



Syntax & Semantics, WiSe 2020/2021

Lecture 1: Organization & Introduction

10/11/2020, Christian Bentz



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68. StuTS in Berlin

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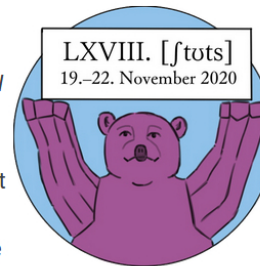
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Willkommen!

For information in English please scroll down and select EN

Vom 19. bis 22. November 2020 findet die 68. Studentische Tagung Sprachwissenschaft (StuTS) statt. Die Tagung wird virtuell stattfinden.



Nach 5 Wochen und über 140 Einreichungen ist die Frist für unseren [Call for Participation](#) abgelaufen.

Unser Tagungsprogramm ist [hier](#) zu finden.

Die [Anmeldung](#) ist weiterhin bis zum 16. November offen!

Auf der Tagung halten Studierende der Sprachwissenschaften (und benachbarter Disziplinen) Vorträge über eigene Forschungsprojekte und bieten praktische Workshops an. Dabei steht der Austausch mit anderen Studierenden im Vordergrund. Außerdem werden für die Teilnehmenden Keynotes bekannter ProfessorInnen der Berliner Universitäten sowie ein ausführliches Freizeitprogramm angeboten. Bei den virtuellen Kaffeepausen haben die Teilnehmenden auch die Möglichkeit, sich besser kennenzulernen.



Online Teaching

- ▶ Lectures will be recorded and put on moodle.
<https://moodle.zdv.uni-tuebingen.de/>
- ▶ Questions can be asked via moodle or email, and will be answered at the beginning of the next lecture (if relevant for everybody).
- ▶ Tutorials are held interactively.

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ALMA

Eberhard Karls Universität Tübingen
alma

Deutsch

Benutzerkennung | Passwort | Anmelden

Zugangsdaten vergessen?

Sie sind hier: Startseite > Studienangebot > Vorlesungsverzeichnis anzeigen

Organisation

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Syntax and Semantics | Veranstaltung

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Semester: Winter 2020/21

Grunddaten | Parallelgruppen / Termine | Vorlesungsverzeichnis | Gekoppelte Prüfungen | Module / Studiengänge

Titel	Syntax and Semantics	Veranstaltungsart	Seminar
Organisationseinheit	Seminar für Sprachwissenschaft (Verantwortlicher)	Angebotshäufigkeit	nur im Wintersemester

Inhalte

This course is an introduction to basic concepts and theories in syntax and semantics. We will cover different frameworks in syntax (e.g. dependency grammar, phrase structure grammar, etc.), as well as semantics (e.g. propositional logic, predicate logic). The semantics part is also first outline of the topics for Semantics and Pragmatics in the Summer Term. Further information and resources can be found on moodle: <https://moodle.zdv.uni-tuebingen.de/>

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Note: Tutorial Week 1 starts on Monday 16th November!



Course Credits

- ▶ Exam on **Thursday 25th February 2021: 6 ECTS**
 - ▶ You will have to register for the exam during the semester. The registration period and deadline will be communicated later.
 - ▶ Probably an online exam on moodle.
- ▶ Handing in (and passing) **3 Tutorial Exercise Sheets** (see details below): **3 ECTS**

Note: Master students in AS who have to do the module ASW-MA-01 “Linguistic Basics” only need 6 ECTS for Syntax and Semantics. So they don’t need to hand in exercise sheets, though it is advisable in preparation for the exam.

