

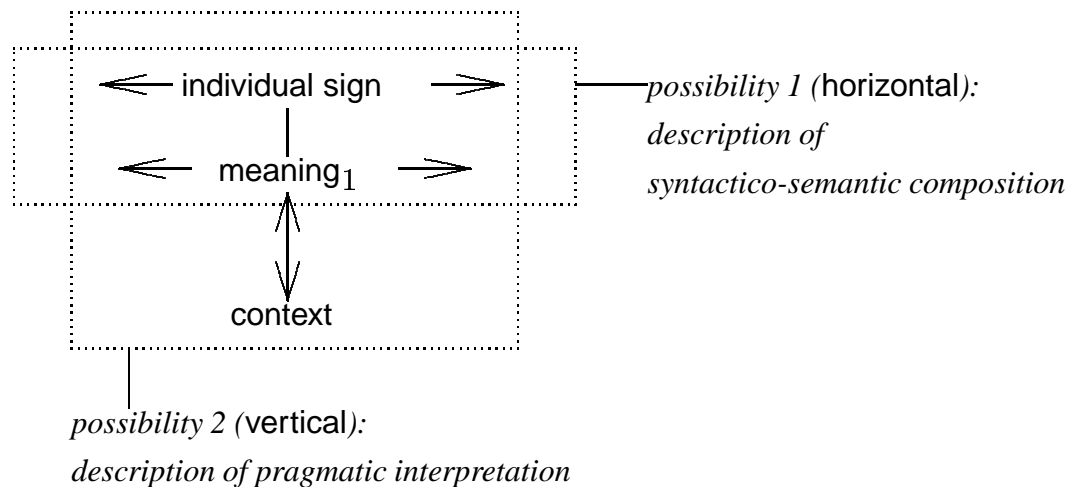
6. Structure and functioning of signs

6.1 Reference mechanisms of different sign types

6.1.1 The mechanism of natural language communication as described so far

1. PoP-1: Language use as an internal matching between meaning₁ and a subcontext
2. PoP-2: Entrance subcontext determined by STAR-point of the sign
3. PoP-3: Derivation order is the time-linear sequence of words

6.1.2 Alternatives of description



6.1.3 Example with minimal syntax

Me up. Weather nice. Go beach. Catch fish. Fish big. Me hungry. Fix breakfast. Eat fish. Feel good.

6.1.4 Fourth principle of pragmatics (PoP-4)

The meaning₁ of the sign type **symbol** is defined as an M-concept. Symbols refer from their place in a positioned sentence by matching their M-concept with suitable contextual referents (I-concepts_{loc}).

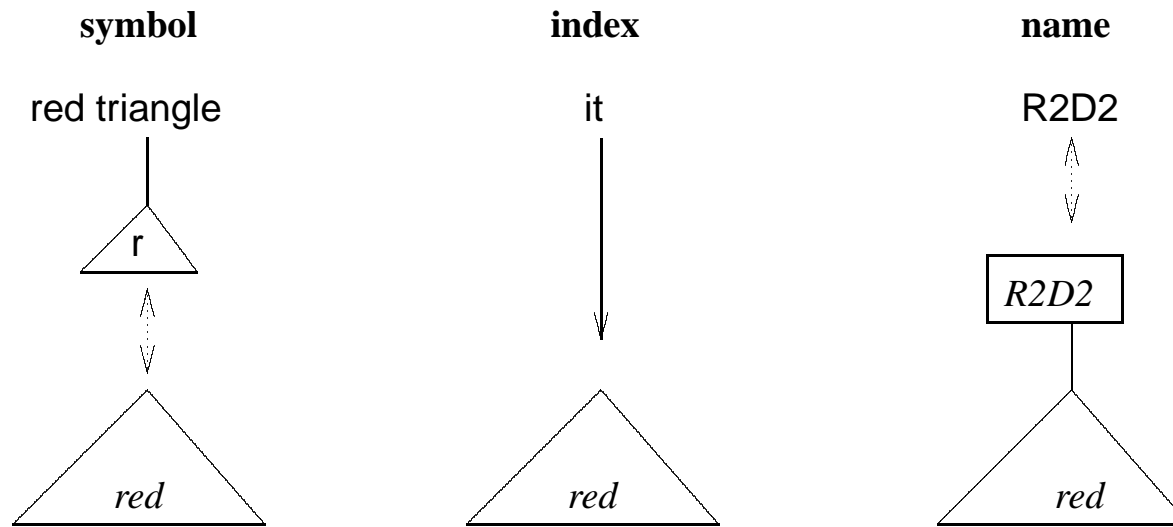
6.1.5 Fifth principle of pragmatics (PoP-5)

The meaning₁ of the sign type **index** is defined as a pointer. An index refers by pointing from its place in the positioned sentence into appropriate parameter values.

