



**How to use corpus
linguistics in
sociolinguistics**

Sociolinguistics

Corpus linguistics

- *The branch of linguistics
- *It focuses on the effect which various social characteristics have on the language of individuals or speaker groups.
- *It includes the major demographic categories of age, gender, social class, ethnicity, situational categories
- *It focuses on the overall characteristics of language varieties: regional dialects, standard/non-standard varieties of a language, multilingualism, language policy, standardisation etc.

- *A methodological basis for doing linguistic research
- *It comes to embody methodologies for linguistic description in which quantification is part of the research activity

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- ✘ The first-generation written corpora - the Brown and Lancaster–Oslo/Bergen corpora.
 - ✘ **Spoken corpora** - is a collection of speech data made accessible via a computer, containing at least transcriptions of speech but increasingly also audio and/or video files containing speech (the London–Lund Corpus (the spoken part of the British National Corpus)).

3 WAYS IN WHICH A SOCIOLINGUIST MAY APPLY CORPUS-LINGUISTIC METHODS AS AN EMPIRICAL BASIS

- **1** - the possibility of using one of the many existing corpora in a sociolinguistic study.
- **2** – to collect one’s own data and create a new corpus for a specific sociolinguistic purpose
- **3** - the possibility of using ‘corpus-inspired’ methods to handle empirical data in a sociolinguistic study, without developing a fully-fledged corpus.



The corpus texts is annotated with linguistic information

- It may represent different levels of analysis:
- intonation,
- morphology,
- word class,
- syntactic structure,
- discourse structure
- speech act information

The corpus texts will be annotated with metadata

- the speakers,
- the situational context of the speech event,
- location,
- recording equipment,
- etc.



A FLEXIBLE TOOL FOR TRANSCRIPTION AND ANNOTATION OF SPOKEN DATA IS **ELANT (THE EUDICO LINGUISTIC ANNOTATOR)**,

The screenshot displays the Elan software interface with the following components and annotations:

- Menu Bar:** Located at the top, containing File, Edit, Annotation, Tier, Type, Search, View, Options, Window, and Help.
- Video Viewer:** A window on the left showing a video of two people in a room.
- Media Player controls:** Located on the right, including Grid, Text, Subtitles, and Controls tabs, and sliders for Volume (0-100) and Rate (0-200).
- Specific viewers:** A label pointing to the Volume and Rate sliders.
- Annotation Density Viewer:** A waveform view showing the amplitude of the audio signal over time.
- Waveform Viewer:** A label pointing to the waveform view.
- Timeline Viewer:** A detailed view of the transcription and annotation tiers, including:
 - K-Spch:** ja
 - W-Spch:** and you follow then the sign Kleef | that's the oranje singl | then you follow the sign
 - W-Words:** and | yo | foll | the | th | sign | Kleef | th 's | th Ora | Single | then | you | follo | th | sig
 - W-POS:** con | pro | v | adv | a | n | n | de | v | a | n | n | adv | pro | v | a | n
 - W-IPA:** ænd ju: fɒləʊ ðən ðə saɪn kli:f | ðætʰs ðə ɔrənʤe sɪŋl | ðen ju: fɒləʊ ðə saɪn kl
 - W-RGU:** hold | preparation | hold stroke | hold | preparation stroke | hold | preparation | hold
 - W-RGph:** Going to t | Going alon
 - W-RGMe:** (empty)



* Types of spoken discourse in Spoken Dutch Corpus

- * a. Spontaneous conversations ('face-to-face')
- * b. Interviews with teachers of Dutch
- * c. Spontaneous telephone dialogues (recorded via a switchboard)
- * d. Spontaneous telephone dialogues (recorded on minidisk via a local interface)
- * e. Simulated business negotiations
- * f. Interviews/discussions/debates (broadcast)
- * g. (political) Discussions/debates/meetings (non-broadcast)
- * h. Lessons recorded in the classroom
- * i. Live (e.g. sports) commentaries (broadcast)
- * j. News reports/reportages (broadcast)
- * k. News (broadcast)
- * l. Commentaries/columns/reviews (broadcast)
- * m. Ceremonious speeches/sermons
- * n. Lectures/seminars
- * o. Read speech

Advantages of spoken corpora like the BNC (British National Corpus) and the CGN (Spoken Dutch Corpus)

- * It contains many speech genres, including the use of spoken language in formal settings like lectures, sermons and news broadcasts.

- * It concerns their size and the possibility of efficiently processing large amounts of naturally occurring spoken data.

- * E.g. The spoken part of the BNC includes 4,700 speakers representing many conversational settings.

the use of **like** as a discourse marker - a feature of white female speakers in late adolescence, and social class had no effect on the distribution of this marker

the use of the form **innit** - a feature of female adolescent speakers with an ethnic minority background and from the lowest socio-economic class.



LLC (London–Lund Corpus of spoken English)

* it exclusively involves speakers who are highly educated adults working in an academic environment

The spoken component of the BNC (British National Corpus)

contains ten million words of speech representing a variety of speech styles, including a substantial proportion of conversation in a variety of speaker groups.

A considerable weakness of both - the actual speech data, the sound files, are not available to the researcher.



A major concern in the development of speech corpora is how to treat non-standard and dialectal forms.

two ways of handling such variation

To produce a dialectal, orthophonic transcription which is as close to the pronunciation as possible

e.g. in the Nordic Dialect Corpus -
hvordan (how)

To produce a transcription based on a written standard, but usually allowing for some variation.

e.g. in the Nordic Dialect Corpus
–orthophonic realisations like
koless'n, kossj'n, korr

PROBLEMS AND LIMITATIONS OF CORPUS LINGUISTIC METHOD

- **1** - The first objection concerns the accessibility of speech data, or lack thereof.
- **2** - some of the corpora that do have spoken data available are not suitable for detailed phonetic or phonological studies because the sound quality is too poor.
- **3** - there may be few instances of a particular variable in a corpus
- **4** - it may be problematic to rely fully on the judgements of the transcriber, since transcribers differ with respect to their interpretations of spoken data.
- **5** - some corpus data are only available as short snippets of sound and not as longer stretches of spoken dialogue.
- **6** - corpus linguistics relies heavily on the method of searching, and in many cases this is the only way to access the corpus data.
- **7** - corpus informants are generally anonymised. It prevents the researcher from accessing the in-depth background information.



Rules for corpus-based sociolinguistic research.

- * **1** - Listen to the data
- * **2** - Browse and search
- * **3** – Precision and recall
- * **4** - Distinguish form from function
- * **5** - Manual work is needed
- * **6** - Comparability of datasets

CORPUS-BASED SOCIOLINGUISTICS EXEMPLIFIED

- * The project **Multicultural London English (MLE)**: examines the role of ethnic-minority English in driving forward linguistic innovation at the levels of phonetics, grammar and discourse.
- * **The Intonational Variation in English (IViE)** Corpus contains speech data and intonation transcriptions from nine urban dialects of British English. The data represent five different speaking styles.
- * **Cheshire and Fox** (2009) study was/were variation in MLE.
- * **McCarthy** (2002) focuses on the response tokens used in everyday conversation, basing the study on the British **CANCODE** (Cambridge and Nottingham Corpus of Discourse in English) corpus and the Cambridge–Cornell Corpus of Spoken North American English.