



Syntax & Semantics WS2019/2020

Lecture 18: Introduction to Semantics

17/01/2020, Christian Bentz



Overview

Section 1: Organization

Schedule

Tutorials

Exam

Section 2: Literature

Section 3: Introduction

Form and Meaning

Combinatoriality

Three Levels of Meaning

Section 4: Reference

References



Section 1: Organization



Schedule 2020

17/01/2020	Lecture 18	Semantics Introduction
20/01/2020	Lecture 19	Word Meaning
24/01/2020	Lecture 20	Propositional Logic
27/01/2020	Lecture 21	Predicate Logic
31/01/2020	Lecture 22	Syntax & Semantics Interface
03/02/2020	Lecture 23	Recapitulation of Semantics
07/02/2020	Exam	

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Tutorials

Week 9: 20/01-24/01/2020

Week 10: 27/01-31/01/2020

Week 11: 03/02-06/02/2020

Notes:

- ▶ The last week before the exam (03/02-06/02/2020) we have optional Q&A tutorials.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Exam

- ▶ There will be 5/6 tasks on syntax, 2/3 tasks on semantics, and 1 block with more general questions on both syntax and semantics
- ▶ We will provide blank papers for you to use
- ▶ You will **be allowed** to use “cheat-sheets”: One A4 page with hand-written notes on the front and back.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

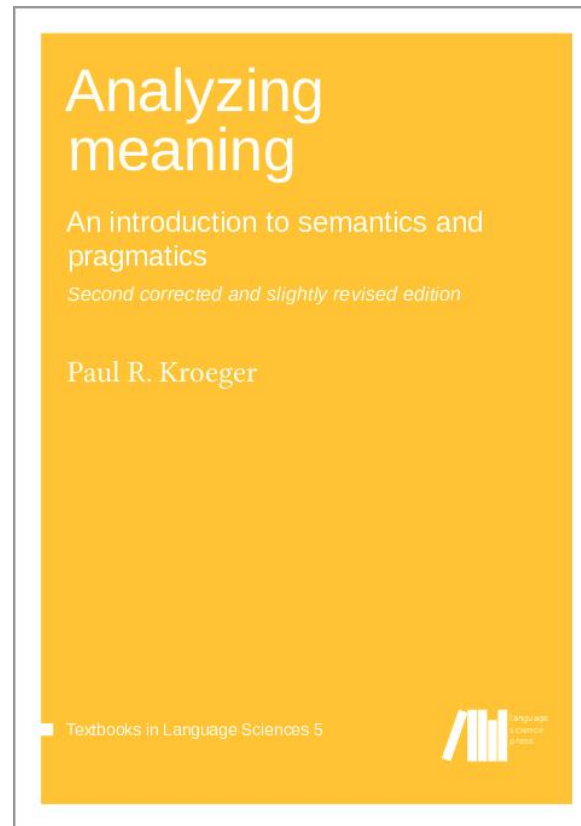


Section 2: Literature



Semantics

Kroeger, Paul. 2019. *Analyzing meaning: An introduction to semantics and pragmatics. Second corrected and slightly revised edition.* (Textbooks in Language Sciences 5). Berlin: Language Science Press.



Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

download at: <http://langsci-press.org/catalog/book/231>



Semantics Lectures

- ▶ Lecture 18: Introduction to Semantics
Kroeger (2019). Chapters 1-2.
- ▶ Lecture 19: Word Meaning
Kroeger (2019). Chapter 5-6.
- ▶ Lecture 20: Propositional Logic
Kroeger (2019). Chapter 3-4; and Zimmermann & Sternefeld Chapter 7.
- ▶ Lecture 21: Predicate Logic
Kroeger (2019). Chapter 4; and Zimmermann & Sternefeld Chapter 10 (p. 244-258).

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Further Introductions

- ▶ Dowty, David R., Wall, Robert E. & Peters, Stanley (1981). *Introduction to Montague semantics*. Dordrecht/Boston/London: D. Reidel Publishing Company.
- ▶ Ferreira, Marcelo (2019). *Curso de semântica formal* (Textbooks in Language Sciences 6). Berlin: Language Science Press.
- ▶ Maienborn, Claudia, von Stechow, Klaus & Portner, Paul (Eds.) (2019). *Semantics theories*. Berlin/Boston: Walter de Gruyter.
- ▶ Roussarie, Laurent (2017). *Sémantique formelle. Volume 1: Introduction à la grammaire de Montague* (Textbooks in Language Sciences 4). Berlin: Language Science Press.
- ▶ Zimmermann, Thomas E. & Sternefeld, Wolfgang (2013). *Introduction to semantics. An essential guide to the composition of meaning*. Berlin/Boston: Mouton de Gruyter.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Section 3: Introduction



Form and Meaning

“Every linguistic expression we utter has a meaning. We are therefore dealing with what has been referred to as form-meaning pairs (de Saussure 1916b). A word such as *tree* in its specific orthographical form or in its corresponding phonetic representation is assigned the meaning *tree*’ [read: “tree prime”]. Larger linguistic units can be built up out of smaller ones: words can be joined together to form phrases and these in turn can form sentences.”