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Preliminary Schedule (2020)

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10/11/2020	Lecture 1	Organization & Introduction
12/11/2020	Lecture 2	Basic Concepts I
17/11/2020	Lecture 3	Basic Concepts II
19/11/2020	Lecture 4	Dependency Grammar I
24/11/2020	Lecture 5	Dependency Grammar II
26/11/2020	Lecture 6	Phrase Structure Grammar I
01/12/2020	Lecture 7	Phrase Structure Grammar II
03/12/2020	Lecture 8	Syntax: Intermediate Summary I
08/12/2020	Lecture 9	X-bar Theory
10/12/2020	Lecture 10	Government & Binding
15/12/2020	Lecture 11	Lexical Functional Grammar I (Feature Descriptions)
17/12/2020	Lecture 12	Lexical Functional Grammar II
22/12/2020	Lecture 13	Syntax: Intermediate Summary II

Christmas Holidays



Preliminary Schedule (2021)

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07/01/2021	Lecture 14	Head-Driven Phrase Structure Grammar I
12/01/2021	Lecture 15	Head-Driven Phrase Structure Grammar II
14/01/2021	Lecture 16	Construction Grammar
19/01/2021	Lecture 17	Minimalism
21/01/2021	Lecture 18	The Evolution of Syntax
26/01/2021	Lecture 19	Syntax: Current Research and Applications
28/01/2021	Lecture 20	Syntax: Summary
02/02/2021		Mock Exam
04/02/2021	Lecture 21	Introduction Semantics: Word Meanings
09/02/2021	Lecture 22	Propositional Logic
11/02/2021	Lecture 23	Predicate Logic
16/02/2021	Lecture 24	Syntax & Semantics Interface
18/02/2021	Lecture 25	Semantics: Summary
23/02/2021	Lecture 26	Overview & Discussion
25/02/2020		Exam



Tutorials

Tutorial 1: Hebah Ahmed, hebah.ahmed@student.uni-tuebingen.de

Tutorial 2: Alla Kutkina, alla.kutkina@student.uni-tuebingen.de

	Monday	Tuesday	Wednesday	Thursday	Friday
8-10					
10-12	Tutorial 1	Tutorial 1		Tutorial 2	
12-14					
14-16					Tutorial 2

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- ▶ You need to go to **only one tutorial (2 SWS)**, so you can choose one of these four options.



Exercise Sheets

- ▶ You have to **pass three Exercise Sheets** to get your 3 ECTS points for the tutorial.
- ▶ You can **choose** which Exercise Sheets to hand in or not.
- ▶ Exercise Sheets will go online **after the thursday lectures.**
- ▶ You have to send them via email to your tutor **by midnight on the following saturday**, in order to get your pass/fail for this Exercise Sheet.

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Tutorials

Week 1: 16/11-20/11/2020

Week 2: 23/11-27/11/2020

Week 3: 30/11-04/12/2020

Week 4: 07/12-11/12/2020

Week 5: 14/12-18/12/2020

Week 6: 11/01-15/01/2021

Week 7: 18/01-22/01/2021

Week 8: 25/01-29/01/2021

Week 9: 01/02-05/02/2021

Week 10: 08/02-12/02/2021

Week 11: 15/02-19/02/2021

Week 12: 22/02-26/02/2021

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Notes:

- ▶ Tutorial **Week 12** will be used as a Q&A session for the exam. Note that in this week, there will be only tutorials on monday and tuesday, since the exam is on thursday 25th February!



Moodle

Please go to moodle and sign up for one of the tutorials
(possible between today 4pm and next sunday 15 Nov 11:59pm).

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The screenshot shows the Moodle course interface for 'Syntax & Semantics WiSe 2020/2021'. The page is in German and shows the user 'Christian Bentz'. The course content is organized into several sections:

- Ankündigungen** (Announcements)
- Tutorial Choice**
- Welcome to Syntax and Semantics in the Winter Term 2020/2021!** (This course will be held purely online. Videos of lectures are going to be uploaded right before the respective time slot of the lecture and can be watched during this time slot or at any other point afterwards (i.e. asynchronously). Tutorials are going to be held synchronically via zoom (or another software). Details are given in the first lecture on 10.11.2020 at 2pm. Further materials such as pdfs, exercise sheets, etc. are also uploaded to this moodle page.)
- Lecture Videos**
- Lecture Slides**
- Tutorials**
- Literature** (Müller (2020) Grammatical theory)

Each section has a 'Bearbeiten' (Edit) button and a '+ Aktivität oder Material anlegen' (Add activity or material) button.



