

# Reference in Communication

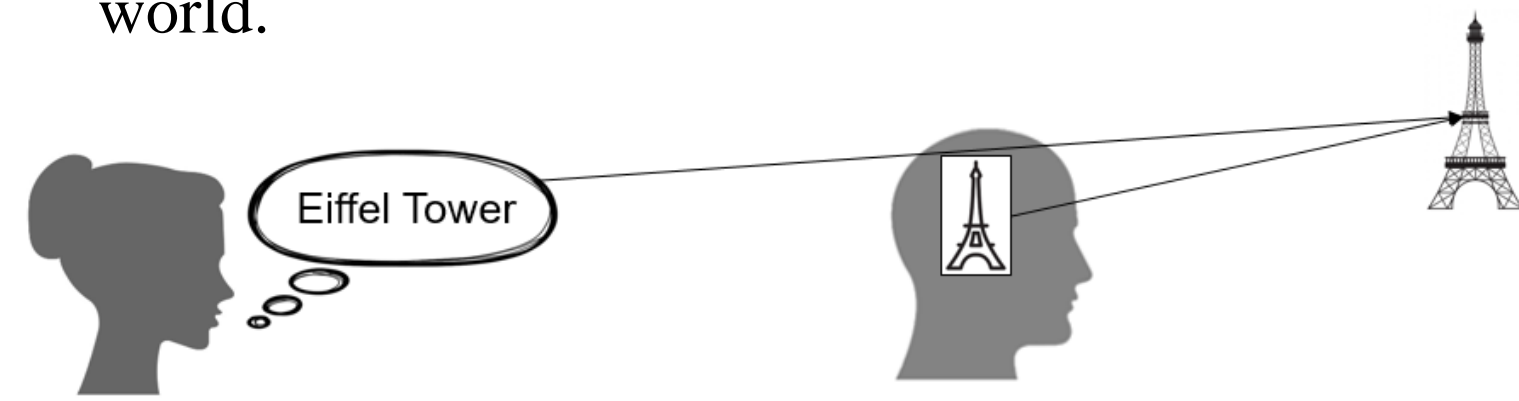
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## Reference

The prevailing view among philosophers:

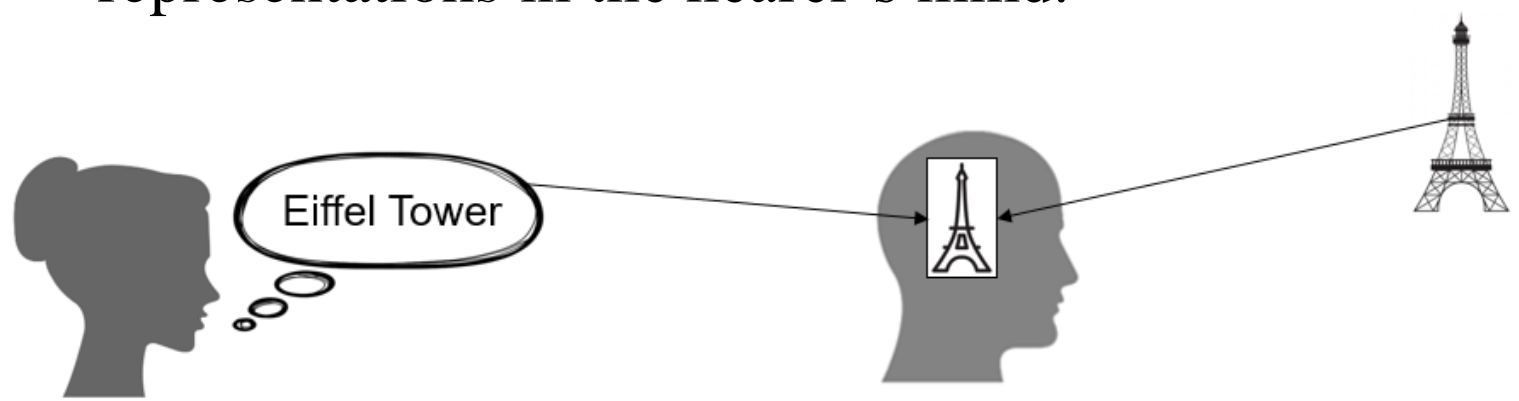
1. Reference is a relation between a linguistic expression and an object in the world (its referent)<sup>1</sup>. Referential expressions refer to objects in the real world.



This view is controversial<sup>2</sup> and gives rise to a number of puzzles (such as double vision, fictional characters, etc.)

I propose a different view:

2. Referential expressions refer to mental representations in the hearer's mind.



This offers a natural solution to the reference puzzles (see on the right).

