



# PS The Philosophy of Language

Frege - Russell - Wittgenstein - Tarski - Quine  
Chomsky - Davidson - Kripke

WS 2002/2003

## PS Philosophy of language - Preliminary syllabus and schedule

Introduction:  
session 1

### A Language:

1. Davidson (*What thoughts require?*) (5)
  2. Levinson (*Toward a biological theory of language development*) (8)
  3. Frege (*Der Gedanke*) (16)
  4. Wittgenstein ("Picturing reality" aus: *Tractatus* 1. - 3.3) (8)
  - + Chomsky (*Form and meaning in natural languages*) (19) / *Language and problems of knowledge* (19)
  - + Wittgenstein (from: *The blue and brown books*) (16)
- sessions 2-4

### B Meaning:

5. Frege (*Sinn und Bedeutung*) (15)
  6. Dummett (*What is a theory of meaning?*) (27)
  7. Wittgenstein ("Meaning as use" aus: *Philosophische Untersuchungen* [1-32]) (13)
  8. Grice (*Meaning*) (8)
  - + Larson/Segal (*Knowledge of meaning*) (20)
  - + Higginbotham (*Evidentials on meaning*) (21)
- sessions 5-7

### C Reference:

9. Russell (*Descriptions*)
10. Kripke (*Naming and necessity* 1+2)

11. Donnellan (*Reference and definite description*)
  12. Searle (*Proper names*)
  - + Evans (*Proper names*)
  - + Russell (*On denoting*)
- sessions 8-10

### D Truth:

13. Davidson (*Truth and meaning*)
  14. Strawson (*Meaning and truth*)
  15. Tarski (*Semantic concept of truth*)
  - + Quine (*Dogmas of empiricism*)
- sessions 11-12

### E Use:

16. Austin (*Performative utterances*)
  17. Searle (*What's a speech act?*)
  18. Quine (*Indeterminacy of translation*)
  - + Malinowski (*Translation of the untranslatable*)
- sessions 13-15

### Philosophy of language: introduction

- philosophy of language: attempts to understand the nature of language and the relations with speakers, their thought and the world
1. What is meaning?
  2. What gives components its meanings?
  3. Does language describe the world or does it construct our picture of reality?
  4. Can we think without language?
- historical forerunners: Plato, Cratylus
  - Descartes: ideas about a universal language

### Philosophy of language: development

- Phase 1:** 20<sup>th</sup> century; linguistic turn in philosophy  
protagonists: Frege, Russell, Moore
- language as the medium of analysis
  - interested in language as an abstract entity
- ⇒ foundation of analytic philosophy
1. rigorous argumentation/clarity as goal/method
  2. lack of interest in history of the subject
  3. emphasis on philosophy and natural sciences
  4. belief in the importance of language
  5. method of formal logic

### Philosophy of language: development

- Phase 1:** language first seen as a tool to analyze thought
- analysis of language: to reveal hidden logical structures and solve philosophical problems (therefore "analytic" philosophy)

**Phase 2:** Vienna circle, *logical positivists*

- Wittgenstein: meaning of a sentence to be associated with conditions which verify it (verificationist approach)
- ⇒ study of linguistic meaning as a starting point

### Philosophy of language: development

- Phase 2:** mistrust to ordinary languages  
grammatical form can be misleading concerning the "true" logical form

- Phase 3:** in 1930s shift away from pure, abstract languages towards its working in (social) contexts ⇒ from semantics/syntax to pragmatics
- Wittgenstein: rejects his own picture theory as a correspondence of language and mind-independent objects in favor of usage-based meaning

Philosophy of language: development

**Phase 4:** started 1951 with Quine: *Two dogmas of empiricism*

- influences of American pragmatist philosophy (Peirce, William James) and European emigrants (Gödel, Tarski, Carnap)

Quine, Putnam: abandon goal of analysis,

⇒ philosophy of language no longer wants to break down concepts into fundamental components

- abandons analysis of syntax
- syntax as major topic in linguistics (Chomsky)

Philosophy of language: development

**Phase 5:** shift from emphasis on connecting language with world towards connecting language with mind (e.g. Fodor, Burge)

- language is seen as a biological entity
- language “emerges” as a tool of cognition
- thinking is dominated by a “language of mind”
- relationship between concepts of reality and its representations in the mind (mental representations)

