

Forensic Transcription

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Cognitive Phonetics

- phonetics: the scientific analysis of speech
- cognitive phonetics
 - the complex interplay of mental, physical and social **skills** that underpin both everyday and specialised activities of acquiring, producing, perceiving, and representing speech
- or in plainer language
 - speaking and listening
 - spelling and pronunciation
 - **transcription**



Forensic transcription

- transcription
 - the representation of speech with written symbols
 - to provide a stable record
 - for official archives
 - court, parliament, etc
 - for linguistic analysis, etc
 - note difference from writing
 - communication of meaning
- forensic transcription
 - the representation of speech captured by a covert recording device for use as evidence in a legal investigation



Overall theme

- the legal system has effective systems to ensure reliability of transcripts of court proceedings, police interviews, etc
- systems to ensure reliability of forensic transcripts seem less effective
 - some appear to promote poor practice
- could better understanding of cognitive phonetics help?
 - not the technicalities but the big picture
 - then a matter of common sense



What is transcription?

- original meaning
 - ‘write across’
- copy written texts by hand
- current meaning evolved via several extensions



Extended meaning

- copy down speech
 - as record of a meeting, interview, etc
- major difference
 - writing stays still to be copied
 - and checked
 - speech is fleeting
 - have to rely on memory
- notes as 'aide memoire'
 - **transcribe** notes to fair copy
 - transcription²



Important effect

- transcription² involves subjective interpretation
 - even with good faith
 - e.g. disagreement over meeting minutes
 - response
 - impartial transcriber, checking, verification processes
- opportunity for bad faith
 - police verbals
- response
 - electronic **recording**
 - note original meaning 'memorise by heart'
 - get the recording **transcribed**



Meaning extension

- transcription³
 - now most common
- copy down speech from electronic recording
- result
 - useful, reliable transcript
 - under certain conditions
 - in certain contexts
 - refer to transcript instead of recording
 - ‘aid’ but **not** ‘aide memoire’
 - more later



Another use for audio

- covert recordings
 - valuable source of evidence
- problem: can be poor quality
 - throughout or in crucial part
 - 'disputed utterance'
- response: send to an expert
- result: looks like transcript³
 - seems equally reliable and useful
- but is it??
 - sometimes but sometimes not (in my experience)



Transcription⁴

- yet another extension to meaning
- many differences from transcript³ to transcript⁴
- quality of recording is just one of **six factors** affecting reliability of transcript
 1. recording factors
 2. speech factors
 3. contextual factors
 4. listener factors
 5. transcriber factors
 6. situational factors
- a job for cognitive phonetics!

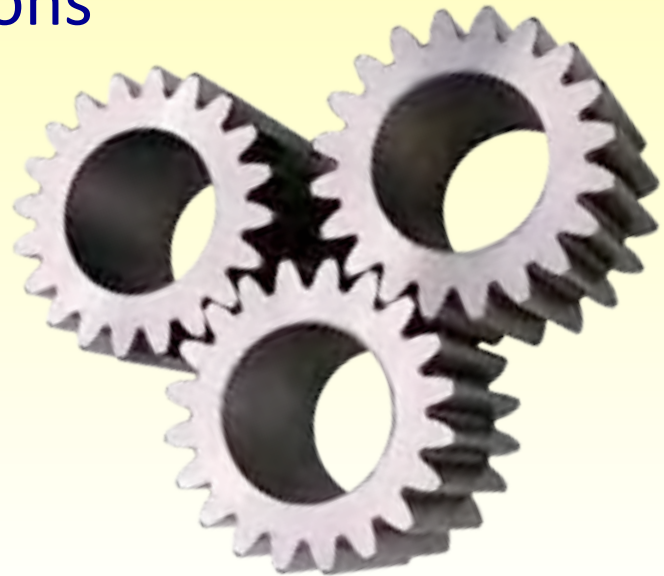


Two arguments

1. transcript³ (normal) and transcript⁴ (forensic) can be very different
 - not just in recording quality but in any or all of 6 factors
2. both are more similar to transcript² (from notes, shorthand) than usually realised
 - i.e. 'having the audio' is good but doesn't make it 'objective'