## Communication

- Communication is a primary and central function of language
- It involves the information transfer from the speaker to the hearer

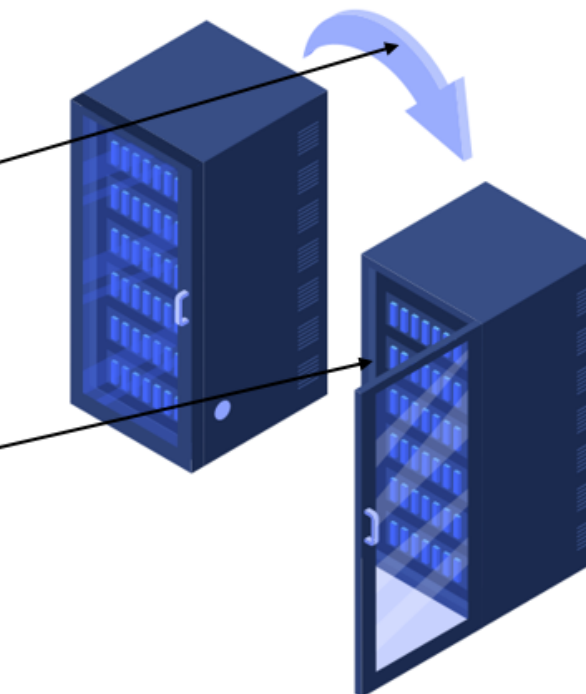


*Schmidt's salary is 5000 euro*

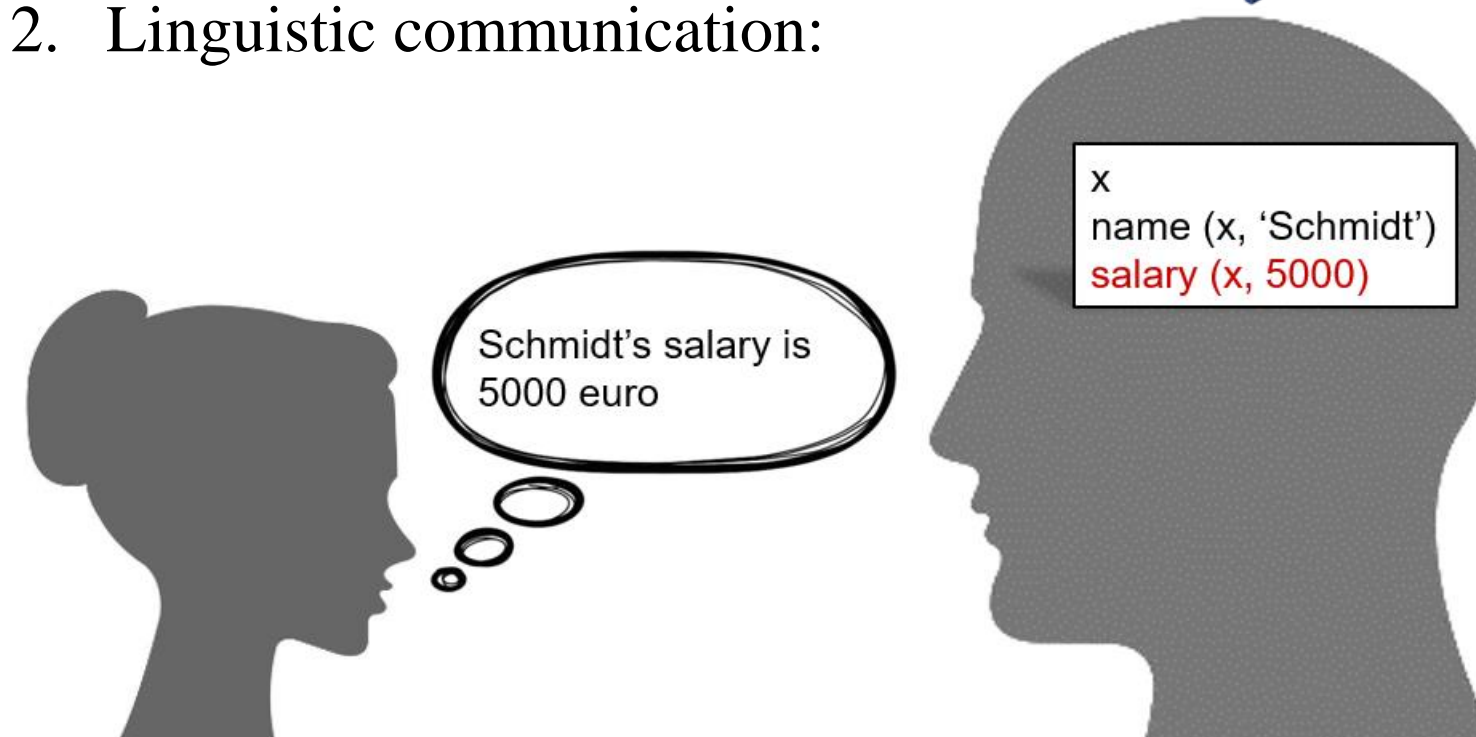
1. Information transfer in computer systems:

```
update employees
set salary = 5000
where name = 'Schmidt'
[where id = 2837]
```

id	name	salary	...
...	...	...	...
2837	Schmidt	5 000	...
...	...	...	...