Müller (2019). Grammatical theory, p. 3.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

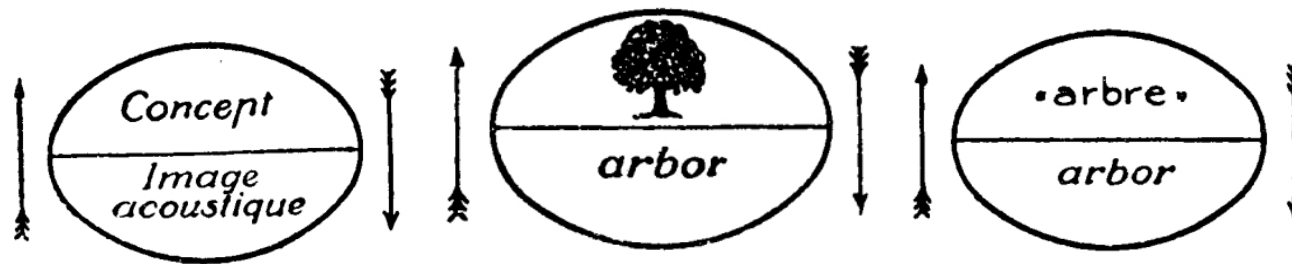
Section 4:
Reference

References



The Roots

“Signifié et signifiant” at three levels:



Level 1: Abstract Relation

Level 2: Concrete Mapping (Denotation)

Level 3: Metalanguage (Translation)

Saussure (1995). *Cours de linguistique générale*, p. 99.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Notational Format

German (deu, Indo-European)¹

(1) phonemic: /baʊm/
orthography: Baum
glossing: tree.NOM.SG²
part-of-speech: NOUN³
translation: “tree”
meaning: *tree*⁴

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

¹The language name is given with the ISO-639-3 code and the language family according to Glottolog (<https://glottolog.org/>).

²see Leipzig glossing rules at <https://www.eva.mpg.de/lingua/resources/glossing-rules.php>.

³Part-Of-Speech. The exact denotations e.g. *NOUN* vs. just *N* can vary according to the syntactic framework. In this lecture I use the POS tags of the Universal Dependencies Project, see <https://universaldependencies.org/u/pos/index.html>.

⁴Following Müllers' notation.



Semantics

(2) /baʊm/
Baum
tree.NOM.SG
NOUN
“tree”
tree'

Semantics typically deals with the mapping of utterances to the “real world”, translation into another language (“what does x mean in language y?”), and with translation into a universally valid logical form.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Arbitrariness

“For most words, the relation between the form (i.e. phonetic shape) of the word and its meaning is **arbitrary**. This is not always the case. Onomatopoetic words are words whose forms are intended to be imitations of the sounds which they refer to.”

Kroeger (2019). *Analyzing meaning*, p. 6.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

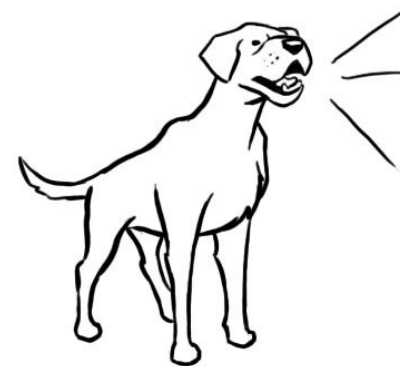
References

Arbitrary:

dog (English)
shun (Armenian)
cicing (Balinese)
gae (Korean)
aso (Tagalog)
etc.

Onomatopoetic:

bow-wow (English)
haf-haf (Armenian)
kong-kong (Balinese)
mung-mung or
wang-wang (Korean)
etc.





However: Systematic Non-Arbitrariness

“[...] By analyzing word lists covering nearly **two-thirds of the world’s languages**, we demonstrate that a considerable proportion of **100 basic vocabulary items** carry strong associations with specific kinds of human speech sounds, occurring persistently across continents and linguistic lineages (linguistic families or isolates). Prominently among these relations, we find property words (“small” and i, “full” and p or b) and body part terms (“tongue” and l, “nose” and n).”