6.1.6 Sixth principle of pragmatics (PoP-6)

The reference mechanism of the sign type **name** is based on an act of naming which consists in adding a name-marker to the internal representation of the individual or object in question. A name refers by matching its surface with a corresponding marker.

6.1.7 Comparing iconic, indexical, and name-based reference



6.1.8 Reference in nonverbal and preverbal communication

1. nonverbal iconic reference consists in spontaneously imitating the referent by means of gestures or sounds,
2. nonverbal indexical reference consists in pointing at the referent, and
3. nonverbal name-based reference consists in pointing at the referent while simultaneously pronouncing a name.

6.1.9 Seventh principle of pragmatics (PoP-7)

The sign type *symbol* occurs as noun, verb, and adjective-adverbial. The sign type *index* occurs as noun and adjective-adverbial. The sign type *name* occurs only as noun.

6.1.10 Relation between sign types and parts of speech

name	Peter		
index	he	here	
symbol	man	old	see
	noun	adj-adv	verb

6.2 Internal structure of symbols and indices

6.2.1 Internal components of the sign types symbol and index

- The *surface* is constrained by the laws of acoustic articulation (in the original medium of spoken language).
- The *category* reflects the combinatorial properties of the part of speech and the inflectional class to which the sign belongs.
- The *meaning*₁ reflects the conceptual structures of the internal context and/or contains characteristic pointers to certain contextual parameters.
- The *glue* connecting surface, category, and *meaning*₁ consists in conventions which must be learned by each member of the language community.

6.2.2 De Saussure's first law

PREMIER PRINCIPE; L'ARBITRAIRE DU SIGNE.

Le lien unissant signifiant au signifié est arbitraire, ou encore, puisque nous entendons par signe le total résultant de l'association d'un signifiant à un signifié, nous pouvons dire plus simplement: *le signe linguistique est arbitraire.*

[THE FIRST LAW: ARBITRARINESS OF SIGNS

The link connecting the designator and the designated is arbitrary; and since we are treating a sign as the combination which results from connecting the designator with the designated, we can express this more simply as: *the linguistic sign is arbitrary.*]

F. de Saussure 1913/1972, p. 100

6.2.3 Possible functions of the sign type symbol

1. *Initial* reference to objects which have not been mentioned so far.
2. *Repeating* reference to referents which have already been introduced linguistically.
3. *Metaphorical* reference to partially compatible referents, both in initial and repeating reference.

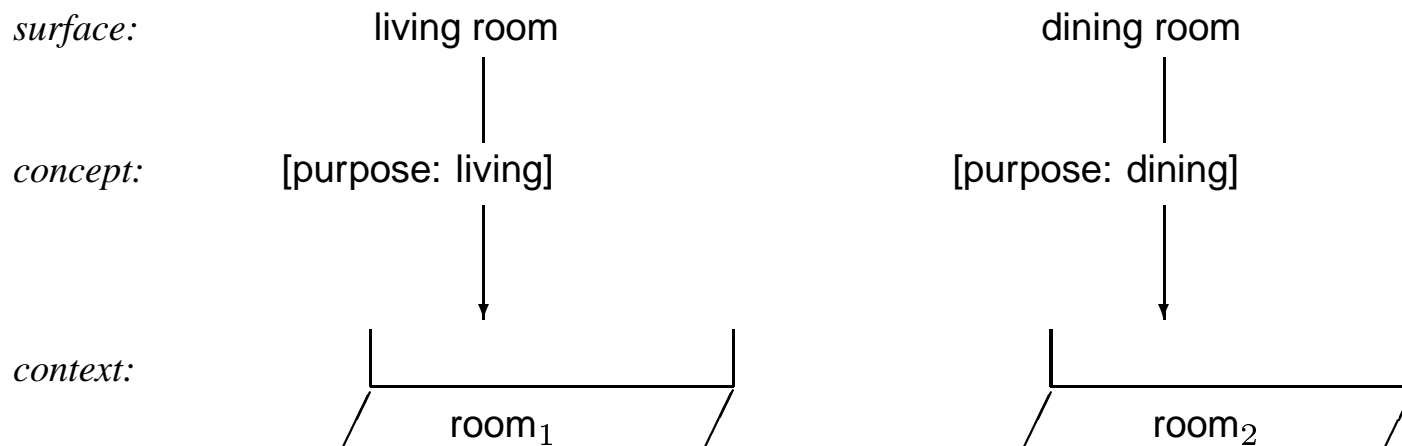
6.2.4 Structural basis of symbolic reference

- the minimal meaning₁ structure of symbols (M-concepts), and
- the limited selection of compatible referents available in the subcontext.

