).

33. Prototypes

published 6-9-2012

When we look whether an individual belongs to a category, what do we compare its features with? What 'represents' the category? Earlier, I denied that there always is an essence, or necessary and sufficient features that something must have to be assigned to a category. So how does it work? Several proposals have been made for this.

Hilary Putnam proposed a *linguistic division of labour*, where specialists know the 'real' meaning, such as, for water, its chemical composition (H₂O). Ordinary people can refer to the specialists in case of doubt, but for everyday activity they use what Putnam recognized as a *stereotype*, such as water being clear, potable, boiling at 100 degrees Celsius, freezing at 0 degrees, subject to expansion when freezing (causing water ducts to burst). In fact these features do not always apply (stereotypes often fail): under pressure the boiling point is higher and the freezing point is lower. At greater heights air pressure is lower hence boiling point is lower. One goes beyond the stereotype when conditions require it. However, specialists also can be wrong, and new scientific discoveries can shift 'real' meaning, even though that seems unlikely before it happens.

Johnson-Laird used the notion of *default* to clarify how conventional criteria for meaning could work. In a default, features are assumed until there is contrary evidence. This fits with philosophical pragmatism: we assume something as given until we run into misfits or novel openings. In other words: all ideas are defaults. The stereotype serves as a default.

Wittgenstein offered the idea of *typical cases* that form a norm and one handles boundary cases in comparison to the norm. Different cases, individuals of a universal, may not have any universally shared feature but a chain of *family resemblance*. Proximate members of a family have common features while distant members don't. X is in the same class as Y not because they have something in common but because there is an intermediate Z that has one feature in common with X and another with Y.

Eleanor Rosch proposed the idea of a *prototype*, which is a salient exemplar of a class that connects others in the class. Class membership is decided on the basis of resemblance to a salient case, or a typical case, which serves as a prototype. The prototype depends on culture and natural conditions. For example, apparently for the Dutch the prototype of a bird is a sparrow, and for the British it is a robin.

The idea of comparison with a salient case or prototype is an ancient one. It goes back to the old notion of a *paradigm*, used by Socrates, as an *exemplary* case to mimic. Aristotle recognized the

exemplary cause in his multiple causality: the prototype that a carpenter imitates in constructing a chair.

There is wisdom in this notion. One can see management as imposing strict, universal rules, or as setting an example to be imitated, or a 'role model', with some leeway for interpretation according to circumstances.

34. Practical prejudice

published 9-9-2012

Often, categorization is more than a simple comparison with a prototypical feature. Following Shank and Abelson, I employ the notion of a *script* to model categories, including types of actions. A script is a network of connected *nodes* that represent component activities (in case of a practice) or notions (in case of a concept). In an activity a connection between components may indicate a sequence in time, one-sided or mutual dependence, the use of pooled resources, a relation of authority (supervision, control), etc. In a concept or theory it may indicate logical implication, conditionals, etc.

The classic example is that of a restaurant, which can be seen as a simple sequence of nodes of entry, seating, selecting, ordering, eating, paying and leaving. Each component activity in turn has subscripsts for different ways of performing the component activity. For example, in the payment node one may pay cash, by cheque, credit card, or debit card, and each has its own script. There is also a superscript, in which the restaurant is part of a wider script of location, traffic, parking, energy supply, etc.

If something happens but one does not have the appropriate script to absorb it, as part of a culture, one is at a loss about what to do. This is part of the problem of integration of foreigners: they cannot properly 'read' events.

In the brain, scripts are embodied in networks of neuronal connections and patterns of neuronal firing. In perception, one subconsciously tries to assimilate sense impressions into existing scripts, and when a fit occurs, the script is 'triggered', unless no scripts are detected in which it 'fits', in which case it is ignored or there fails to be perception. Scripts can also be triggered internally, without perception, as in dreams or thought.

This entails that perception is always already an interpretation, modelled here as assimilation into one or more scripts. When a slot is found in a script for the perception to fit in, the whole of the script is tentatively attributed to what is perceived, even when not all is perceived. In philosophy and psychology this is known as *Gestalt*. This greatly helps identification and fast and coherent response to perception, which serves survival of the self.

It also entails prejudice, invalid attribution. A gesture towards a pocket is falsely interpreted as the reach for a gun. Scripts serve to identify an individual as having a place in one or more scripts. When a perception entails simultaneous activation of several scripts, this can lead to tentative connections between them that are strengthened or weakened in subsequent perception and action. I propose that the process models the sense making discussed in the preceding items

of this blog: something is recognized as belonging to a category by trying to fit features of it into a script.