**Movements:** theory-building approach (Kripke) vs. reductionist approach (Churchland et al.)

A: Language - Frege on “Thought”

Frege sieht Gegensatz Psychologie - Logik

⇒ Logik hat die Aufgabe, die Gesetze des Wahrseins zu finden, NICHT des Fürwahrhaltens oder Denkens

Bilder: sind wahr, wenn in Übereinstimmung mit dem Abgebildeten

- *Was am Satz wahr ist, ist sein Sinn*
  - Gedanke = der Sinn eines Satzes; ist fassbar
- relevante Sätze sind Mitteilungen, Behauptungen

1. Fassen des Gedankens (Denken)
2. Anerkennung der Wahrheit (Urteilen)
3. Kundgeben des Urteils (Behaupten)

A: Language - Gedanke und Vorstellung

Art des „Gegebenseins“ in der Sprache: z.B. *Präsens*

1. für Zeitangabe; 2. für Zeitlosigkeit (Naturgesetze)

- bei 1. ist die Zeit des Sprechens wichtig
  - bei Eigennamen: die Art, wie sie gegeben sind
- Unterschied: Gedanken von Naturgesetzen gehören *nicht* zum Inhalt des Bewußtseins

⇒ wenn Gedanken zum Bewußtsein gehörten, hätte jeder „seine/ihre“ Wissenschaft

⇒ Gedanken sind also *weder* Vorstellungen *noch* Dinge der Aussenwelt sondern ein „drittes Reich“

- gemeinsam mit Vorstellungen: nicht wahrnehmbar
- gemeinsam mit Dingen: keine Träger notwendig

A: Language - Language and thought

Davidson (*What thought requires*): **Thinking**

- shows in the distinctive behavior towards different objects

• coupled with propositional attitudes (= beliefs, desires, doubts, intentions)

• animals: do not perceive something “is the case” or something “is true”

therefore: difference between human & animal:  
**concepts**

- creatures with propositional attitudes can fit concepts into new schemes

Concepts of speakers of natural languages

concepts have logical relations to one another

⇒ some concepts: more derived, others: more directly sensorily attached

- to have a concept is *to class things under it*

• ability to judge or believe that certain items fall under the concept

Quine: things in sharpest focus are the public things

- a concepts is defined by its typical causes
- concepts are employed by sentences and thoughts, individuated by their relations to each other

### Concepts and thought

Thoughts: have propositional content, have logical relations to each other; cf.  
“it rained in Spain and we got wet”  $\Rightarrow$  “it rained in Spain” **AND** “we got wet”

- the structure of language mirrors the structure of propositional thought
- possession of concepts implies a degree of creativity
- iterativity  $\Rightarrow$  creative power of language (e.g. the iterative use of *and* or the morphology of words)

### Creativity and the human language

- a language with finite vocabulary of names, predicates and connectives, is creative, creates potential infinity
- $\Rightarrow$  semantics is possible **without** the concept of reference = without matching names and predicates with objects
- resource for complex predicates: quantities and variables in elementary logic

The domain in which thought can occur is complex

### A: Language - Biological foundations

Lenneberg (*Toward a biological theory of language development*) gives 5 biological premises:

1. cognitive function is species-specific
  - cerebral functions mediate between sensory input and motor output
  - cerebral functions correspond with cognitive functions
  - neurophysiology unknown, behavioral correlates: tendency to categorize, generalize, memorize
  - $\Rightarrow$  generates specificity of each species' worldview

### Lenneberg's premises on foundations of language

2. specific properties of cognitive function are replicated in every member of the species
  - in species there is a form/function invariance
3. cognitive processes/capacities are differentiated spontaneously with maturation

Lenneberg voluntarily disregards environment slightly, environment has status of delivering "building blocks" and primarily energy for differentiation

cognition: behavioral manifestation of physiological processes

### Lenneberg's premises on foundations of language

4. at birth, humans are immature, certain cognitive aspects emerge during infancy, some require extra-organismic stimuli:
  - for development of visual perception it needs "properly illuminated objects"
  - but: environment does not shape mode of input processing
5. social phenomena come about via spontaneous adaptation of behavior
  - language is the manifestation of species-specific cognitive propensities