6.2.5 Integrating additional symbolic content to ensure reference

the table, the garden table, the green garden table, the small green garden table, the round small green garden table, the round small green garden table near the pool, etc.

6.2.6 Characterizing objects symbolically



6.3 Indices for repeating reference

6.3.1 Pure indices

Index words which contain no additional grammatical or symbolic meaning components, e.g. here, now, and you.

6.3.2 Nonpure indices

Index words which incorporate symbolic-grammatical distinctions, e.g. between singular (I) and plural (we), between nominative (I, we) and oblique (me, us) case, etc.

6.3.3 Pointing area of third person pronouns

It is outside of the STAR-point parameters and comprises all objects and persons that have been activated so far and are neither the speaker nor the hearer.

6.3.4 Repeating reference

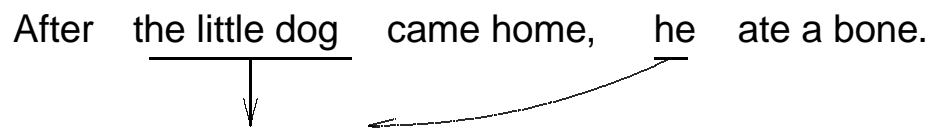
This special task reference arises in longer sentences and texts when a certain referent has already been introduced and needs to be referred to again.

6.3.5 Using third person pronouns for repeating reference

Because of their grammatical differentiation and the general nature of their pointing area, third person pronouns are ideally suited for a brief, precise, and versatile handling of repeating reference .

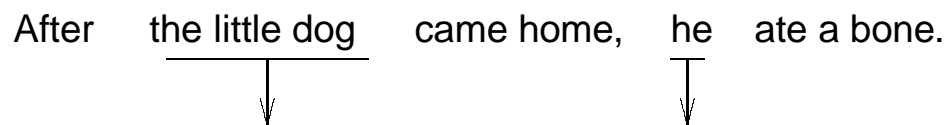
6.3.6 Indexically repeating reference

After the little dog came home, he ate a bone.



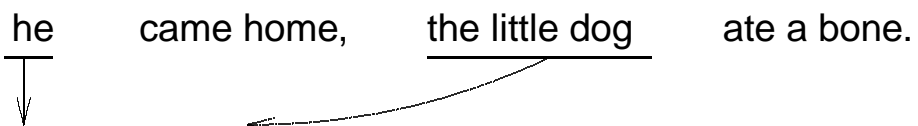
6.3.7 Indexical reference without coreference

After the little dog came home, he ate a bone.



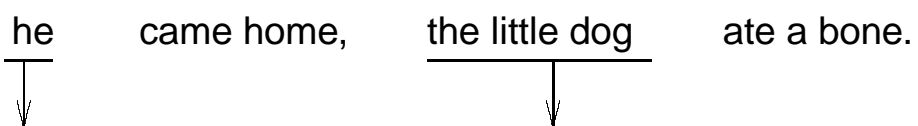
6.3.8 Symbolically repeating reference I

After he came home, the little dog ate a bone.



6.3.9 Symbolic reference without coreference

After he came home, the little dog ate a bone.



6.3.10 Sentence structure blocking repeating reference

Anaphorical positioning:

After Peter_i came home he_i took a bath.

Peter_i took a bath after he_i came home.

%! Near Peter_i he_i sees a snake.

Cataphorical positioning:

After he_i came home Peter_i took a bath.

%! He_i took a bath after Peter_i came home.

Near him_i Peter_i saw a snake.

6.3.11 Cross-sentential coreference

Peter_k wanted to drive into the country. He_k waited for Fido_i. When the little dog_i came home he_k was glad.

6.3.12 Symbolically repeating reference II

After Fido came home, the little dog ate a bone.