Can one call a script embodied in the brain a ‘mental representation’? Perhaps, but it is not a simple ‘reflection’ but part of an active process of mental construction.

36. Hermeneutics

published 15-9-2012

In *hermeneutics* (theory of interpretation), mostly attributed to Hans-Georg Gadamer, one finds the notion of a *hermeneutic circle* that is spanned by a *paradigmatic* and perpendicular to it a *syntagmatic* axis. Paradigm refers to a concept with an existing meaning, and syntagm refers to expressions in which concepts are used (e.g. a sentence). As Frege proposed, the meaning of an expression is a (grammatical) function of the meanings of the words in it. However, the meaning of a word also depends on the expression it is in. The shift of a word from one expression and context to another alters its meaning. That is the hermeneutic circle.

The connection with the notions of *reference* and *sense* discussed before (in item 32) is as follows. Associated with a concept is a set of characteristics used for identifying something as belonging to the concept (*sense*), in a repertoire of partly personal associations (*connotations*), and the whole of that is the *paradigm*. Thus the paradigm is partly personal. We identify and categorize individual things always in the context of specific conditions, such as an expression in a certain setting, and that is the *syntagm*. There, from all possible features those are selected that fit the context, and from that context novel elements may be added. Here one can think again of the scripts that were discussed earlier (in item 34). Thus we may, for example, find that intelligence appears to have a novel aspect (social intelligence perhaps) that was not previously recognized. And that may then start to belong to the public extension and sense of the concept.

This process is not unlike the scientific method of testing hypotheses in specific conditions and revising them when needed. It also implements pragmatism, in which from application, in different contexts, one arrives at new ideas.

There is some indication that paradigm and syntagm arise in different areas of the brain; that sentence construction and verbs, which are closely associated, constituting the syntagm, occur in the so-called Broca region, and nouns, which refer to concepts, constituting the paradigm, occur in the Wernicke area, as I learned from Pinker.

There is a connection with literature. It is characteristic of it to operate in this fashion, in an ‘de- and re-conceptualisation of known elements’ in a ‘negation of generally accepted assumptions concerning reality’, as Reckwitz formulated it in his *Humanism and the literary imagination* (2009). Literature employs individuality to confuse, upset and reconstruct universals by forcing upon them the richness, the finesse, of specific people in specific circumstances. As Roland Barthes said: ‘Science is crude, life is subtle, and it is in the bridging of that gap that the importance of literature lies’.

37. Meaning change

published 19-9-2012

Here I end the series on meaning with an analysis of the change of meaning, for which I combine some points from previous items.

Ferdinand de Saussure made a distinction between *langue*, the shared, common order of meaning in language at a certain moment (*synchronically*) and *parole*, individual, creative language use that shifts language over time (*diachronically*). He next focused more on the order than on change, and it is the second that concerns me here. How does meaning change?

In search for an answer I return for a moment to the earlier discussion of *universals* and *individuals*. Universals, kept in *semantic memory*, arise from abstraction from specific individuals in specific situations, which are kept in *episodic memory*. I claimed earlier that universals are subject to change. How does that work?

Abstraction has several functions. One is the reduction of a complex of features to a few simple, most characteristic and most relevant ones (for a certain purpose). That furthers economy of thought and speed of interpretation and action. A second function is to cut ourselves loose from specific, familiar circumstances where no longer anything new happens, to move to novel conditions where we can still learn something new. Here universals function as steps we stand on to step away to novelty. We use universals to try and fit a novel situation into known frameworks that we carry along from previous experience.

This brings me back to the *Cycle of invention* that I discussed earlier, in items 31 and 35. That yields a 'logic' of change of knowledge, practice, technology, product, etc. I propose that it is also applicable here, to the change of meaning.

The connection is as follows. Both the *hermeneutic circle*, discussed in the preceding item of this blog, and the cycle of invention indicate that a change of content (knowledge, meaning) arises because known *content* is applied to a novel *context* and by adaptation to that and inspiration from it new content arises. The cycle adds a few elements. In the beginning new content is ambiguous, diffuse, ill understood, and disordered, with gaps, overlaps, incongruities, or straight contradiction. In the course of experiments with the novelty more order arises by the solving of puzzles, elimination of redundant, irrelevant or extraneous elements, in *consolidation*. That also is economic, in offering simplification. That is the process of constructing universals. The loosening from the peculiarities of a specific context makes it possible to carry over experience to a novel context, in *generalisation*.