2. Linguistic communication:



## 1. Double vision

*Hesperus is Phosphorus*<sup>5, 6</sup> (Why is this informative?)

Interpretation:

- Find a discourse referent named 'Hesperus'
- Find a discourse referent named 'Phosphorus'
- Combine the two discourse referents into one

Discourse referents:

- Can split and merge as the mental state of the agent progresses
- Are in many-to-many relation to real referents
- Can have no correspondence in the real world

## 2. Fictional characters

*Sherlock Holmes lived on Baker Street*<sup>5</sup> (Is it true?)

Interpretation:

- Find a discourse referent X named 'Sherlock Holmes'
- Find a discourse referent Y named 'Baker Street'
- Associate new information with them: X lived on Y

Fictional characters:

- We have mental representations for them and referential expressions refer to those mental representations

## 3. Empty descriptions

*The present king of France is bald*<sup>5, 7</sup> (Is it true?)

Interpretation:

- Find a discourse referent that represents the present king of France.
- Update it with new information: he is bald.

Presupposition failure (no truth value):

- The second instruction cannot be performed since the first does not return any discourse referent
- An attempt to repair fails since accommodation will lead to a contradiction

## 4. Semantic vs speaker's reference

*The man drinking a martini is happy*<sup>8</sup> (But he is drinking water)

Interpretation:

- Find a discourse referent that represents a man drinking a martini.
- Update it with new information: he is happy.

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 drinking a martini, then the communication proceeds without problems

## 5. Indexicals

*That is a picture of one of the greatest philosophers of the twentieth century*<sup>9</sup> (But the picture has been replaced)

Interpretation:

- Find a discourse referent corresponding to the portrait the speaker is pointing to
- Update it with new information: he is one of the greatest philosophers of the twentieth century

The truth cannot be evaluated without a hearer:

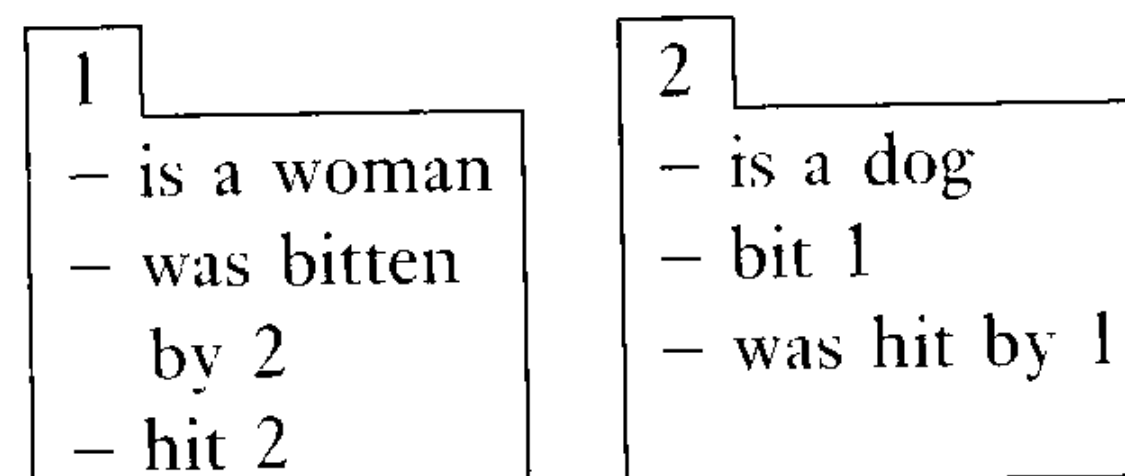
- Some people will understand the intentions, others won't
- They will form different mental representations with different truth conditions

## Conclusions

- If reference is treated as a mental phenomenon, then many reference puzzles are solved in a very natural way.
- A sentence is not a proposition but a sequence of instructions to create a proposition 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.

## Dynamic semantics

- The purpose of referring expression is to identify a previously established discourse referent.<sup>2, 3</sup>
- Discourse referents are mental entities that are activated (created, modified) when we:
  - perceive objects with our senses,
  - process utterances of other people or
  - infer new information through reasoning
- The meaning of a sentence lies in its context change potential, not its truth conditions. It's the mental state that has truth conditions.



## References

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## Information

Have a question?

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