Blasi, Wichmann, Hammarström, Stadler, & Christiansen (2016). Sound-meaning association biases evidenced across thousands of languages.

Table 1. Summary of signals found in the ASJP database

Concept	Positive symbol	Negative symbol
Ash	u	—
Bite	k	—
Bone	k	y
Breasts	u m	a h r
Dog	s	t
Drink	—	a
Ear	k	—
Eye	—	a
Fish	a	—
Full	p b	—
Hear	N	—
Horn	k r	—
l	ʃ	u p b t s r l
Knee	o u p k q	—
Leaf	b p l	—
Name	i	o p
Nose	u n	a
One	t n	—
Red	r	—
Round	r	—
Sand	s	—
Skin	—	m n
Small	i C	—
Star	z	—
Stone	t	—
Tongue	e E l	u k
Tooth	—	b m
Water	—	t
We	n	p l s
You	—	u o p t d q s r l

Positive and negative signals are those that have frequency significantly larger and smaller than expected.

Section 1:
Organization

Section 2:
Literature

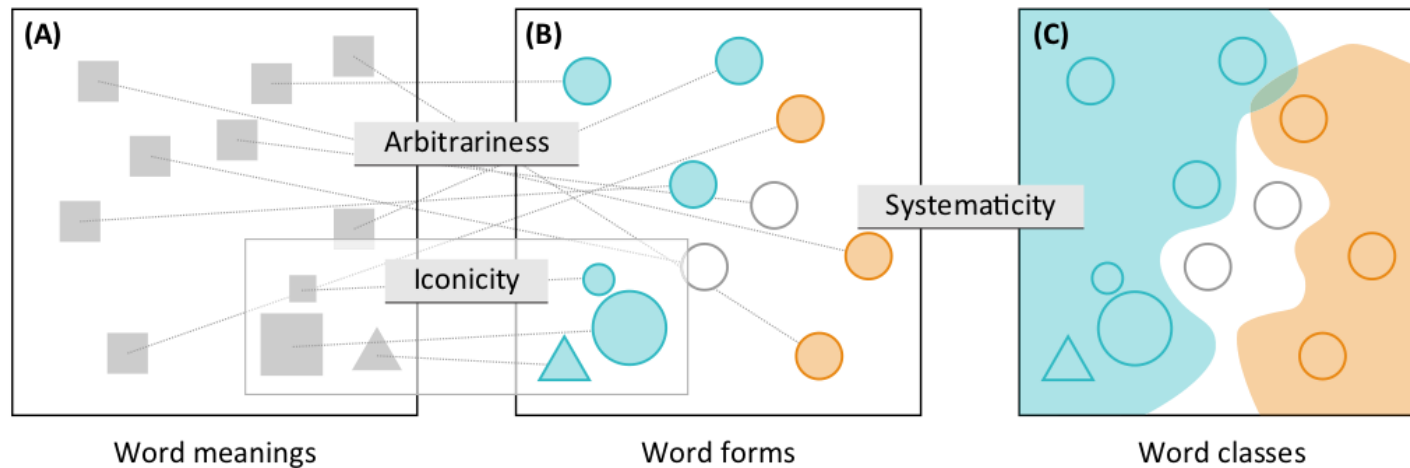
Section 3:
Introduction

Section 4:
Reference

References



However: Iconicity and Systematicity



Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

“Figure 1. (A,B) Words show **arbitrariness** when there are conventional associations between word forms and meanings. Words show **iconicity** when there are perceptuomotor analogies between forms and meanings, here indicated by shape, size, and proximity (inset). (B,C) Words show **systematicity** when statistical regularities in phonological form, here indicated by color, serve as cues to abstract categories such as word classes. For example, blue and orange might correspond to cues indicative of English nouns and verbs.”

Dingemans, Blasi, Lupyan, Christiansen, & Monaghan (2015). Arbitrariness, iconicity, and systematicity in language.