The cycle shows that adaptation to a novel context can happen *proximately*, by making other choices from *existing* repertoires of practices/meanings, in *differentiation*. When that fails, in more *distant* adaptation we adopt novel connotations (*sense*) from foreign concepts or practices that we encounter in the novel context, in *reciprocation*. This is my proposal for how *parole* works.

In communication we put the content of our concepts into the novel contexts of what others think, say and do, and with that we may shift the content of our views. That is *making sense*.

105. Wittgenstein

published 4-8-2013

I largely disagree with Wittgenstein's early work (of the *Tractatus logico-philosophicus*), while I largely agree with his later work (of the *Philosophical investigations*) that on some points constitutes a 180 degree turn from his early philosophy, and which for me has formed a great source of inspiration.

I agree with the early Wittgenstein that we fool ourselves with language. This is the case not only in philosophy, but more widely, in talk of abstract entities such as knowledge, happiness, meaning, etc. In particular, as I argued in item 29 of this blog, we suffer from an *object bias*, treating abstract notions as if they were objects in time and space. The properties of such objects are used for metaphors to deal with abstractions, and thereby they mislead us. Here I make use of the work of Lakoff and Johnson. This cognitive bias, embodied in language, is inherited from our evolution, so I argue.

I disagree with the early Wittgenstein's famous dictum that 'Of which we cannot speak one must remain silent'. As I argued in item 103, it is the job of philosophy to speak of things that go beyond scientific and everyday understanding, notions and meanings, which by definition are difficult to talk about but nevertheless insistently knock on the door of our thought.

In line with my pragmatist philosophy, set out in this blog, I agree with the later Wittgenstein's notion of words as 'tools', where meaning is pragmatic, depending on the use to which they are put, in *meaning as use*. Words may develop new meanings in the way that a screwdriver might be used as a hammer. I discussed this in the items on meaning (nrs. 32-37).

I try to connect Wittgenstein's views on meaning with established theory of meaning, derived from Frege, with the distinction between what words refer to (*extension, reference*) and how this reference is established (*intension, sense*). We determine reference and truth on the basis of associations in thought, connected to words, that constitute sense, which we develop as we put words to practice, along the line of our life. This private sense may yield a shift of public reference, and hence 'truth', along a *hermeneutic circle*. Universals are to be seen as imperfect and temporary, in *imperfection on the move*. This has important ethical implications, in lifting the suppressive, regimenting weight of universals and giving more room for individuality.

Related to this I like Wittgenstein's notion of *language games* with rules for using words, established in conversations and embedded in culture, in tacit habit.

I also like Wittgenstein's notion of *family resemblance*, where entities can resemble each other without having some shared essence. I think this also has ethical implications. People can have affinity or similarity without some shared cultural, ethnic or national essence. Identities can be plural. This may yield an antidote to nationalistic intolerance.

While in his earlier thought Wittgenstein used logic to show up the delusions of language, in his later thought he appreciated words as *forms of life* that are richer than logic. Language constitutes a category on its own.

Here I start a series that continues an earlier discussion on language, meaning, and cognition.

In 'old' philosophy, ideas, reason and meanings are seen to be foundations, preceeding and guiding action in the world. Looking at the world objectively, from outside, we are supposed to analyse, plan and act. Ideas are seen as representations judiciously attached, item-by-item, to things in the world. Meanings are seen as objects attached to words. The philosopher Quine used the 'museum metaphor': meanings are like exhibits in a museum, with words as labels. Words and their meanings are given, fixed, a-temporal.

That is boring, since it precludes novelty and surprise, scary even, since it imprisons us.

As analysed by Braver¹, Wittgenstein and Heidegger, and before them David Hume, turned the logic around. Practice, action and habit in the world are primary, in time, origin and quality, and ideas and meanings arise from them, as frozen frames, snapshots cut from a film. Thinking is a response to action, and then also a basis for further action. Most of the time, competence is tacit; we have no reflective awareness of what we are doing. Meaning is not analytic, applying to independent items, but holistic: words have meanings in constellations of words in expressions. Meaning depends on the context of action. Meaning is not substantial but functional. To understand the meaning of a word one should look at how it is used. For this, Wittgenstein used the term 'language game'. Meaning is a role in that game, and meanings vary across language games.