### A: Language - Picture theory of meaning

Wittgenstein (*Tractatus logico-philosophicus*): explains relationship of language/thought/world in the "picture theory of meaning"

Welt = was der Fall ist, die Gesamtheit der Tatsachen, nicht der Dinge

- besteht aus logischen Tatsachen (Sachverhalte)
- keine Dinge existieren isoliert/sind außerhalb der Verbindung mit anderen Dingen denkbar
- Selbständigkeit des Dings: kann in verschiedenen Sachverhalten vorkommen

Substanz: unabhängig davon, was der Fall ist

A: Language - Form and structure

Substanz ist Form und Inhalt  
 Form der Dinge: Raum, Zeit, Farbe

- Wir machen uns Bilder der Tatsachen (2.1)

Bild ist Modell der Wirklichkeit  
 Dinge entsprechen Elementen des Bildes  
 Elemente des Bildes verhalten sich  
 zueinander in bestimmter Art und Weise  
 Das Bild ist eine Tatsache (2.141)

⇒ Das Verhalten der Bildelementen entspricht dem  
 Verhalten der Dinge, ist die Struktur des Bildes

- Zum Bild gehört eine abbildende Beziehung

A: Language - Logic structure of language

Bild muß mit dem Abgebildeten *etwas* gemeinsam  
 haben bzw. identisch sein

- die Form der Abbildung ist eine logische Form ⇒  
 das Bild ist ein logisches Bild
- ⇒ das logische Bild kann die Welt abbilden
- was das Bild darstellt, ist sein SINN (2.221)

Das logische Bild der Tatsachen ist der Gedanke (3)

- Sprache kann nicht "der Logik widersprechendes"  
 darstellen (3.032)

- der Name *bedeutet* den Gegenstand, der Gegenstand  
*ist* die Bedeutung

A: Language - Knowledge of language

Chomsky (*Form and meaning in natural languages*):  
 core problem of human language unsolved = one is  
 able to understand/produce indefinite numbers of  
*novel* expressions

- theory of grammar: concerned with question, what  
 is a persons' knowledge of his/her language?

evidence about the sound-meaning-relation: insight  
 via introspection; relation is specified by a system of  
 rules called GRAMMAR

- difference Surface Structure - Deep Structure

A: Language - Evidence for universality of language

1. study of many languages : generative analysis  
 renders similar structures
2. study of a single language ⇒ mental capacity  
 study involves 2<sup>nd</sup> order abstraction
3. different speakers under different conditions  
 achieve language acquisition in a limited amount of  
 time and data input ⇒ Language Acquisition Device  
 (LAD) exists

Chomsky (*Language and problems of knowledge*):  
 E-language vs. I-language:

- externalized [of mind/brain] vs. internalized

A: Language - Features of a Universal Grammar

1. system of principles that specify human language
2. system constitutes an initial state  $S_0$
3. LAD: system that maps data into I-language
4. I-language: state attained by language faculty  
 under external conditions

- Chomsky rejects "learning a language", rather;  
 language grows in the brain

⇒ 3 aspects of knowledge of language:

- a.) internalized system of knowledge
- b.) knowledge how to speak/how to understand
- c.) knowledge what sentences mean

B: Meaning - The referential theory of meaning

Philosophical theory of meaning: *to explain how strings  
 of marks/noises become meaningful and why humans can do  
 it effortlessly*

widespread and intuitive theory:

referential theory of meaning

- linguistic expression stands for things in the world
- some strings are meaningful and some not  
 therefore: have parts that are themselves meaningful
- mean "something in particular"
- meaning is effortless for competent speakers

B: Meaning - Problems of the referential theory

main problem expressions stand for things, thus  
⇒ words are like labels, sentences reflect states-of-affairs

- can explain a persons' understanding in terms of that person's knowledge what the sentence words refer to

**objection 1:** not all words denote actual objects, cf. Lycan 1997:5; *Pegasus* or *nobody* or *Ralph is fat*.  
*fat* = abstract quality (property, feature, attribute) but *is* = abstract relation

B: Meaning - Problems of the referential theory

**objection 1** (cont.): some nouns do not denote abstract /individual things; cf. *sake*, *behalf* (Quine)  
• some words do not refer to things at all (*hey*, *and*, *the*, *alas*, i.e. most function words)