6.3.13 Initial reference established by symbol, index, and name

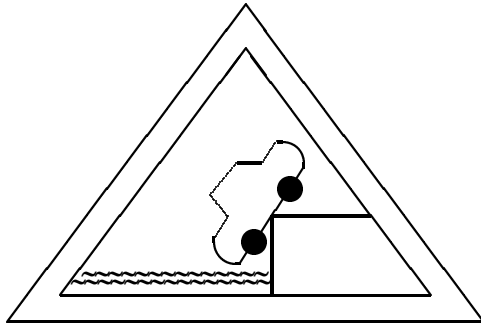
the little dog
After he came home, he slept.
Fido

6.3.14 Repeating reference using symbol, index, and name

After he came home, the little dog
he slept.
Fido

6.4 Exceptional properties of icon and name

6.4.1 Example of an icon (street sign)

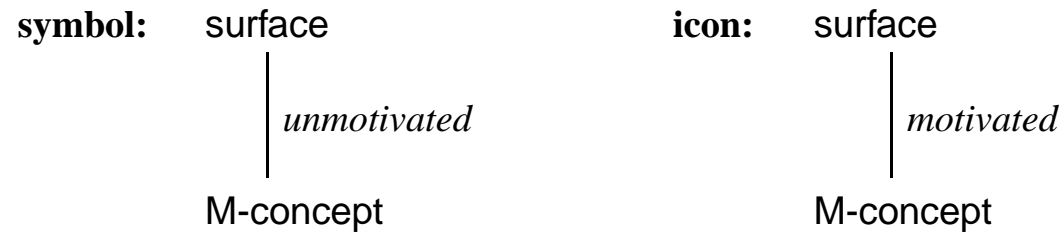


6.4.2 The controversy between *naturalists* and *conventionalists*

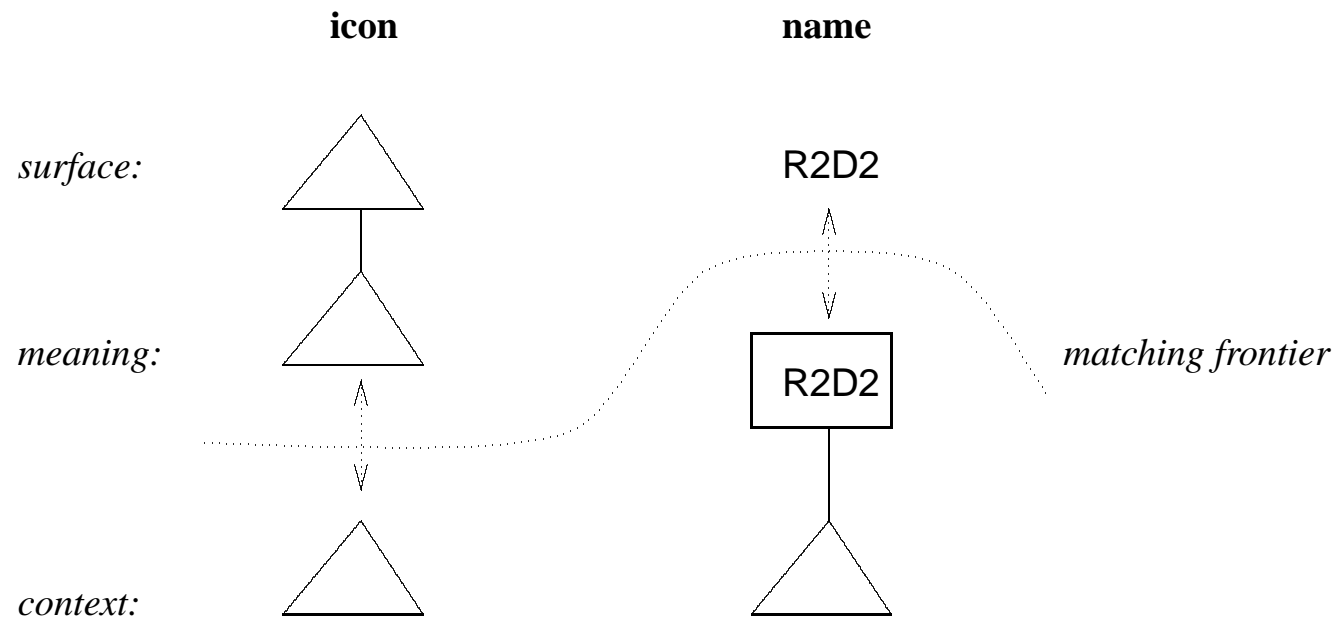
[The naturalists] maintained that all words were indeed ‘naturally’ appropriate to the things they signified. Although this might not always be evident to the layman, they would say, it could be demonstrated by the philosopher able to discern the ‘reality’ that lay behind the appearance of things. Thus was born the practice of conscious and deliberate etymology. The term itself (being formed from the Greek stem *etymo-* signifying ‘true’ or ‘real’) betrays its philosophical origin. To lay bare the origin of a word and thereby its ‘true’ meaning was to reveal one of the truths of ‘nature’.

