Handout 3
Thoughts, Frege's Second Puzzle, &
Intensional and Extensional Contexts



Fregean Thoughts

Ouestion: what is the sense of a whole sentence?

To answer this question Frege introduces a third notion: a Thought.

(Fregean) Thought: "[the] objective content [of the act of thinking], which is capable of being the common property of several thinkers."

Thoughts have at least three features:

- (A) They are the *objects* of the activity of thinking.
 - They are not the *thinking* of something, but *what is thought*.
- (B) They are *objective*.

Two people can think the *same* Fregean Thought, or one person can think the same Thought at two different times. ("Objective" may also suggests a Thought is independent of any given mind that thinks it.)

- (C) They are *abstract*.
 - You can't find them in space and time.

Consider a loose analogy: The note *C sharp* is not any particular playing of a note, but the note played. It is objective (you can play it at different times, and two people can play the same note). It is abstract (you can't find the note C sharp in your cupboard).

Question: are Thoughts the senses or the referents of whole sentences? Frege: they are the senses, not the referents. Here's his rough argument.

- P1. If two sentences have identical grammatical structure with words that have identical referents, the whole sentences have the same referent.
- P2. There are sentences with the same referential structure but which express different thoughts.
- C. The Thought expressed by a sentence is not its referent.

P1 is a version of a principle called *compositionality* which we will talk more about later.

P2 is supported by examples like (1) and (2) we considered before.

- (1) Clark Kent is Clark Kent
- (2) Clark Kent is Superman

Question: So what is the referent of a whole sentence?

Answer: A truth-value (i.e. *true* or *false*). Why? One reason: the truth-value of a sentence is generally preserved under substitution of coreferring expressions.

Reporting Thought and Frege's Second Puzzle.
How can we talk about Thoughts and senses rather than the objects that stand as their referents?
(A) Direct quotation. E.g., Raul thought the Thought expressed by "Clark Kent is Superman". The sense of ``Superman" is different than that of "Clark Kent".
(B) Indirect quotation Raul thought that Clark Kent was Superman.
Two reasons to think this: (i) Frege is already committed to the idea that Thoughts are the "objects of thinking". (ii) To resolve the following puzzle.
<i>Frege's Puzzle for Intensional Contexts</i> : How can two statements of the from "A thinks that p" and "A thinks that q" differ in <i>truth value</i> , when "q" is obtained by substituting some referring expression in "p" with another referring expression that has the same referent.
For example, how can (3) and (4) below differ in truth value?
(3) Lois thinks that Clark Kent saved her.(4) Lois thinks that Superman saved her.
In general this is permissible. For example, the following <i>inference</i> is a good one.
P1. I was standing three feet from Clark Kent yesterday. P2. Clark Kent is Superman.
C. I was standing three feet form Superman yesterday.
It's a good inference because if the first sentence is true, and "Clark Kent" and "Superman" refer to the same object, the conclusion is true as well. Let's introduce some vocabulary to help describe the puzzle.
A sentential context: a sentence with some of its words removed. e.g. - "Jones went to" - "Jones thought that" - " is taller than"
Two referring expressions <i>corefer</i> when they have the same referent.
An <i>Intensional</i> Context: one in which truth values <i>need</i> not be preserved when coreferring expressions are substituted for one another.
An <i>Extensional</i> Context: a context in which truth values are <i>always</i> preserved when coreferring expressions are substituted for one another.
Question rephrased: Why are attitude reports ("A thinks that", "A fears that", "A hopes that") intensional?

Frege's answer: in these reports we are no longer talking about what the referring expressions customarily refer to, but how a person is thinking of them. Consider an analogy. No one worries about why *this* inference is bad.

P1. Jimmy called out "Clark Kent!"
P2. Clark Kent is Superman.
C. Jimmy called out "Superman!"

Why? Because it's conventional that when it is in quotes "Clark Kent" no longer refers to the man clark Kent, but to the words or symbols "Clark Kent".

Frege thinks the same rough idea applies to indirect speech. For example, in "Lois thinks that Clark Kent saved her" is not a report about Clark Kent directly, but how Lois thinks of him. So, Frege thinks, that when we put the words "Clark Kent saved her" in this intensional context, *its referent changes*. To what? To the customary sense of "Clark Kent saved her" (that is the Thought it expresses). For this reason Frege says that in intensional contexts, referring expressions have their "indirect referent" (i.e. their sense as referent).

An interesting snag: every referent has a sense. So if the referent of "Clark Kent saved her" in an intensional context is its customary sense (the sense it has in extensional contexts), then what is the *sense* of "Clark Kent saved her" in an intensional context? Frege says it is something new: the sense of its customary sense. He calls this the "indirect sense" of the expression.

	normally is	in an indirect attitude report is
Reference of S	Customary Referent	Indirect Referent = Customary Sense
Sense of S	Customary Sense	Indirect Sense = Sense of Customary Sense

How does this help with the original problem?

Since the referent of the a sentence *changes* to its customary sense in an intensional context, and the truth values of whole sentences are determined based on the referents of their constituent expressions, then if you substitute two coreferring sentences with different senses in an intensional context, the truth value of the whole sentence can change.

This makes a lot of sense for Frege. Recall that for him, (5) and (6) express different Thoughts.

- (5) Clark Kent saved Lois.
- (6) Superman saved Lois.

Thus, someone could rationally believe one without believing the other. If what we're doing in saying "Lois believes that Clark Kent saved her" and "Lois believed that Superman saved her" is describing what Thoughts Lois has, then we want the embedded clauses "that Clark Kent saved her" and "that Superman saved her" to *talk about these Thoughts*. This is precisely what allowing sentences to change their reference in intensional contexts accomplishes.