Examples: Iconicity

Table 1. Some Iconic Associations Found in Ideophones across Languages [20,22]

Form	Meaning	Examples
Reduplication	Repetition, distribution	<i>goro</i> : <i>gorogoro</i> , 'one : multiple heavy objects rolling' (Japanese) <i>wùrùfù</i> : <i>wùrùfù-wùrùfù</i> , 'fluffy : fluffy here and there' (Siwu) <i>curuk-nu</i> : <i>curukcuruk-nu</i> , 'a sharp prick : many sharp pricks' (Tamil) <i>kpata</i> : <i>kpata kpata</i> , 'drop : scattered drops' (Ewe)
Vowel quality	Size, intensity	<i>katakata</i> : <i>kotokoto</i> , 'clattering : clattering (less noisy)' (Japanese) <i>pimbilii</i> : <i>pumbuluu</i> , 'small belly : enormous round belly' (Siwu) <i>giniginì</i> : <i>ginuginu</i> , 'tinkling : bell ringing' (Tamil) <i>legεε</i> : <i>logoo</i> , 'slim : fat' (Ewe)
Vowel lengthening	Length, duration	<i>haQ</i> : <i>haaQ</i> , 'short : long breath' (Japanese) <i>piQ</i> : <i>pìiQ</i> , 'tear short : long strip of cloth' (Japanese) <i>dzoro</i> : <i>dzoroo</i> 'long : very long' (Siwu)
Consonant voicing	Mass, weight	<i>koro</i> : <i>goro</i> , 'a light : heavy object rolling' (Japanese) <i>tsratsra</i> : <i>dzradzra</i> , 'a light : heavy person walking fast' (Siwu) <i>kputukpluu</i> : <i>gbudugbluu</i> , 'chunky : obese' (Ewe)

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

Dingemanse, Blasi, Lupyan, Christiansen, & Monaghan (2015). Arbitrariness, iconicity, and systematicity in language.



Examples: Systematicity

Table 2. Phonological Cues Predictive of Major Word Classes in Different Languages [33]

Category	Phonological cues
English nouns	Length of syllables, proportion of sounds in the word that are vowels
English verbs	Approximants (e.g., l, r, w) in the first syllable
Japanese nouns	Fricatives (e.g., s, z), rounded vowels (e.g., o)
Japanese verbs	Coronals (e.g., t, d, n)
French nouns	Bilabials (e.g., p, b) in the first syllable
French verbs	Proportion of sounds in the word that are vowels

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

Dingemans, Blasi, Lupyan, Christiansen, & Monaghan (2015). Arbitrariness, iconicity, and systematicity in language.



Combinatoriality/Compositionality

Amharic (amh, Afro-Asiatic)

- (3) zaf təlləq' nāw⁵
tree.NOM.SG big be.N.3SG
[NOUN ADJ VERB]
“The tree is big.”
*big'(tree')*⁶

Two words might be productively combined <zaf təlləq'> to yield a new meaning. *Combinatoriality* is a hallmark of human language (and other communication systems) as it enables the *infinite use of finite means*.

⁵Amharic is normally written in Ge'ez script. This is a transliteration into Latin script based on Leslau (1995).

⁶This is the notation in Müller (2019). The notation in Kroeger (2019) for this example would be BIG(t) – this notation will be used in the semantics part of this course.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Problem: Idioms

- (4) Kim ha-t de-n Wald vor lauter
kim have-PRS.3SG ART-ACC.SG forest because.of all.the
Bäum-en nicht ge-seh-en
tree\ -DAT.PL not PTCP-see-PTCP
literal translation: “Kim hasn’t seen the forest because of all the
trees.”
actual meaning: Kim was so concerned with the details that s/he
didn’t see the overall picture.

In the case of idioms (e.g. *kicking the bucket*), the intended meaning of the sentence is not a *linear combinatorial* derivation of its parts. Rather, a complex meaning is assigned to the whole phrase.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Three “levels” of meaning

1. **Word meaning:** Meaning assigned to individual words.
Example: kick; bucket
2. **Sentence meaning:** Meaning derived via combination of word meanings (compositional). “The term **sentence meaning** refers to the semantic content of the sentence: the meaning which derives from the words themselves, regardless of context.”
Example: KICK(j,b), literally “John kicks the bucket.”
3. **Utterance meaning** (“speaker” meaning): “The term **utterance meaning** refers to the semantic content plus any pragmatic meaning created by the specific way in which the sentence gets used.” Another definition is: “The totality of what the speaker intends to convey by making an utterance.”
Example: *John dies.*

Kroeger (2019). Analyzing meaning, p.5.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Three “levels” of meaning

Teochew (Southern Min Chinese, Sino-Tibetan)

(5) Lw chya? pa bɔy?
you eat full not.yet
“Have you already eaten?”

Sentence meaning: “Have you already eaten or not?”, i.e. a request for information.

Utterance meaning: Greeting like “hello” or “how are you” in English.

Kroeger (2019). Analyzing meaning, p. 5-6.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Section 4: Reference



Reference

“[...] we will think about how speakers use language to talk about the world. **Referring** to a particular individual, e.g. by using expressions such as *Abraham Lincoln* or *my father*, is one important way in which we talk about the world.”

