

Mental reference

The essential business of language is to assert or deny facts.

Bertrand Russell

The point of a discourse is the exchange of information.

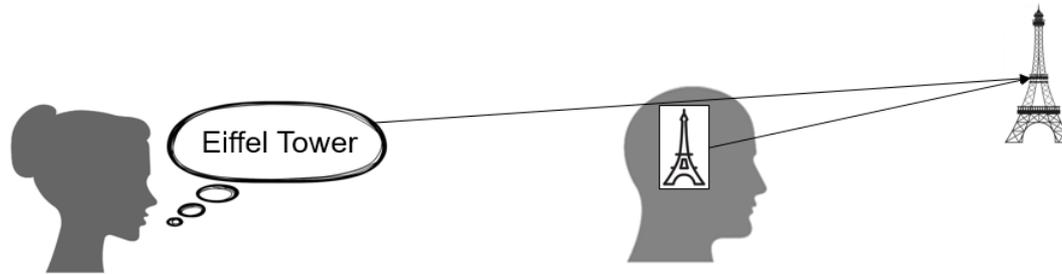
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Reference

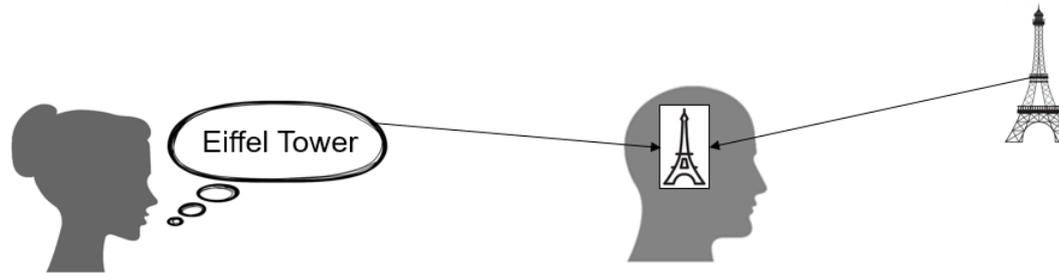
- Reference is usually understood as a relation between a linguistic expression and an object in the world.
 - Referential expressions refer to objects in the real world



- This view is controversial and gives rise to a number of puzzles:
 - Double vision
 - Reference to fictional characters, etc.

Mental reference

- I propose a different view:
 - Referential expressions refer to mental representations in the hearer's mind.



- This offers a natural solution to reference puzzles

Communication

- Communication is a primary and main function of language
 - Information transmission from the speaker to the hearer
 - Not the evaluation of the truth of the sentence



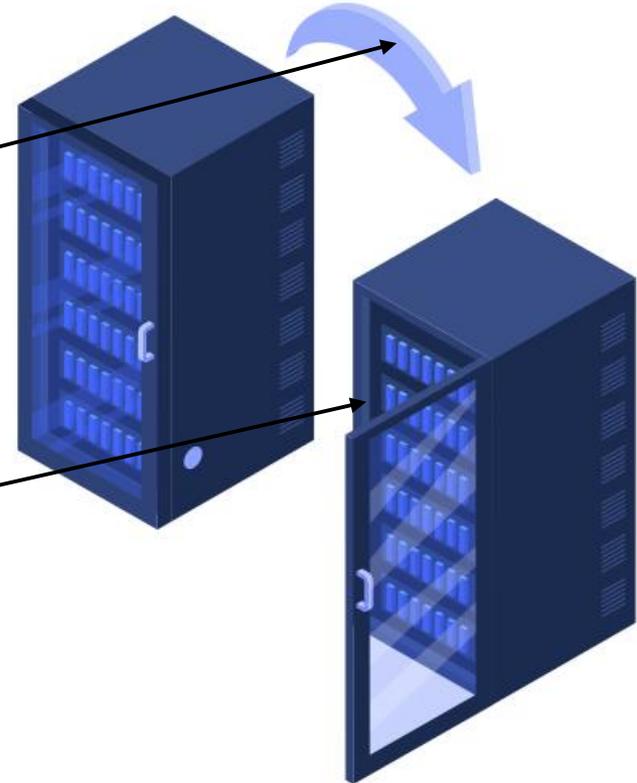
Information transmission

- New information should be linked to the old one:
Ivanov's salary is 50 000 rub.

```
update employees
set salary = 50000
where name = 'Ivanov'
[where id = 2837]
```

id	name	salary	...
...			
2837	Ivanov	50 000	...
...			

