

24.903 Week #5 – 2022-02-28 + 2022-03-02

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1 Pronouns in context

The 1st person singular pronoun *I* refers to the individual who counts as the utterer in the context.

In a context where there is a plurality that counts as the utterer (a statement with multiple signatories, for example), using *I* would be infelicitous and using *we* would be appropriate.

The 1st person plural pronoun *we* is not only used to indicate a plural utterer. It can also be used to refer to a group that contains the utterer plus some other individuals. Which individuals are included is a matter for contextual determination.

The second person pronoun *you* (which is grammatically plural, but can be used to refer to a single individual) refers to the addressee of the context plus possible other salient individuals. *You* also has a generic use: if *you* park in this lot, *you* will get a ticket.

In many languages, pronouns can incorporate *honorific* features. For example, the German *du-sie*, French *tu-vous*, and Spanish *tu-usted* contrast conveys signals about the relation between utterer and addressee. We will return to this in Week 7.

The 3rd person singular pronoun *it* refers to the non-human individual that is salient in the context:

- (1) It is broken.

We discussed that one can use multiple instances of *it* that do not refer to the same individual:

- (2) (Working to repair a broken doodad. Where is the screwdriver?) It's right next to it.

Ideally, we would have a theory that explains how context evolves even during the interpretation of a single sentence. This is the idea pursued in certain approaches: dynamic semantics and centering theory, for example.

Instead of going into those advanced areas, we will adopt a common “stop-gap” analysis. We assume that pronouns come with a “referential index”, a number. And we assume that the context determines a “variable assignment”, a function from numbers to entities.

The meaning for *it* then is stated as follows:

- (3) For any context c , any world w , and any index n ,
 $\llbracket \text{it}_n \rrbracket^{c,w}$ = the non-human individual x such that $g_c(n) = x$,
 where g_c is the variable assignment determined by context c .

Our sentence in (2) is now represented as follows:

- (4) It_i is right next to it_j (where i, j are numbers)

The sentence is only felicitous in a context that determines a variable assignment that assigns non-human individuals to the indices i and j .

2 Finger exercise

Let us calculate the meaning of the sentence *I am tired*. We will need the following Function Application principle, updated for a system that tracks contexts:

- (5) FUNCTION APPLICATION
 For any context c and any world w :
 If a constituent α has two daughters β , γ , and $\llbracket \beta \rrbracket^{c,w}$ is a function whose domain contains $\llbracket \gamma \rrbracket^{c,w}$, then $\llbracket \alpha \rrbracket^{c,w} = \llbracket \beta \rrbracket^{c,w}(\llbracket \gamma \rrbracket^{c,w})$.

Note that we are “passing down” both the context and the world. If we were building a dynamic semantics, we might have $\llbracket \beta \rrbracket^{c,w}$ pass an updated context to its sister. But that’s for another time in another course.

- (6) For any context c and any world w :
- $$\begin{aligned}
& \llbracket \text{I am tired} \rrbracket^{c,w} \\
&= \llbracket \text{tired} \rrbracket^{c,w} (\llbracket \text{I} \rrbracket^{c,w}) \\
&= (\lambda x_e. x \text{ is tired in } w) (\llbracket \text{I} \rrbracket^{c,w}) \\
&= (\lambda x_e. x \text{ is tired in } w) (\text{the individual who counts as the speaker in } c) \\
&= 1 \text{ iff the individual who counts as the speaker in } c \text{ is tired in } w.
\end{aligned}$$

If the context is such that Kai is speaking, then *I am tired* is true of a world w iff Kai is tired in w .

3 A picture of what happens in a conversation

3.1 The conversational scoreboard

We have concluded that the context plays a big role in supplying input to the semantics. Here are some features we are relying on:

- the individual(s) counting as the utterer(s) in the context
- the individual(s) counting as the addressee(s) in the context
- the set of salient individuals in the context
- a salient relation determined by the context ($\rightarrow$ compounds, genitives)
- the variable assignment determined by the context ($\rightarrow$ third person pronouns)

As one proceeds building a fuller picture of the meanings conveyed through language, this set of features of the context grows and grows. [Lewis 1979](#) suggested the term “conversational scoreboard” for the structured representation of what the context tracks during the course of a conversation.

3.2 The common ground

[Stalnaker 1978](#) proposes that a core component tracked in context is the “common ground” of the participants in the conversation: The common ground of a conversation at any given time is the set of propositions that the participants in that conversation at that time mutually assume to be taken for granted and not subject to (further) discussion.

3.3 What is a proposition?

In the model we have been building, sentence meanings are functions from contexts and worlds to truth-values:

- (7) $\llbracket \text{I am tired} \rrbracket = \lambda c. \lambda w. \text{ the individual counting as the utterer in } c \text{ is tired in } w$

If we feed the current context to the meaning of a sentence, we get a function from worlds to truth-values. In other words, a sorting function that characterizes the set of worlds where the sentence (relative to the current context) is true. This is *the proposition expressed by the sentence in the current context*:

- (8) Assume that in c , Kai utters the sentence. Then:
 $\llbracket \text{I am tired} \rrbracket^c = \lambda w. \text{ Kai is tired in } w$

3.4 Assertion and acceptance

When uttered assertively, sentences are meant to update the common ground. If the sentence is accepted by the participants, the proposition it expresses is added to the common ground. From then on, the truth of the sentence is part of the common ground, is mutually assumed to be taken for granted and not subject to further discussion.

3.5 The context set

The common ground describes a set of worlds, the “context set”, which are those worlds in which all of the propositions in the common ground are true. The context set is the set of worlds that for all that is currently assumed to be taken for granted, could be the actual world. If a proposition is added to the common ground, the context set is updated by removing the worlds in which this proposition is false and by keeping the worlds in which the proposition is true.