“Philosophers have found it hard to agree on a precise **definition for reference**, but intuitively we are talking about the speaker’s use of words to “point to” something in the world; that is, to direct the hearer’s attention to something, or to enable the hearer to identify something.”

Kroeger (2019). Analyzing meaning, p. 15 and page 17 respectively.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

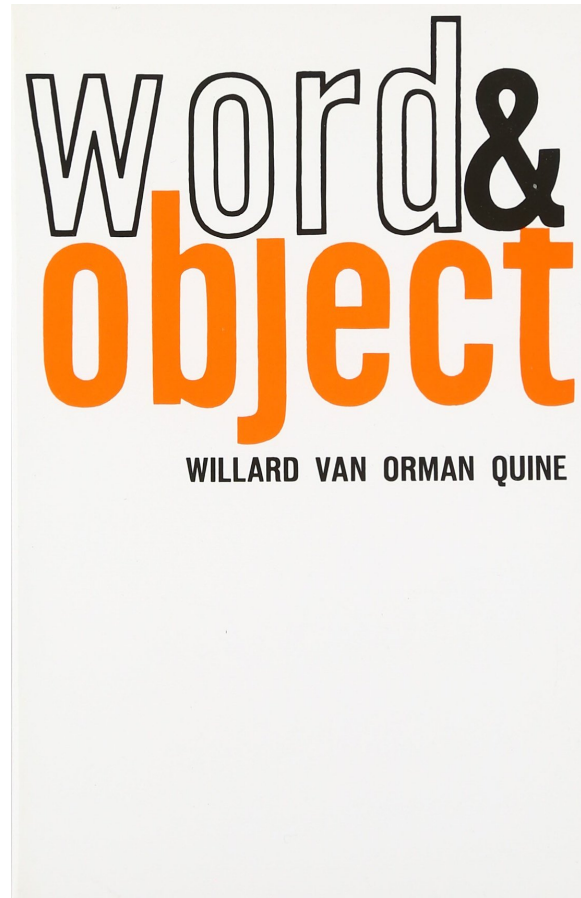
References



Meaning as Reference

“What is relevant rather to our purposes is *radical translation*, i.e., translation of the language of a hitherto untouched people [...] The utterances first and most surely translated in such a case are ones keyed to present events that are conspicuous to the linguist and his informant. A rabbit scurries by, the native says 'Gavagai', and the linguist notes down the sentence 'Rabbit' or 'Lo, a rabbit') as tentative translation, subject to testing in further cases.”

Quine (1960). *Word and object*, p. 28.



Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

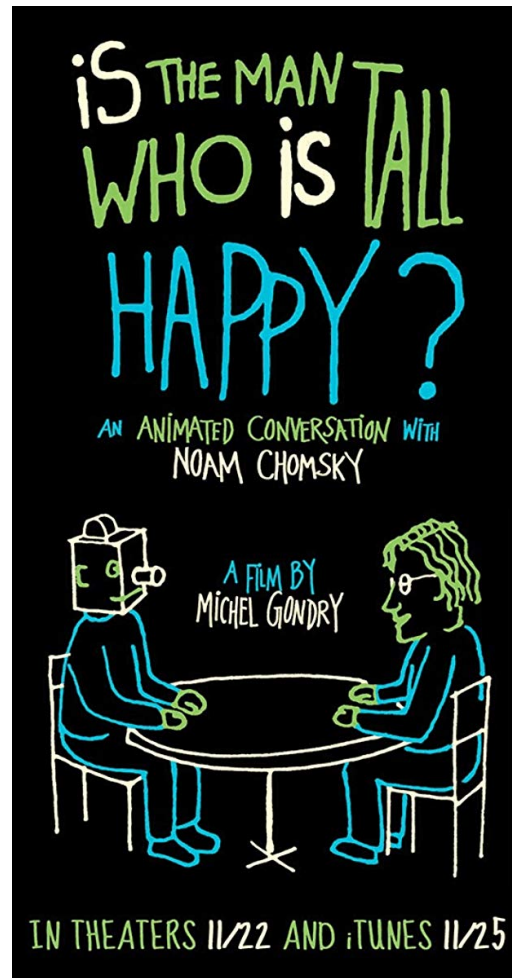
References



Against Reference: Words as Mental Representations

“It’s just a classic error that runs right through philosophy and psychology and linguistics right up to the moment. That’s the idea that words... say, meaning-bearing elements, like, say, “tree” or “person” or, you know, “John Smith” or anything... pick out something in the extramental world, something that a physicist could identify so that if I have a word... say, “cow”... it refers to something, and a, you know, scientist knowing nothing about my brain could figure out what counts as a cow. That’s just not true.”