– Truth evaluation?



Linguistic communication

- Referential expression serves to find a mental representation of the object in the hearer's mind
 - Truth evaluation?



Dynamic semantics

- File of cards metaphor:
 - “*B’s task is to construct and update a file which, at any point in the conversation, contains all the information that A has conveyed up to that point*” (Heim 1982:178)
- A card corresponds to a *discourse* referent
- The meaning of noun phrases is procedural
 - “*For every indefinite, start a new card; for every definite, update a suitable old card*” (Heim 1982:179)
- Sentence meaning is a context change potential
 - It the entire file, not a sentence, which has truth conditions

Discourse referents

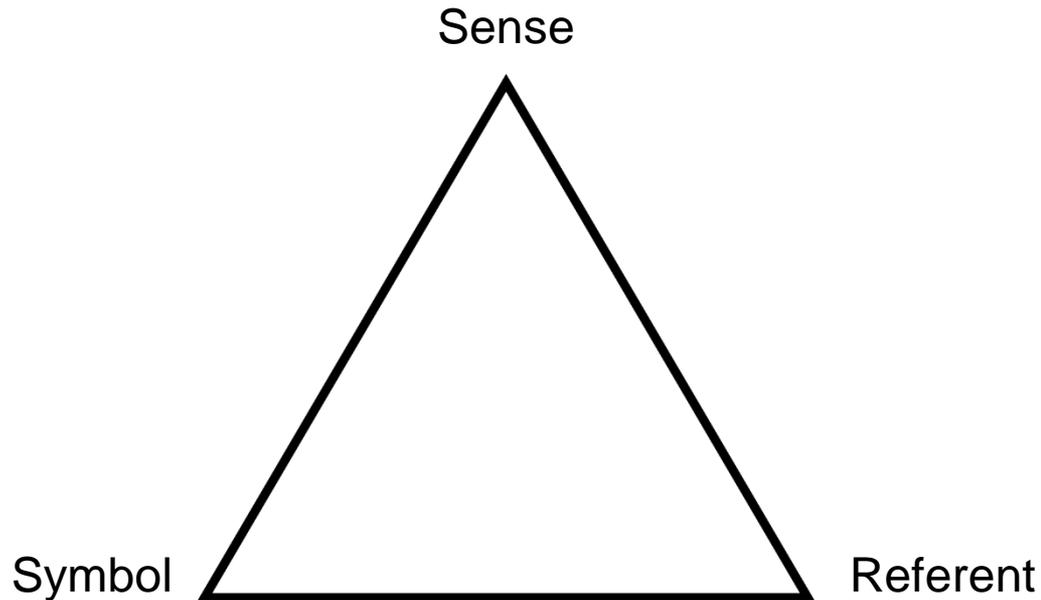
- Stand for all kinds objects being discussed:
 - Real, hypothetical, fictional, abstract, ...
- Can be introduced linguistically or extralinguistically
 - ‘Mental referent’ would be a better notion
- Relation to real referents is many-to-many
 - Several discourse referents can map to one real referent
 - One discourse referent can map to several real ones
 - A discourse referent can have no corresponding real one
- Can split and merge as discourse progresses
 - Unlike real referents

Frege's puzzle

- If 'Hesperus' and 'Phosphorus' have the same value
 - then those pairs of sentences below must be equivalent
- Informativity puzzle
 - *Hesperus is Hesperus* (non-informative, a tautology)
 - *Hesperus is Phosphorus* (informative)
- Truth value puzzle
 - *John believes that Hesperus is Hesperus* (likely true)
 - *John believes that Hesperus is Phosphorus* (might be false)