Learning Strategy

- ▶ Watch the lecture.
- ▶ Go through the lecture slides again.
- ▶ Do the exercises (if possible) before the tutorial.
- ▶ Join the tutorial.

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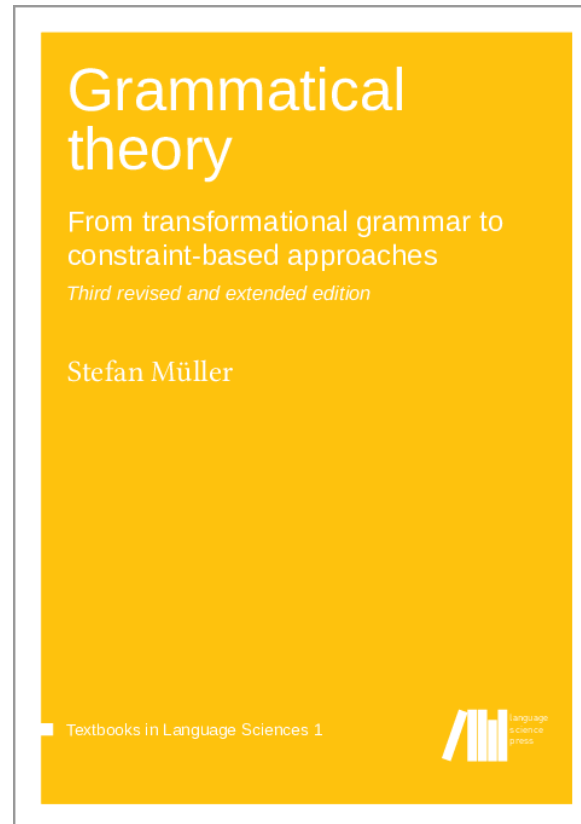


Section 2: Literature



Syntax

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



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download at: <http://langsci-press.org/catalog/book/255>



Further Introductions

- ▶ Adger, D. (2003). *Core Syntax. A minimalist approach*. Oxford: Oxford University Press.
- ▶ Carnie, A. (2013). *Syntax. A generative introduction*. Oxford: Wiley-Blackwell.
- ▶ Müller, Stefan. 2019. *Grammatical theory: From transformational grammar to constraint-based approaches. Third revised and extended edition. Volume II*. Berlin: Language Science Press.
- ▶ Radford, A. (2004). *English Syntax. An introduction*. Cambridge: Cambridge University Press.

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Some notes on Müller (2019)

- ▶ Volume I of Müller (2019) (i.e. pages 1-439) gives an extensive overview of a wide variety of grammatical frameworks from the early 20th century to the latest developments.
- ▶ Volume II (i.e. page 444 onwards) discusses further more general topics such as the “innateness of linguistic knowledge”, “The competence/performance distinction”, “Language acquisition”, etc.
- ▶ It is for free (!)

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However:

- ▶ Not all of the frameworks presented in the book are discussed in the lecture series (e.g. Categorical Grammar, Tree Adjoining Grammar, etc.).
- ▶ The order in the lecture series diverges from the order of chapters in the book. This is because the lecture series considers different grammatical theories in (roughly) chronological order (e.g. starting with Dependency Grammar of the early 20th century).
- ▶ Müller (2019) gives mainly German and English example sentences. The lecture series will aim to give examples from a wider variety of languages across the world.
- ▶ Theories, and parts of theories, that are only applicable to German syntax are not considered here.

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Section 3: Introduction



Form and Meaning



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.