**objection 2:** "words = names", but lists of names/labels are ungrammatical

**objection 3:** meaning involves more than reference (*John Paul* vs. *the pope*) = same referent - different meaning

⇒ most persistent critic to the referential theory: Wittgenstein (*Philosophische Untersuchungen*)

B: Meaning - Relationships of meaning and sense

Frege (*Über Sinn und Bedeutung*): every significant linguistic expression has both sense and reference = different kinds of semantic properties

- reference: contributes to truth or falsity of sentences in which it appears

Frege: reference = relation between expression and the real object

referent of a sentence = its truth value, can be TRUE or FALSE

- reference is compositional (complex reference determined by partial references)

B: Meaning - Relationships of meaning and sense

Co-referring expressions may be substituted in any sentence without altering the truth value of that sentence (*Morning star*, *Evening Star*)

"Sinn": aspect of the semantics of an expression

$a=a$  and  $a=b$  have different cognitive value

$a=a$  is true a priori, tautological

$a=b$  is cognitively interesting (empirical), not a priori therefore: have different cognitive value ("Sinn")

- mode of representation: a way in which a referent is presented to the mind
- senses in sentences compose thought ("Gedanke")

B: Meaning - Relationships of concepts and meaning

Dummett (*What is a theory of meaning?*): to grasp the meaning of an expression is to understand its role in the language

⇒ complete theory of meaning = complete theory of how language functions, incl. how speakers communicate; **therefore:** a theory of meaning is a theory of understanding

"to know the meaning" = "to have the concept"

- **but:** concepts can be grasped by someone who speaks another language only

⇒ theory of meaning must associate concepts with words

B: Meaning - Meaning as use

Wittgenstein (*Philosophische Untersuchungen*) Zweifel an referential theory, cf. Bedeutung der Worte „rot“ oder „5“

- „primitive Vorstellung“ von Sprachfunktion, trifft nur auf bestimmte, theoretische Sprachen zu
- Sprachfunktion definiert analog zu Spiel: Eigenschaften von Sprachfunktion aber nicht alle Eigenschaften Bild des Dings „tritt vor die Seele“ wenn man das Wort hört ⇒ Gebrauch ähnelt einem Spiel (Sprachspiel; 7.)

• Benennen: „was der Andere sagen/(denken) soll“ (16.)

„Platte!“ elliptischer Satz, meint mehr als „Platte“

ist Ellipse ein Verkürzung? - vgl. Russisch „Stein rot“ = Verkürzung von „Der Stein ist rot“?

B: Meaning - Meaning and intention

Grice (*Meaning*) differentiates: natural vs. non-natural meaning  $mean_{NN}$   
natural meaning: causal, can be discovered  
non-natural meaning: sign systems equipped with meaning, part of which is linguistic meaning (2 types)  
1. speaker's/utterer's meaning = the conveyed meaning  
2. sentence meaning = the literal meaning  
• Wittgenstein: argues against a "private" language;  
à gap between stimulus and response exists  
• Grice tries to close the gap: to mean something linguistically is to intend/induce a belief in somebody but only by hearer's awareness/recognition of the intention

B: Meaning - Meaning and intention

Grice emphasizes that "to  $mean_{NN}$  something is to produce an attitude" is not enough  
à attitude can be produced without  $mean_{NN}$   
cf. smbd. puts on a tail coat à leads to cognitive attitude to believe that the person goes to a dance  
• therefore: speech has no triggers itself that provoke a response **this relationship is established by convention**  
Utterer U means non-naturally something through action/utterance X iff U intends to produce effect on audience A by getting A to recognize via X that U intends the effect  
Grice: meaning is product of interaction between speaker/hearer, not isolated from community intentions (typical/conventional uses of words)

B: Meaning - Position of meaning and structure

Higginbotham (*Elucidations of meaning*): to speak or understand: meanings of words must be known and their combinations  
à knowledge of meaning has 2 components:  
lexical and structural  
• if syntax is fixed, all to be learned are words (lexical)  
• structural meaning: computed after an universal algorithm  
meanings: cannot be "given", must be extracted  
evidence for meaning comes from perceptual features  
theoretical aim: derive meaning from words in sentences on behalf of semantic principles P (are universal)