J. Lyons 1968, p. 4 f.

6.4.3 Comparing the structure of symbol and icon

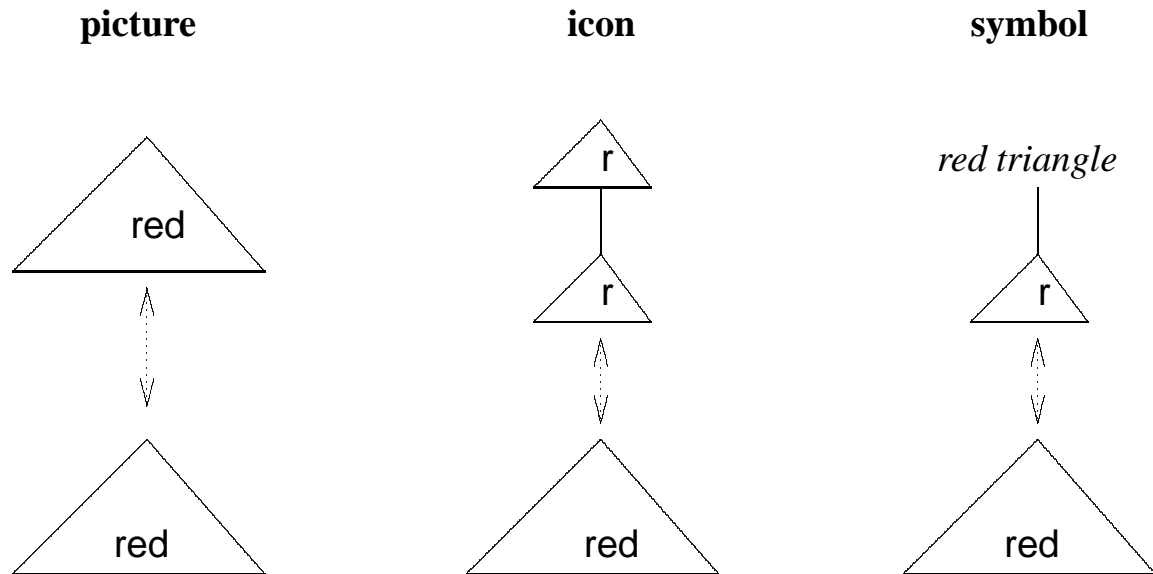


6.4.4 Comparing the structure of icon and name

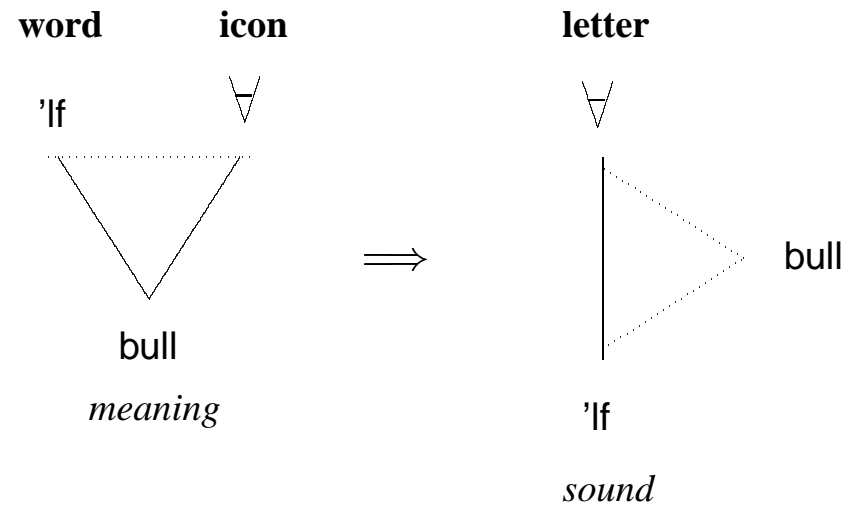


6.5 Pictures, pictograms, and letters

6.5.1 Transition from picture to icon to symbol



6.5.2 Rotation principle underlying transition from icon to letter



6.5.3 Aristotle on writing

Spoken words are the signs of mental experience and written words are the signs of spoken words.

DE INTERPRETATIONE, 1