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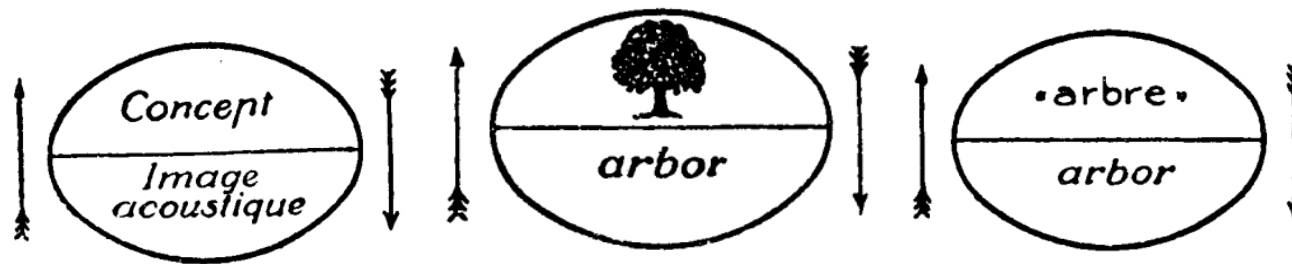
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The Roots

“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.

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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

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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.



Simple Example

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

Explanation: The phonemic transcription of a string of sounds is reflected in an orthographic representation (to some degree). The German orthographic word <Baum> is then analyzed morphosyntactically as a nominative singular noun, which is a translational equivalent to “tree” in the meta-language English. The meaning *tree'* is (supposedly) more abstract and universal across languages.

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Syntax

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

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Syntax typically deals with the morphosyntactic and POS level.



Semantics

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

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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.



Interlude: Chomsky's Colorless Green Ideas

- (5) Farblos-e grün-e Idee-n
colorless-NOM.PL green-NOM.PL ideas-NOM.PL
schlaf-en furios.
sleep-PRS.3PL furiously
[[[ADJ ADJ NOUN] VERB] ADV]
“Colorless green ideas sleep furiously.”
Meaning ???

Chomsky (1957, p. 15) has famously argued that syntax and semantics are independent of one another, since sentences as the one above can be syntactically analyzed and are grammatically correct, while deriving a meaning is impossible. Is it? ...

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The Stanford Christmas Challenge

“It can only be the thought of verdure to come, which prompts us in the autumn to buy these dormant white lumps of vegetable matter covered by a brown papery skin, and lovingly to plant them and care for them. It is a marvel to me that under this cover they are labouring unseen at such a rate within to give us the sudden awesome beauty of spring flowering bulbs. While winter reigns the earth reposes but these *colourless green ideas sleep furiously*.”

source: <https://linguistlist.org/issues/2/2-457.html#2>

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Combinatoriality



Combinatoriality/Compositionality

Amharic (amh, Afro-Asiatic)

- (6) 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.

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Combinatoriality in Syntax

- (7) Kim sieht einen großen Baum
[PROPN [VERB [DET [ADJ NOUN]]]]
“Kim sees a big tree”

In the example above, the elements of the sentence which combine to larger phrases (e.g. adjective and noun, determiner and noun phrase, etc.) are *adjacent* to one another. However, this is not always the case...

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Problem: Non-Adjacency

- (8) Kim **hat** den Wald vor lauter Bäumen nicht **gesehen**
... [AUX VERB]
“Kim hasn’t seen the forest because of all the trees.”

The term *non-adjacency* refers to the fact that elements of a sentence which depend on each other, do not necessarily occur next to each other in linear order. This is also sometimes referred to as the *non-linearity* of syntax, or *long-distance dependency*.

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Combinatoriality in Semantics

- (9) Kim sieh-t ein-en groß-en
kim see\-PRS.3SG DET.INDF-ACC.SG big-ACC.SG
Baum
tree.ACC.SG
“Kim sees a big tree”
 $\exists x[\text{TREE}(x) \wedge \text{SEE}(k,x)]^7$

In the example above, the meaning of the overall sentence arguably derives as a *combination* of the meanings of the individual parts. Importantly, this is not always the case...

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⁷This is predicate logic notation as used in the semantics part of this lecture series.



Problem: Idioms

(10) 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.

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Combinatoriality: Summary

Every syntactic and semantic theory (or both combined) have to deal with the **combinatoriality**, and also, importantly, with the problems of **non-linearity** and **non-adjacency** of meaning and form.

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References



References

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton.

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.

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.

Townsend, S. W., Engesser, S., Stoll, S., Zuberbühler, K., Bickel, B. (2018). Compositionality in animals and humans. PLOS Biology.

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Thank You.

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