B: Meaning - Derivation of lexical meaning

The learner has to derive the lexicon: *lexicon is learnable*  
• semantic characteristics of words can be deduced according to their syntactic position  
*I cut the fish* cut V, in situation E, involving Patient Y, and Agent C by means of instrument Z (elucidation)  
• distinct knowledge enables decoding of V in *I cut the fish yesterday*  
1. English has V, VP is head-initial  
2. Every thematic position in V must be filled  
3. NPs must be assigned roles  
4. Yesterday is an adjunct and contributes to event E  
5. If there is an agent the agent is the subject

B: Meaning - Knowledge of meaning and of fact

• meaning of a word includes: knowledge is available about its function  
à some objective component in meaning because: individual meaning can be wrong; we are aware if we are ignorant about a meaning (counterargument: idiolects)  
• knowledge of meaning vs. knowledge of fact: knowledge of fact = widely shared collateral information  
• grammatical knowledge requires systematization, cf.  
*I cut the fish with the knife - The knife cut the fish*  
*I looked at the Moon with the binoculars - \*The binoculars looked at the Moon*

C: Reference - Defining attempts

**Reference** (Baghramian): The relation between an expression, such as a name, and the thing for which it stands, for instance, the object for which it stands.  
Application of the analytic method: the discussion of denoting phrases; proper names and descriptions  
Russell (*Descriptions and incomplete symbols*): Problems with reference: "The present King of France is bald" - true or not? or negative existentials: "The golden mountain does not exist"  
à theory of descriptions: enables us to maintain both. meaningful and false without committing to existence

C: Reference - Formal analysis of propositions

“The present King of France is bald”  $\Rightarrow$   
1. There is at least one King of France  
2. There is at most one King of France  
3. That king (of France) is bald.  
condition 1. fails  $\Rightarrow$  FALSE  
if something enters a proposition like “Romulus”  
-has got to be one of the things in the world  
 $\Rightarrow$  if Romulus did not exist, “Romulus existed” and  
“Romulus did not exist” would not be significant  
but: Romulus is part of the proposition  
**There is more than one way in which a thing can fail to exist.** Romulus: not a name but a *description*

C: Reference - Descriptions

Romulus: description for “person who was called Romulus”  
• if it were a name, its existence would be evident  
therefore: “Romulus did not exist” is FALSE for one value of x according to the description “x was called Romulus”  
Russell defines two sorts of descriptions:  
1. ambiguous descriptions/indefinite descriptions: “a dog”, “a house”  
2. definite descriptions: “the last person who came into this room”

C: Reference - Proper names

Russell: apparent syntactic form misleads about hidden logical form of propositions  
• names to be meaningful, have to have bearers  
• descriptions do not need bearers  
 $\Rightarrow$  a description is understandable even if reference is unknown  
 $\Rightarrow$  a name is not understandable when unknown if it has a reference or not  
• ordinary names: abbreviated definite descriptions  
 $\Rightarrow$  meaning of name: its description  
• genuine names: have only reference, not associated with description: “I”, “this”, “now” = don't have *sense*

C: Reference - Definite descriptions

State of reference in 1960s: two views  
Russell: ordinary names are disguised descriptions, do not refer to their bearers; only *this* and *now* refer directly  
Strawson: opposing Fregean view: descriptions DO refer  
background: pragmatic view of reference: speakers refer  
Donnellan (*Reference and definite descriptions*): attempts to reconcile the two views  
descriptions: 2 different categories depending on uses  
Strawson's focus: referential, speaker enables hearer to identify what's been talked about  
Russell's focus: speaker says something without particular object in mind

C: Reference - Two competing views on reference

• reason: tacit and explicit knowledge of context  
how a proposition is used depends on intention of the speaker  
therefor: definite description has 2 possible functions  
both can be in one and the same sentence  
duality of functions according to Russell and Strawson:  
Russell: for the denoting phrase C and the entity x:  
“x is identical with C” is TRUE  $\Rightarrow$  x is denotation of C  
• the only relationship Russell recognizes:  
**the denotative use**  
but: sometimes speaker uses C to refer to something:  
**the referential use**