Noam Chomsky



Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Semiotic Triangle (Triangle of Reference/Meaning)

“**Semiotics** is the study of the relationship between **signs and their meanings**. In this book we are interested in the relationship between forms and meanings in certain kinds of symbolic systems, namely human languages. The diagram is a way of illustrating how speakers use language to describe things, events, and situations in the world.”

Kroeger (2019). *Analyzing meaning*, p. 16.

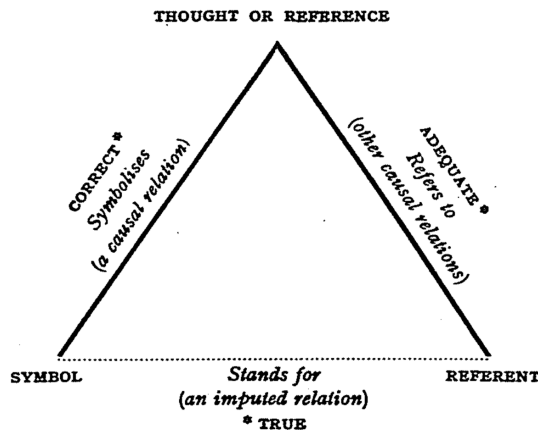
Section 1:
Organization

Section 2:
Literature

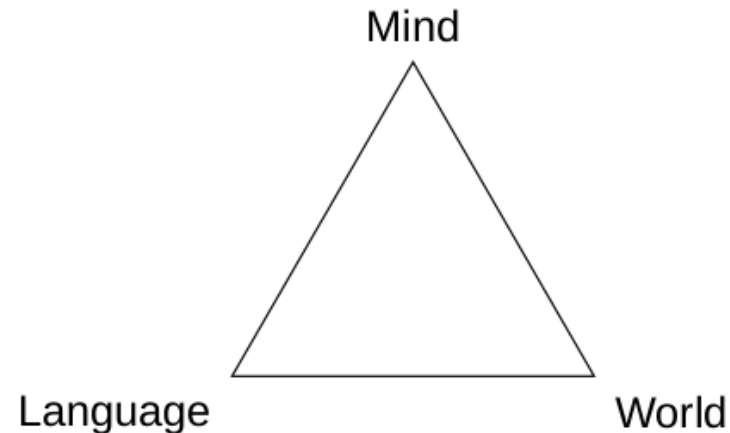
Section 3:
Introduction

Section 4:
Reference

References



Ogden & Richards (1923).
The meaning of meaning, p. 11.



Kroeger (2019). *Analyzing meaning*, p. 16.



Denotational vs. Cognitive Semantics

“The basic approach we adopt in this book focuses on the link between linguistic expressions and the world. This approach is often referred to as **denotational semantics** [...] An important alternative approach, **cognitive semantics**, focuses on the link between linguistic expressions and mental representations.”

Kroeger (2019). Analyzing meaning, p. 17.

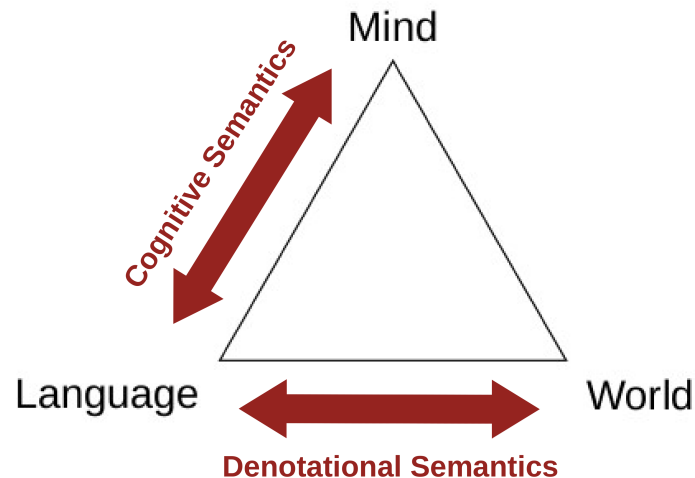
Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References





Types of Referring Expressions

“A **referring expression** is an expression (normally some kind of noun phrase) which a speaker uses to refer to something. The identity of the referent is determined in different ways for different kinds of referring expressions.”

- ▶ Proper names
- ▶ “Natural kind” terms
- ▶ Deictic elements (indexicals)
- ▶ Anaphoric elements
- ▶ Definite descriptions
- ▶ Indefinite descriptions

Kroeger (2019). *Analyzing meaning*, p. 18.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Proper names

“A **proper name** [...] always refers to the same individual. [...] For this reason, they are sometimes referred to as **rigid designators**.”

