Linguistic Methods

1. Introduction
   The Research Process
Purpose of the course

- Give an overview of linguistic methods
- General research methods as they are applied in linguistics
- Some more specific methods and ways of using methods
Why is it important to know different methods?

• Important to all researchers and in applied work
• Become specialist in one, a couple of or several methods
• Be familiar with all methods that are used by researchers in the area
• Here: get an overview, place your own methods in context, find other relevant methods, be able to critically read studies that use different methods and take part in discussions/reviews of research
• Basic overview course as basis for choosing specified methods courses
What we do in this course

• Get an overview, place your own methods in context, find other relevant methods, be able to critically read studies that use different methods and take part in discussions/reviews of research

• Basic overview course as basis for choosing specified methods courses and for being able to find more information on each method.
Where the methods come from

• Different sciences - related to linguistics
• Philosophy of science
• What is linguistics / linguistic perspective?
  "The study of human languages, human linguistic communication and the human language ability"
Describe, understand and explain (Swedish: Förstå och förklara)

• Positivism (explain)
• Hermeneutics (understand)

• Not opposites, both needed
• ”Interpretation” practically always involved
  - not raw data, not objective - methods
  influence - important to know
• Human languages are systems that tie together different aspects of reality into a naturally founded socially and culturally functioning communication system.

• Wide area - choice of objects of study and methods
• Physical aspects: measurements, time, acoustics - phonetics, measure sounds, identify voices, sounds
• Biological aspects - speech organs, brain etc
• Psychological aspects - processes, models of production, memory, planning, comprehension - experimental methods
• Social aspects - conventions, how we communicate, how do they arise, how are they preserved or changed
Understand - Explain in a wide sense

- Understanding:
  Wide sense - perceive meaningful relations

- Explanation - perception of something as falling under a general principle that can explain why it is the case
Understand

in a narrow sense

• Understand:
  perceive something as based on a specific intention or motive

Think about this
What about your own perspective?

Natural science and philosophical/humanistic research
Methods - data collection

• Registration of data (memory, notes, recording - audio, video, experimental registration, writing, logging etc.)

Ethical aspects

• Intuition (classic linguistic method - judgement of correctness)
  (of one or more persons with one or more examples)
• Literature studies - review, integrate
  Relate to what others have done - separate "schools", integration important

• Observation with researcher not present
good to observe - bad to influence
Administration
• Participation observation: ethnomethodology
  (interpret the situation, close to the experience of the subject)

• Manual or digital excerpts from texts
  Choice, good sources, what to select, automatic?
• Observation schema
  Field, study, recording, text - coding
• Interview
  Different types, more or less standardized, open, closed questions - how to analyze answers
  Standardized
  Deep interview,
  Self confrontation interview
• Linguistic language description interview - elicitation interview with informants
• Questionnaires
  - open answers
  - closed answers
  - scaling, similarity estimation
    (especially sociolinguistics)
• Experiment
  - pseudoexperiment
  - fullblown experiments (phonetics, psycholinguistics, neurolinguistics)
Methods for primary data analysis

- Transcription
- Automatic analysis
  - Acoustic / optic
  - Recognition, discrimination
Methods for secondary analysis

• Conceptual analysis, definitions, operationalization, taxonomies, describing and explaining statements and theories
• Interpretation and coding
• Source criticism and philological methods, text emendation
• Formalization
• Statistical analysis
Methods for drawing conclusion and presenting results

• Drawing conclusions
• Types of justification
• Structure of report
• Tables, diagrams, figures
• Presentation medium (speech, writing, picture, web material etc)
Some types of linguistic studies

- Literature study
- Lexicographical studies
- Conceptual analysis and deep lexical descriptions
- Analysis of constructions, types of expressions and texts
- Formalization
- Corpus studies
Some types of linguistic methods

• Historical studies
• Experimental studies
• Simulation
• Developmental project, action research, consult work, language planning
Ethical aspects

- Informants, subjects
- Colleagues
- Research council etc financing the research
- "Customers", who will use the results
- The researcher
Ethics

• Not limit freedom more than necessary
• Not inflict harm or pain
• Not prevent rationality, e.g. through false information

-> Application to ethical board
  Informed consent
  Anonymize data (confidentiality)
  (Agreement about use of identifying data)
The Research Process

Fig. The research process "wheel"
How to start

• Idea and choice of topic
• Literature studies and delimitation of the research task and its relation to the social environment
• Reflection over the research task - theoretical problems and frameworks, concept analysis, choice of methods
• Specified plan for carrying out the research task
How to continue

For theory development, conceptual investigations, uses of intuition and formalization:

• Literature studies, critical and careful
• Reflection over theoretical problems and questions
• Creating tentative theoretical claims, theories, suggestion for formalization etc.
• Evaluation of own suggestions in relation to, for example, linguistic intuition, related theoreis or suggestions for formalization or other lingusitic claims. Revisions of own suggestion.
How to continue

For studies with data collection
(experiment, interview, case studies, corpus or literature data)

• Preparations for data collection
• Carrying out data collection
• Analysis (primary and secondary)
• Putting results together
How to finish

• Revise results - Connect them to theory -
  Draw conclusions - Theory development -
  Possibly relation to applications

• Reporting (in different forms, written, oral) -
  seeking feedback and ideas for
  continuation in interaction with the
  environment
Assignments

• PART 1. INTRODUCTION: OVERVIEW OF LINGUISTIC METHODS. THE SCIENTIFIC PROCESS.
• Allwood Chapter 1 (or corresponding):
  • 1. Write a short (1/2 page) description of a linguistic phenomenon that demands both understanding and explanation.
  • 2. Sketch (1 page) an investigation that demands a combination of at least 6 of the methods mentioned in the overview of methods.
  • 3. Discuss how the investigation in 2 fits with the 10 types of study mentioned.
  • 4. Which ethical problems arise in your investigation?
• Allwood Chapter 2 (or corresponding):
  • 1. Make a time and work plan for your sketched investigation.
  • 2. Make a literature search for relevant literature for the investigation.