C: Reference - Referential and attributive use

• reference is not equal to denotation  
• sentence cannot be separated from context  
“The presidential candidate will be conservative”  
• propositions are not to be used in isolation  
Donnellan defines 2 uses: referential and attributive  
“Smith's murderer is insane” - we don't know who murdered Smith  $\Rightarrow$  attributive use  
we know Jones did it  $\Rightarrow$  Question “Who murdered Smith?” can be answered  
 $\Rightarrow$  referential use  
difference: lies in the beliefs of the speaker  
beliefs depend on world and discursive knowledge

C: Reference - Problem of presuppositions

Donnellan's example: contextual factors like *I believe the king is not the real king but an usurper but his subjects believe he is real, so if I say "I want to see the king"* ∃

- my use: attributive
  - other's interpretation: referential
  - problem: both uses carry implication/presupposition
- presupposition: implication that x exists, cf.  
"De Gaulle is king of France"  
but: ex. utterances neither referential nor suppositional  
"Is de Gaulle king of France?"  
but reason for implication/presupposition are different

C: Reference - Proper names and social uses

Evans (*Proper names*): social dimension: not absent from referential performance

- ∃ speaker relies on a practice WITHIN a community
  - argument that proper names are like demonstratives
- Evans advocates dependence of proper names on existence and coherence of a general practice of reference (a supplement to Kripke's theory)  
Kripke: names preserve reference after initial act of dubbing; are being used in a meaning-preserving way  
Evans: this cannot account for instances where a name changes its reference over time or when the causal chain breaks down (cf. Madagascar, earlier: mainland region)

C: Reference - A review of Kripke's view

Kripke (*Naming & necessity*) criticizes Russell's descr.

1. There are instances where name is not associated with an identifying description
  2. A person may know use of a proper name without knowing appropriate set of descriptions
- ∃ speakers legitimately use proper names without information required for identifying the individual
  - defines rigid vs. non-rigid designators
- rigid: refer to the same object in all possible worlds  
non-rigid: can be satisfied by different objects in different worlds
- objects are given proper names by act of baptism

C: Reference - Kripke on Proper names

Kripke: baptism/dubbing: act through which given names (proper names) acquire their reference

- names: passed on via causal chain from speaker to speaker (= long chain from Aristotle's name to today's reference)
  - can also be applied to common terms of natural kinds
  - are rigid designators (*water; tiger; gold*)
- ∃ there are causal, communicative ties between term and object rather than clusters of descriptions
  - essential properties: microstructural (e.g. gold is Element 27, not "everything that glitters")

C: Reference - Kripke's view vs. Evans' view

Evans supplements Kripke's theory with: way users grasp the sense of a name

- ∃ reference of a name: determined by causal route of dubbing and its subsequent uses
- also involved: belief and other information
- correction of Kripke: intentional account of names

Example: "NN" used for person x by a group of people acquainted with x

- ∃ group has learned "This is NN" as a demonstrative reference to x

C: Reference - Proper names: practice of use

Group defined as "producers", commit act of baptism and subsequent dealings with name for x

- producers can introduce others as producers via "This is NN"
  - can also be picked up by observing others using the name
- early stages: all participants in name-using practice are producers  
mature stages: participants not acquainted with x: "consumers", not able to inject new info into practice  
reason: conventional use of names  
late stages: only consumers are left, info diminishes

C: Reference -Problems of use

1. E.g. two lookalikes, both called "Jack Jones"  
Evans: here, "Jack Jones" has **no referent**
  - flaws of practice are inherited
2. proper names can have same reference by two different uses in two separate networks of communication (Evans' example: "Jekyll/Hyde")
3. parallel to proper names: natural kind terms: *elm diamond, leopard*
  - there are producers with capacity to recognize them
  - possible pitfalls: are we producers because we identify zebras? Can't we "inject new info" by research?
4. All of consumers' info on a name may be false

D: Truth - Meaning beyond the word level

- Davidson (*Truth and meaning*): meaning of sentences depends on meaning of words
- ⇒ reason for acquisition and productivity of language
  - assign an entity as meaning to a word (Joe to "Joe")
  - problem of "unsaturated", incomplete entities cf. "the father of"
- theory of complex expressions: t refers to x  
t = structural description of singular term,  
x = singular term; predicates = functional expressions  
sentences = special case of complex singular terms  
but: difficult to identify singular term with its reference
- logically equivalent sentences have same truth value

