What is linguistics? Unit 1, Class 6

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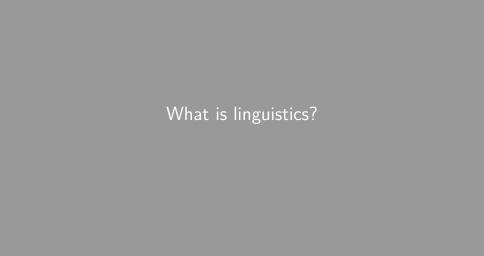
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What is linguistics?

Linguistics and subsystems of language

Linguistics beyond grammar



Linguistics

- Scientific study of human language
- Not just the study of one language, but human language broadly
 - Linguists study individual lagnuages as a tool to answer larger questions

Questions in linguistics

- Are there any linguistic universals? Why/why not?
- How many languages are spoken in Nepal/globally/Kathmandu?
- What determines the critical age of language acquisition? Can it be extended?
- When/why do people misunderstand written/spoken utterances?
- How can a robot sound more humane-like?
- Where does meaning arise from?
- Does speaking Munda or Nepali or Tamang change the way you view the world?
- How is second language acquired? How does it help in acquiring the third language?
- Will an alien have a similar language (grammar, meaning) like ours?

Descriptive vs Prescriptive

Descriptive

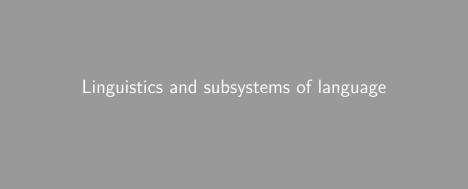
- Linguistics describes what is and was.
- Rules follow what people say.
- Concerned with linguistic knowledge.

Prescriptive

- Some forms deemed inappropriate or wrong.
- People should follow what the *rules* say.
- Current usage is generally condemned.

Methods in linguistics

- Fieldwork
- Formal analysis of patterns in data sets
- Psycholinguistic experiments
- Computational modelling
- Corpus analysis



Phonetics

Study of speech sounds (production and perception) as physical entities

- Aspiration: [t] vs $[t^h]$ • Voicing: [b] vs $[b^h]$
- $\left[v\right]$ is pronounced by
- bringing the lower lip into contact with upper teeth and
- forcing air out of the mouth while
- the vocal folds vibrate and
- nasal cavity is closed off

Phonology

Study of sound system/patterns of a particular language, language sounds as abstract entities

• English: a word never starts with [kn] while in German it is possible (e.g., Knabe= 'boy')

Morphology

Study of word structure and systematic relations between words.

- missile: 'ICBM'
- anti-tank-missile: 'missile targetting tanks'
- anti-aircraft-missile: 'missile targetting aircraft'
- anti-missile-missile: 'missile targetting ICBMs'

Morphological Rules

Rule: Anti-X-missile is a missile targetting Xs.

- What kind of missile targets anti-missile-missiles?
- anti-anti-missile-missile-missile
- anti-anti-missile-missile-missile: 'missile targetting anti-anti-missile-missile-missiles'

Syntax

Study of phrase and sentence structure

- word order: The book is on the table vs Table is on the book.
- agreement: I am here vs I are here.
- ocases: I like her vs I like she.
- I [saw [the woman] [with the telescope]].
- I [saw [[the woman] [with the telescope]]].

Semantics

Study of linguistic meaning, i.e., meaning of sentences, phrases, words and morphemes

• What is the meaning of "I shot an elephat in a Navy with a Canon"?

Syntactically well-formed, semantically nonsensical: *Colorless green ideas sleep furiously.*

Pragmatics

Study of language use

 Context influences the interpretation of utterances – the same sentence can have different meanings across different situations.

Simply put:

• semantics: *literal* meaning and

pragmatics: intended meaning.



Historical Linguistics

• How languages change over time.

Sociolinguistics

- How languages vary socially.
- How language is used as a social resource.

Psycholinguistics

- How language is represented and processed in people's mind and brain.
- Psychological and neurobiological factors associated with language acquisition and use (production, comprehension).

Language Acquisition

• How people learn language (e.g., first language acquisition).

Computational Linguistics

- Making computers process (generate/'understand'/translate...)
 human languages.
- Mathematical representation of natural language to understand the properties of language and how humans process language

References

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