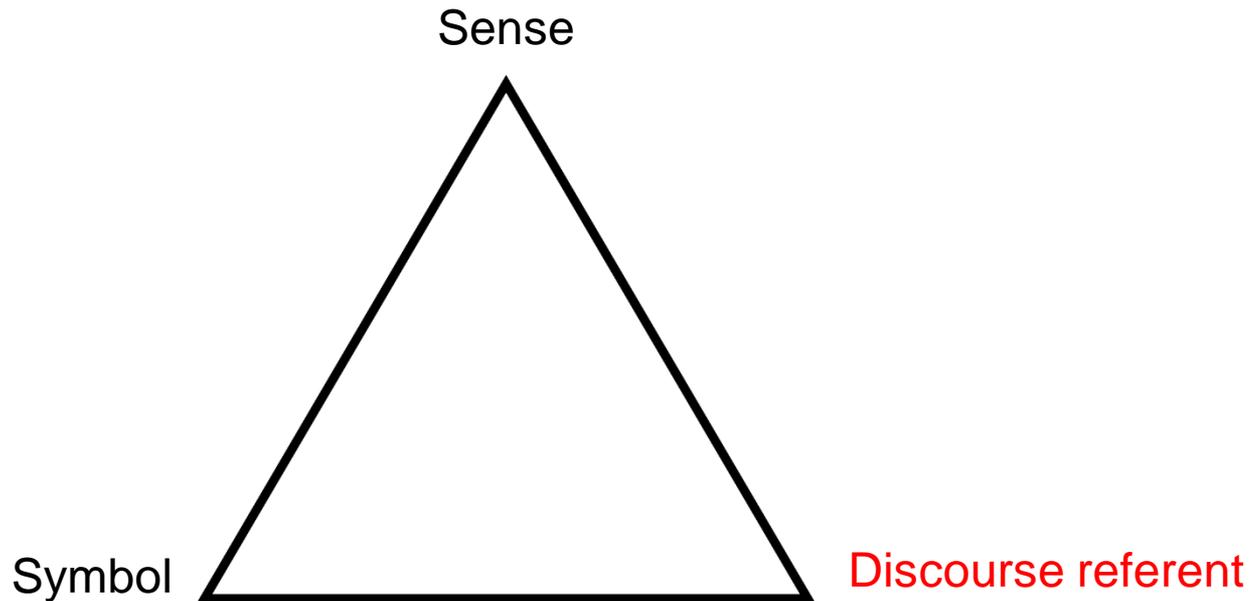
Frege's solution

- Sense is a mode of presentation of a referent



Dynamic semantic solution

- Sense is a pattern to search for a discourse referent



Frege's puzzle natural solution

- If John has two distinct discourse referents
 - *John does not believe that Hesperus is Phosphorus*

x
Hesperus (x)

y
Phosphorus (y)

- Then 'Hesperus is Phosphorus' is informative for him and leads to merge of the two into one
 - *John believes that Hesperus is Phosphorus*

x
Hesperus (x)
Phosphorus (x)

Kripke's puzzle

- Double vision
 - *Pierre believes that Londres is pretty*
 - *Pierre believes that London is ugly*
- Has the same natural solution
 - Two discourse referents map to the same real one

x
Londres (x)
pretty (x)

y
London (y)
ugly (y)

- The puzzle arises only if we appeal to real referents
 - If we abandon this view, then there is no puzzle at all

Fictional characters

- *Sherlock Holmes lived on Baker Street*
- Fictional characters:
 - We have mental representations for fictional characters as well as for real objects
 - Referential expressions refer to those mental representations

x
Sherlock Holmes (x) lived on (x, y)

y
Baker Street (y)

- The same applies for:
 - hypothetical objects, abstract objects, etc.

Speaker's reference

- *Her husband is kind to her*
 - Said about a spinster who has no husband
- Truth is irrelevant for the success of communication
 - What matters is the correspondence of the sentence to the hearer's beliefs, not to the real world
 - If the hearer also believes that the man is her husband, then the communication goes without problems
- Moreover
 - The hearer need not believe that the man is her husband
 - He can just assume that the speaker believes so

Pragmatic reasoning

- In the process of communication the interlocutors reason about each other
- The speaker:
 - Chooses such an expression so the hearer could identify the discourse referent correctly
- The hearer:
 - Reasons whom the speaker could mean in the current context using such an expression

Conclusions

- If reference is treated as a mental phenomenon then
 - Many reference puzzles are solved in very natural way or even dissolved (i.e. do not appear)
- A sentence does not has a truth value by its own
 - It is sequence of instructions to update a mental representation in the hearer's mind
- Truth is irrelevant for the success of communication
 - What matters is the correspondence of the sentence to the hearer's beliefs, not to the real world

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Thank you!
Questions?