

Chapter 1

Structures in languages



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Textbook

- Gussenhoven, Carlos & Haike Jacobs (2011). *Understanding Phonology*. Third edition. London, New York: Hodder Arnold.
 - also available in China
- We will not cover all chapters
 - *we will skip all the difficult parts!*

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Elearning website

- Go to elearning.shisu.edu.cn and enroll in the Phonology 2017 course (MA Phonology School of English Studies)
 - course documents (course outline, PDFs of PPTs, extra material)
 - announcements (+ course docs)
 - questions and discussion
 - definitions of phonological terms (English)
 - *new words!*

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Grading

- You can do a combined phonology-morphology essay, due at the end of the course (deadline: September 1)
- (You can also write separate essays)
- Around mid-term, you will hand in a short proposal (introduction) for the final essay (details later)

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Ch. 1: Introduction

- All languages are the same and all are different
 - all languages have sounds, syntactic and morphological units
 - same (or similar) **structures** (Why?)
 - languages differ in the exact sounds they have and how you can combine them (e.g. into *syllables*)
 - is there a limit to these differences? (typology)
 - Is there an organization / system to them?
 - Is this structure innate? acquired?
 - language in the nature/nurture debate
 - Data – description – analysis - understanding

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Phonetics and phonology

- “Phonetics is part of the natural sciences (physics, biology, etc.), phonology belongs in the humanities (like psychology)”
 - phonetics an important aid to phonology
- Most interesting aspect of phonology:
 - how does language work?
 - finding the regularities: What are the rules?
 - exercises: little puzzles (unlike phonetics!)

Acquisition

- Some 6,000 (?) languages in the world
- Children learn each and every one of these without making a special effort
 - no special intelligence or training required
 - note: this is about speech, not writing
 - debate is possible: do all people speak equally well?

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Linguists

- Linguists study languages
 - either dead or alive
 - either present-day or in the past
 - Old English, Middle English (sting-stang-stung)
 - some part (e.g. syntax, phonology) or whole
 - "theoretical" or "descriptive"
 - either a language by itself or in comparison with others (typology)
- Note: in reality, always a combination

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Reasons for language study

- Interesting reflection on what humans know and can do (culture, cognition)
- Interesting reflection on how the brain works (psycholinguistics)
- Applied for several purposes (aphasia, second language learning, speech recognition, text-to-speech, etc.)



As a science

- Science formulates hypotheses on the basis of data
 - what's a hypothesis?
 - theories of linguistics, e.g. phonology
 - e.g. a theory of syllables
 - *a good theory makes predictions*
 - *let's predict* that no language can have syllables that start in rt-
 - correct?

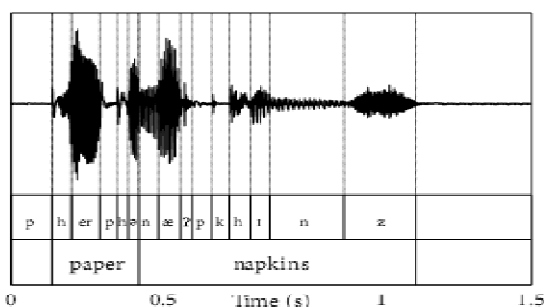
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Evidence

- Important: phonetics
 - first semester
 - the physical properties of speech
- Experiments (phonetics, and also psycholinguistics)
- Language comparison
- Logic and common sense
- Recently: neurolinguistics

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Ex: Waveform could be used to discover the rule of aspiration



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Phonology

- Describing the sounds of a language and their behaviour
 - some combinations not allowed
 - Chinese /pai/ and /pan/ but not */pain/
 - Chinese /tán/ 谈 but not */dán/
 - English [so:]C ? [sai]C ?
- Theories about this – *Why?*
 - Making use of syllable structure , segments, phonetic explanations, etc.

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Recent research

- Luo Mingqiong 骆明琼 PhD thesis (SISU 2014)
 - different theories of syllable structure
 - own proposal (“Moraic Model”)
 - comparison of Mandarin, Shanghainese, Amoy and Cantonese syllable structure
 - evidence from “phonological patterns” (which sounds are allowed where), history, language games, songs/poems, simple psycholinguistic experiments, etc.

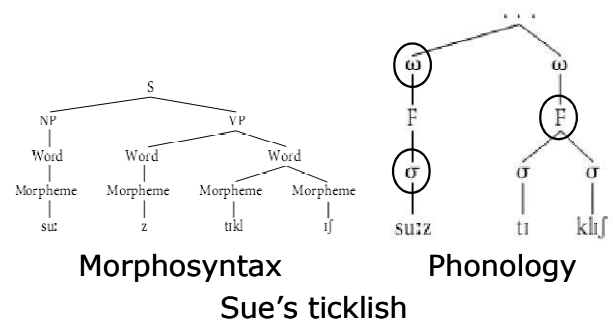
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Structure in Morphology

- Morphology: this semester, after this class ☺
- Words consist of morphemes: meaningful units
 - English *women*
 - 1
 - Chinese *women* 我们
 - 2
- Also: structure!: types of morphology, comparison between languages, theories

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Structures not “isomorphic”



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Syntactic structure

- Finally, sentences also have structure
 - the syntax course
 - also structure: constituents
 - [The man with the hat] is Frank
 - He said [that watermelons are green]
 - good evidence that this kind of structure is “real” (→ psycholinguistics, 3rd semester)

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Sound and meaning

- Phonology helps to structure our communication
 - using a limited set of sounds
 - using a limited set of syllables
 - defining an (almost?) infinite number of concepts / words
 - rules: efficient form of communication

Knowing what is allowed and what is not allowed helps us to interpret (and even to expect what is coming in) speech

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Variation

- If phonological structure helps for human communication, why are not all languages the same?
 - Why?
 - Maybe they are the same on a deep / abstract / structural level?
 - =Chomsky's "Universal Grammar"

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Conclusion about structure

- (At least) two kinds of structure:
 - phonological structure
 - morphosyntactic structure
 - others?
 - meaning? = semantic structure
 - conversations? = pragmatic structure

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Conclusion

- Phonological structure:
 - the sound structure of words and sentences – what are the rules / patterns?
 - differences and similarities between languages (or dialects) (or language stages)
 - first need to freshen up our knowledge about phonetics, the way speech is produced and perceived (→ Ch. 2)

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Homework

- Please read the chapter carefully, and note down any questions you may have
- Please prepare exercises Qs 5, 6, 7, 11, 12. (Not graded)
- Thank you

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