4 Presupposition

There are many sentences that have meaning components that impose certain requirements on the common ground. For example, one might want to say that

- (9) It was Margaret who broke the keyboard.

presupposes that someone broke the keyboard (and then asserts that Margaret broke the keyboard): what is required is that the common ground include the proposition that someone broke the keyboard, or in yet other words, that the context set only include worlds where someone broke the keyboard. That means that the sentence requires that it is taken for granted and not subject to (further) discussion that someone broke the keyboard. A speaker who sincerely asserts the sentence would have to assume that its requirements are satisfied; that is, such a speaker would have to assume that it is common ground that someone broke the keyboard. This is what we mean when we say that the speaker presupposes (in asserting the sentence) that someone broke the keyboard.

4.1 Properties of presupposition

Presuppositions are

- signaled as to be taken for granted
- not subject to (further) discussion
- not “at-issue”

4.2 Diagnostic tests

Since presuppositions are signaled as to be taken for granted, we can object to that by complaining that the prior common ground did not in fact include the relevant proposition (Shanon 1976, von Stechow 2004):

- (10) a. The person who proved Hall’s Conjecture is visiting MIT.
b. Hey, wait a minute, I had no idea that Hall’s Conjecture was proven.
c. #Hey, wait a minute, I had no idea that that they’re visiting MIT.

Consider also: *What the hell is Hall’s Conjecture?*

Presuppositions cannot be the (only?) new contribution of an asserted sentence (lecture notes from 1998 by Orin Percus):

- (11) A: So, Daiane believes that Dzsenifer kissed Amanda.
 B: Yes, and what's more, Daiane is correct in thinking that (Dzsenifer kissed Amanda).
 B': #Yes, and what's more, Daiane is aware (of) that (Dzsenifer kissed Amanda).
- (12) A: I wonder whether there were any thieves among the visitors and whether it was any of them who shot Bill.
 B: There was a single thief and he shot Mary.
 B': #The thief shot Mary.

Presuppositions are affected differently (often not at all) when sentences are embedded. This is called “projection” and can be illustrated by the so-called “family of sentences” test:

- (13) a. The person who proved Hall's Conjecture is visiting MIT.
 b. Maybe the person who proved Hall's Conjecture is visiting MIT.
 c. Is the person who proved Hall's Conjecture visiting MIT?
 d. If the person who proved Hall's Conjecture is visiting MIT, there must be a gala reception.

We can practice using these diagnostic tests on the following cases:

- (14) a. It stopped raining.
 (↪ it rained before)
 b. Jill knows that the door is locked.
 (↪ the door is locked)
 c. It is broken.
 (↪ the referent is non-human)
 d. Marta was astonished, too.
 (↪ someone else was astonished)
 e. It's Rose who scored the winning goal.
 (↪ there was a winning goal)

4.3 Presupposition accommodation

“Presupposition accommodation” is the process by which the context is adjusted quietly and without fuss to accept the utterance of a sentence that imposes certain requirements on the context in which it is processed.

(15) I am sorry that I am late. I had to take my daughter to the doctor.

Accommodation is limited by the natural requirement that participants will only adjust the context quietly and without fuss if the accommodated claim is not one that they would wish to debate, either because they trust the speaker or because they do not care. As a corollary, when a presupposition is actually taken to be false in the common ground, i.e. when everybody takes it to be false and believes everyone else to do so as well etc., then accommodation is unlikely to occur.

- (16) a. The king of France is on a state visit.
b. I’m late because my giraffe was sick.

Other cases where accommodation is hard or impossible are cases where there is not enough information to repair the common ground.

(17) Tonight, John is having dinner in New York, too. (Kripke 2009)

You’re holding a bag of avocados, you’ve just started talking to someone randomly in a café, and they say:

- (18) #She/The woman has an awesome guacamole recipe, so you should ask her for it. (Beaver & von Stechow 2019)

See von Stechow 2008 for more discussion of problems surrounding accommodation.

References

- Beaver, David & Kai von Fintel. 2019. Variable costs. Slides from a course taught at ESSLLI 2019 in Riga, Latvia. <http://mit.edu/fintel/beaver-fintel-2019-dk-costs-essli.pdf>.
- von Fintel, Kai. 2004. Would you believe it? The king of France is back! Presuppositions and truth-value intuitions. In Marga Reimer & Anne Bezuidenhout (eds.), *Descriptions and beyond*, 315–341. Oxford University Press. <http://mit.edu/fintel/fintel-2004-kof.pdf>.
- von Fintel, Kai. 2008. What is presupposition accommodation, again? *Philosophical Perspectives* 22(1). 137–170. DOI: [10.1111/j.1520-8583.2008.00144.x](https://doi.org/10.1111/j.1520-8583.2008.00144.x).
- Kripke, Saul. 2009. Presupposition projection and anaphora: Remarks on the formulation of the projection problem. *Linguistic Inquiry* 40(3). 367–386. DOI: [10.1162/ling.2009.40.3.367](https://doi.org/10.1162/ling.2009.40.3.367).
- Lewis, David. 1979. Scorekeeping in a language game. *Journal of Philosophical Logic* 8(1). 339–359. DOI: [10.1007/BF00258436](https://doi.org/10.1007/BF00258436).
- Shanon, Benny. 1976. On the two kinds of presuppositions in natural language. *Foundations of Language* 14(2). 247–249. JSTOR: [25170057](https://www.jstor.org/stable/25170057).
- Stalnaker, Robert. 1978. Assertion. In Peter Cole (ed.), *Pragmatics* (Syntax and Semantics 9), 315–332. Brill. DOI: [10.1163/9789004368873_013](https://doi.org/10.1163/9789004368873_013).