There is no rock bottom, absolute, unambiguous, context-independent, constant meaning. In justifying what we say or do we reach a point where one can only say: this is how we do it. Meanings and considerations of validity or justification are relative to a language game. As in chess one can say that a move is legitimate or not, while it does not make sense to ask whether chess is true.

It is meaningless to talk of the justification of linguistic conventions by describing what is represented, because any such justification presupposes the conventions. We cannot talk of what transcends our talk.

By postulating meanings independently from practice we impose a separation between subject and world and then question how meaning is connected to the world.

I sympathise with this analysis, but the problem now is this. One of the most pervasive and tenacious language games is to talk about things in the world, designated by words, in a separation of subject and world. If old philosophical intuitions arise from that game, and if language games form the basis for judging validity, aren't those intuitions valid? Either old philosophy is justified or there is something not quite right with the story of language games.

¹ Lee Braver, 2012, *Groundless grounds; A study of Wittgenstein and Heidegger*, London: MIT press.

So, where do we go from here, with what theory of meaning? I have discussed my view in earlier items of this blog, and I will return to it in a following item. I propose that it is entirely reasonable to use words to refer to things, as more or less independent entities, apart from practices. That is what we use language for.

As I argued before, a problem arises only when we use intuitions from objects moving in time and space metaphorically to grasp abstract concepts such as meaning, identity, knowledge, concepts, culture, etc. I called this the ‘object bias’.

Meanings themselves are not like objects moving in time and space. A word when shifted from one sentence to another shifts its meaning.

As I discussed earlier, in items 146 and 148 in this blog, a second problem with the story of language games is that it appears to imply radical relativism. If meanings are tied to language games and have no sense outside them, does that mean that meanings are *incommensurable* between language games, and that debate between them is hopeless? Or do meanings allow for some connection between games?

In different language games, some words are often the same. Their meanings vary with the game but are nevertheless connected, in the process of meaning development. Could this not yield a bridge between the games? The rules of chess and draughts differ, but they can be compared. Wittgenstein used the notion of ‘family resemblance’. That may apply to language games.

168. Word as process

published 20-10-2014

Following the preceding item in this blog, the puzzle now is this. On the one hand words can refer to things (objects or abstractions) that have some identity, i.e. some stability across different contexts. On the other hand meanings are context-dependent. They arise in relation to meanings of other words in specific action contexts or ‘language games’. So how can we reconcile this ‘identity’ across contexts with dependence on context?

What is the identity of these spooks that change as they move from room to room, while retaining their appearance?

The solution I proposed earlier in this blog, using established theory of meaning, is that meaning has two faces. One face is static *reference* to something, when one identifies something *as* something (a chair, say), and the second face is the dynamic *sense* or of *how* one does the identification, and how that is affected by contexts of action old or new. Reference stands to sense as a picture to a film.

Features by which we identify, in making sense, constitute the *connotation* of an expression. Which features are picked out depends on the context. ‘Chair’ refers to one thing in talk of academic appointments and quite another in talk of interior decoration. And new kinds of objects

may turn up to serve as a chair. Connotation is a moving penumbra, as it were, which accompanies a word as it is applied across contexts. It is a bundle of shifting potentialities.

Saying that features are selected for identification would suggest some deliberate, rational choice. In fact the features are picked up, largely tacitly, in 'framing', prompted by the context.

I elaborated this in terms of the *hermeneutic circle* (in item 36 of this blog). Meanings of sentences are functions of the meanings of individual words in it, as recognized in analytic philosophy, but *at the same time* the meanings of the words depend holistically on that of the sentence, which does not sit well with analytic philosophy.

As recognized by Wittgenstein and Heidegger, the crux and cradle of meaning lie in practice. Semantics (theory of meaning) follows and arises from pragmatics (language use). There, I think, lies the fundamental basis for pragmatism.

While analytic philosophy neglects the birth of meaning in practice, pragmatic philosophy neglects the abstraction of concepts from practice. In that abstraction most of the fuzzy set of connotations is shed. The sun is at its zenith and the penumbra is slight. Abstraction violates, kills perhaps, what Wittgenstein called the 'form of life' of words.

But we need abstraction to go from one context to another, plucking experience to employ it elsewhere. But when applied in a novel context the abstraction needs to be enriched again, cloaked in connotation, as a form of life, as it is absorbed in the crucible of the context, being amalgamated with other words there.

All this is reflected in the double meaning of being as a thing and being as a process. Old philosophy was built on the first, and later philosophy (of Nietzsche, Wittgenstein and Heidegger) on the second. It is both, along the hermeneutic circle.