D: Truth - Intension and extension

- ⇒ two sentences have the same reference when they have the same truth value, which is **intolerable**
  - extension of singular terms: the object
  - extension of sentences: their truth-value
- because: if elements of equivalent extension are replaced, the truth-value remains constant
- Intension: content of a word, sum of features
- two words are intensionally equivalent if they share the same features (speed/velocity)
  - two words are extensionally equivalent if they refer to the same class of objects (Evening Star/Morning Star)
  - sentences: synonymous if their parts are synonymous

D: Truth - Proof of syntax

- Supposition: we have a theory of syntax that can tell if an utterance is meaningful
- semantics: added via dictionary that gives the meaning of each constituent
- but: knowledge of meaningfulness + knowledge of constituent meaning does not lead to knowledge of sentence meaning
  - ⇒ no proper semantic theory exists
  - cornerstone of syntax: decision of meaningfulness
  - needed: a cornerstone for semantics
- postulating ontological meanings for words leads into circularity

D: Truth - Proof of semantics

- therefore: approaches point towards **holistic** meaning
- ⇒ meaning of any sentence to be understood only if we can give meaning of every sentence
- Frege: word has meaning only in context
- Davidson: sentence has meaning only in context of the entire language
- ⇒ s means p, p to be replaced by sentence; p "gives the meaning of s"
  - candidates for p: s itself or translation of s into meta-language
- meta-language can be the language of logic:  
(T) s is T iff p

D: Truth - Proof of semantics

- Theory of meaning/cornerstone of semantics: a predicate meeting certain conditions: applies to TRUE sentences
- theory is empirical, sentences have to be tested
- cf. "Snow is white" TRUE iff snow is white
- our empirical power: ability to speak and understand
- but: formal semantics is incompetent with demonstratives; truth value depends on definition of truth, cf. "I am wise"
- ⇒ truth: a property not of sentences but of utterances/speech acts
- Truth has to be relativized to times and speakers**

D: Truth - The communicative approach

Strawson (*Truth and meaning*): conflict of approaches communicative approach vs. formal semantics approach

- communicative approach: no account of meaning is complete without reference to intentions (Grice, Austin)
- formal semantics approach: system of sem./syntactic rules is no system for communication (you can be competent without having the concept of communication; Chomsky, Frege)

Communicative approach: concept of communication explains the concept of meaning; utterer intends others to think that he/she believes p  
utterances: explained with **preconventional comm.**

- Cf. complex intentions

D: Truth - Problems with truth

- formal definition of truth: to avoid semantic paradoxes

Tarski's semantic theory of truth:

- claims that universal/general definitions of truth applicable to all languages will encounter paradoxes because truth conditions are formulated in the same language to which they apply

Steps: 1. to avoid self-referentiality: true/false are predicates of the metalanguage  
2. definition of truth for a formalized language; theory of truth should be:

- a.) materially adequate, b.) formally correct

D: Truth - Problems of a semantic definition

Tarski (*The semantic conception of truth*): difficulty to give a definition of truth that is **adequate** and **formally correct** "true": sometimes refers to psychological phenomena (beliefs) and to physical objects (sentences, propositions)

- meaning of "true": ambiguous;
- philosophers have not diminished the ambiguity

Aristotle adapted to modern terminology: "Truth of a sentence consists in its agreement with reality"  
à "A sentence is true if it designates an existing state-of-affairs" which is still vague

D: Truth - Formal specification of a language

To be characterized: 1. class of meaningful expressions  
2. class of axioms (are asserted without proof)  
3. rules of inference (to deduce new asserted sentences from previously asserted sentences)  
4. axioms + from axioms deduced sentences: theorems  
5. in a formal language: the only asserted sentences are theorems

- practiced in deductive logic languages (Maths etc.)