Kroeger (2019). *Analyzing meaning*, p. 18.

Examples:

- (6) *King Henry VIII*
- (7) *Abraham Lincoln*
- (8) *Mao Zedong*

Types

- ▶ **Proper names**
- ▶ “Natural kind” terms
- ▶ Deictic elements (indexicals)
- ▶ Anaphoric elements
- ▶ Definite descriptions
- ▶ Indefinite descriptions

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



“Natural kind” terms

“**Natural kind terms**, e.g. names of species or substances, are similar. When they are used to refer to the species as a whole, or the substance in general, rather than any specific instance, these terms are also rigid designators: their referent does not depend on the context in which they are used.”

Kroeger (2019). *Analyzing meaning*, p. 18.

Types

- ▶ Proper names
- ▶ “**Natural kind**” terms
- ▶ Deictic elements (indexicals)
- ▶ Anaphoric elements
- ▶ Definite descriptions
- ▶ Indefinite descriptions

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

Examples:

- (9) *The octopus* has eight tentacles and is quite intelligent.
- (10) *Camels* can travel long distances without drinking.
- (11) *Methane* is lighter than air and highly flammable.



Deictic elements (indexicals)

“For most other referring expressions, reference does **depend on the context of use**. **Deictic elements** (sometimes called indexicals) are words which refer to something in the speech situation itself.”

Kroeger (2019). *Analyzing meaning*, p. 18.

Types

- ▶ Proper names
- ▶ “Natural kind” terms
- ▶ **Deictic elements (indexicals)**
- ▶ Anaphoric elements
- ▶ Definite descriptions
- ▶ Indefinite descriptions

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

Examples:

- (12) *I* am not convinced. (pronoun referring to the speaker)
- (13) *You* are a great person. (pronoun referring to the hearer)
- (14) *Here* and *now* we will settle the issue.



Anaphoric elements

“Third person pronouns can be used with deictic reference, e.g. “Who is *he*?” (while pointing); but more often are used anaphorically. An **anaphoric element** is one whose reference depends on the reference of another NP within the same discourse. (This other NP is called the **antecedent**.) [...] Pronouns can be used with quantifier phrases [...] but in this context, the pronoun **does not refer** to any specific individual.”

Kroeger (2019). *Analyzing meaning*, p. 18.

Examples:

(15) Susan refuses to marry George_{*i*}, because he_{*i*} smokes.

(16) [Every boy]_{*i*} should respect his_{*i*} mother. (Note: non-referring anaphora)

Types

- ▶ Proper names
- ▶ “Natural kind” terms
- ▶ Deictic elements (indexicals)
- ▶ **Anaphoric elements**
- ▶ Definite descriptions
- ▶ Indefinite descriptions

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Definite descriptions

“Common noun phrases may or may not refer to anything. **Definite noun phrases** (sometimes called definite descriptions) [...] are normally used in contexts where the hearer is able to identify a unique referent. But definite descriptions can also be used generically, without referring to any specific individual.”

Kroeger (2019). *Analyzing meaning*, p. 20.

Types

- ▶ Proper names
- ▶ “Natural kind” terms
- ▶ Deictic elements (indexicals)
- ▶ Anaphoric elements
- ▶ **Definite descriptions**
- ▶ Indefinite descriptions

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

Examples:

(17) this book (referring)

(18) the sixteenth President of the United States (referring)

(19) Life’s battles don’t always go *to the stronger or faster man*.
(non-referring)



Indefinite descriptions

“**Indefinite descriptions** may be used to refer to a specific individual [...] or they may be non-specific [...]. Specific indefinites are referring expressions, while non-specific indefinites are not. [...] In some contexts [...] an indefinite NP may be ambiguous between a specific vs. a non-specific interpretation.”

Kroeger (2019). *Analyzing meaning*, p. 20.

Types

- ▶ Proper names
- ▶ “Natural kind” terms
- ▶ Deictic elements (indexicals)
- ▶ Anaphoric elements
- ▶ Definite descriptions
- ▶ **Indefinite descriptions**

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

Examples:

- (20) My sister has just married *a cowboy*. (referring)
- (21) My sister would never marry *a cowboy*. (non-referring)
- (22) My sister wants to marry *a cowboy*. (ambiguous)



Sense vs. Denotation

“The German logician Gottlob Frege (1848-1925) was one of the first people to demonstrate the importance of making this distinction. He used the German term *Sinn* (English **sense**) for those aspects of meaning which do **not depend on the context of use**, the kind of meaning we might look up in a dictionary.

Frege used the term *Bedeutung* (English **denotation**) for the other sort of meaning, which does **depend on the context**. The denotation of a referring expression, such as a proper name or definite NP, will normally be its referent.”

Kroeger (2019). Analyzing meaning, p. 21.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Example: Context-Dependence

“We have said that **denotations are context-dependent**. This is not so easy to see in the case of proper names, because they always refer to the same individual. Other referring expressions, however, will refer to different individuals or entities in different contexts.”

Kroeger (2019). *Analyzing meaning*, p. 21.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

(23) prime minister

Sense: “A prime minister is the head of a cabinet and the leader of the ministers in the executive branch of government, often in a parliamentary or semi-presidential system.”

https://en.wikipedia.org/wiki/Prime_minister

Denotation: Singapore in 1975 → Lee Kuan Yew; England in 1975 → Harold Wilson; England in 1989 → Margaret Thatcher; etc.



Example: Context-Dependence

“The denotation [set] of a content word depends on the **situation or universe of discourse** in which it is used. [...] For each situation, the sense determines a denotation set, and knowing the sense of the word allows speakers to identify the members of this set.”

Kroeger (2019). *Analyzing meaning*, p. 21-22.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

(24) *to talk*

Sense: “to speak; to have a conversation or discussion.”

<https://dictionary.cambridge.org/dictionary/english-german/talk>

Denotation set (in our world): {people, mechanical devices, parrots (?)}

Denotation set (in *Alice in Wonderland*): {people, mechanical devices, parrots (?), playing cards, chess pieces, white rabbits, cats, dodo birds, etc.}



Example: Different Sense, Same Denotation

“Two expressions that have **different senses** may still have the **same denotation** in a particular situation. [...]”

Kroeger (2019). *Analyzing meaning*, p. 22.

- (25) the largest land mamal
- (26) the largest African mamal

Denotation: the African bush elephant (context: 21st century)

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Example: Synonymous Expressions

“Such examples demonstrate that two expressions which have different senses *may* have the same denotation in certain situations. However, two expressions that have the same sense (i.e., **synonymous expressions**) must *always* have the same denotation in any possible situation.”

Kroeger (2019). Analyzing meaning, p. 22.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

(27) my mother-in-law

(28) the mother of my spouse

Denotation: a particular female person (depending on the speaker)



Beyond Denotational Semantics

“So, while we have said that we will adopt a primarily “denotational” approach to semantics, this does not mean that we are only interested in denotations, or that we believe that denotation is all there is to meaning. If meaning was just denotation, then phrases [...] which have no referent in our world at the present time, would all either mean the same thing, or be meaningless. [...] Frege’s distinction allows us to see that non-referring expressions [...] may not have a referent, but they do have a sense [...]”

Kroeger (2019). *Analyzing meaning*, p. 22.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References

- (29) the present King of France
- (30) the largest prime number
- (31) the diamond as big as the Ritz
- (32) the unicorn in the garden



References



References

Blasi, Damian E., Wichmann, Søren, Hammarström, Harald, Stadler, Peter F. & Christiansen, Morten H. (2016). Sound-meaning association biases evidenced across thousands of languages. *PNAS* (113), 39, pp. 10818-10823.

Dingemanse, Mark, Blasi, Damian E., Lupyan, Gary, Christiansen, Morten H. & Monaghan, Padraic (2015). Arbitrariness, iconicity, and systematicity in language. *Trends in Cognitive Sciences* (19), 10, pp. 603-615.

Leslau, Wolf (1995). *Reference grammar of Amharic*. Wiesbaden: Harrassowitz.

Müller, Stefan. 2019. *Grammatical theory: From transformational grammar to constraint-based approaches. Third revised and extended edition. Volume I*. Berlin: Language Science Press.

Ogden, C. K., & Richards, I. A. (1923). *The meaning of meaning*. Orlando, Florida: Harcourt Brace Jovanovich.

Quine, Willard van Orman (1960). *Word and object*. Cambridge, Massachusetts: MIT Press.

de Saussure, Ferdinand (1995). *Cours de linguistique générale*. Publié par Charles Bailly et Albert Sechehaye avec la collaboration de Albert Riedlinger. Édition critique préparé par Tullio de Mauro. Paris: Payot.

Section 1:
Organization

Section 2:
Literature

Section 3:
Introduction

Section 4:
Reference

References



Thank You.

Contact:

Faculty of Philosophy

General Linguistics

Dr. Christian Bentz

SFS Wihlemstraße 19-23, Room 1.24

chris@christianbentz.de

Office hours:

During term: Wednesdays 10-11am

Out of term: arrange via e-mail