'Snow is white' true	iff	snow is white
- material, the 'name'		- formal side
- name à x		- sentence à p
x is true iff p		

D: Truth - The paradox of Truth

- problem of definition of truth: only to be resolved in an exactly specified language

à for all natural languages: problem remains vague  
solution: replace natural language with one that is "exactly specified" and diverges from the natural language as little as possible

cf. "The sentence on this slide is not true" à s

- a.) s is true iff the sentence on this slide is not true
- b.) s is identical with "the sentence on this slide"
- c.) à s is true iff s is not true

- not to be considered a joke but an antinomy that is revealing for foundations of logical science

D: Truth - Reasons for Tarski's distinction

1. language of this antinomy contains expressions and names of these expressions and the semantic term "true"; à this language is "semantically closed"
2. in this language, logic holds because 2. cannot be rejected, therefore 1. rejected

à necessary for problem of truth:

**distinction of object language and metalanguage**

- can be applied recursively

metalanguage: free of undefined terms; must have logical terms e.g. iff; semantic terms in it only by definition

**therefore: definition of truth becomes materially adequate and formally correct**

D: Truth - Problems of empiricism

Quine (*Two dogmas of empiricism*): criticises empiricism  
Dogma 1: fundamental dichotomy of analytic sentences (grounded independently of facts, “truths of reason”) and synthetic sentences (grounded in facts, “truths of facts”)  
Dogma 2: reductionism; each meaningful sentence is referable to immediate sensory experience (*reductionism*)  
Quine attacks notion of analyticity on basis of the principle of verification: sentences/propositions are only meaningful if empirically analyzable/verifiable  
• conventionally: analytic sentences true in virtue of their component terms, are a priori

D: Truth - The road to pragmatism

Quine: statements about the world: not individually but as a corporate body before the “tribunal of senses”,  
à holism  
• holism: each belief is part of a network of other beliefs  
• field or “web” of belief has center and periphery  
center: logical, arithmetic truths, are more protected from falsification; but: not immune to revision  
• any belief can be held true via drastic adjustments of the web (Baghramian 1998)  
à distinction analytic - factual statements is paradox  
• argument rejects principle of verification  
à view leads to linguistic behaviorism, aspects of “use”

E: Use - On doing while speaking

Austin (*Performative utterances*): conventional view: utterances report facts, describe situations truly/falsely  
• questioned by Austin and pragmatists  
• there are utterances intended not to report facts but to influence people  
à “descriptive fallacy” is to say, there are only **statemental utterances**  
• some utterances look like statements but: the utterer “does” something, cf.  
“I apologize, I name this ship, I bet you \$10...” à are all **performative utterances**  
difference: words have to be said in appropriate context

E: Use - Contextual influence on performatives

• cf. “I do” in wedding ceremony, requires situation  
problematic: “I promise” - possible difference of outward act and potential inner emotion  
therefore: some truths are **implied**  
(e.g. when I have the official power of naming ships)  
à the convention evoked must exist and be accepted  
cf. “I divorce you” not accepted (or: unauthorized person comes and names a ship “Stalin”)  
  
Question: are there grammatical means to decide if something is performative?

E: Use - Specification of speech acts

Searle (*What is a speech act?*): typical speech situation: speaker/hearer/utterance  
• illocutionary act: *to state/describe/warn/comment/apologize*  
• unit of linguistic communication: not word/sentence/token of symbol but:  
**the production of the symbol in performance of the speech act**  
= rule-governed behavior called: illocutionary act  
  
Approach on rules:  
knowledge of meaning = knowledge of the rules of use;  
but: fails to formulate the necessary rules

E: Use - Rules in a speech act

1. regulative rules: regulate relationships that exist independently of the rules (e.g. interpersonal relations; cf. “Do x”; “If y, do x”)  
2. constitutive rules: constitute and regulate activities dependent on the rules (e.g. football; “x counts as y”)  
à semantics: sets of constitutive rules  
illocution: acts in accordance with these sets  
  
Approach on propositions:  
• within different illocutionary acts, the included acts of reference and predication can be the same:  
a.) *John, leave the room!* b.) *John will leave the room* c.) *Did John leave the room?*



### E: Use - Propositions in a speech act

Propositions a.-c.: common content; equal proposition  
à dichotomy illocutionary act vs. propositional content  
therefore: every sentence has two parts:

1. propositional element
2. function indicating device (word order, stress, intonation, mood, performatives etc.)

Approaches on meaning:

refers to Grice's meaning: "A intends with x an effect on audience by their recognition of the intention"

• example: behaving French vs. telling "I'm French"

à we must capture intentional **and** conventional components