Reason for arguments

- key to improving reliability of forensic transcripts⁴ lies in understanding how 6 factors work together
 - then good practice with forensic transcription becomes common sense
- each individual point well known but not always put together to see full implications
- reason:
widespread misconception about nature of speech

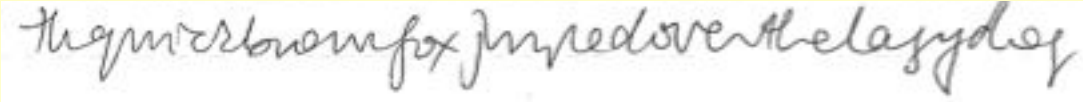


Widespread misconception

- many assume speech is like auditory version of print
 - discrete, invariant sounds
 - phonemes
 - grouped into words of standard form
 - separated by short pauses
- makes transcription almost like transcript¹ (copy down what you hear)
- **nothing could be further from the truth!**



Nature of speech

- more like handwriting
 - except no gaps or punctuation
 - highly variable person to person, context to context
- even the **clearest** speech is not
 - The quick brown fox jumped over the lazy dog
- more like 
 - but **much** messier and **much** more variable
- and that's the clear speech!
 - as with handwriting, very variable



2. *Speech factors*

- ‘normal’ transcript³
 - clear speech monitored ‘for the tape’
 - may not always sound like it!
 - even so, very hard to transcribe
 - anyone ever tried?
 - many differences spoken and written language
 - not ‘sloppy’
 - actually aids comprehension
 - lot of ‘tidying up’ needed
 - part of skill of transcriber

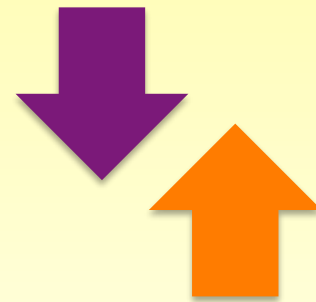


Conversational speech

- forensic transcript⁴ usually natural spontaneous speech
 - very different
- highly context-bound
 - like scribbled notes with personal abbreviations
 - but no gaps or punctuation!
- often drowned out by background noise, overlaps, etc
 - different issue from recording factors
- very hard to transcribe, even if transcriber was present
 - ‘cocktail party effect’
- **Question:** how do we understand each other?!

3. Context factors

- (as in reading) we rely heavily on context
 - bottom up (from signal) and top-down (from context)
 - trading relationship
- external context
 - knowledge of what's going on
- internal context
 - knowledge of language
- constantly predicting based on both
 - 'Hi Mum, what's for _____?'
- importance of duration and continuity
 - often very different between transcript³ and transcript⁴



4. Listener factors

- need to use context shows crucial role of **listener** in making speech 'clear'
 - ultimate is foreign language in unfamiliar context
 - indecipherable to us
 - perfectly clear to them
- listener knowledge usually assists (internal context)
 - According to a research at an English university, it doesn't matter in what order the letters in a word are, the only important thing is that first and last letter is at the right place. The rest can be a total mess and you can still read it without problem. This is because we do not read every letter by itself but the word as a whole.

But can mislead

- Bruce (1958)
 - Sentence 1
 - I tell you that our team will win the cup next year
 - Sentence 2
 - You said it would rain but the sun has come out now
 - Sentence 1 (food)
 - I tell you that I feel more hungry than you are
 - Sentence 1 (travel)
 - I tell you that I too will leave next year

******* no diminution of confidence *******

5. *Transcriber factors*

- transcription is an ‘unnatural act’
 - cf. speaking, listening, reading, writing
- requires skill, patience, perseverance
 - variable levels
 - professional transcribers tested and accredited
- even best transcript is an **abstraction**
- role for judgment
 - what to include
 - what to omit



6. Situational factors

- purpose dictates level and type of detail required
 - ‘verbatim’ transcript as one type among many
 - not considered ‘accurate’ in some contexts

- ability to check

- get agreement from speaker
- verify against external context

9. O: a- (.) an (0.5) and (.) we had sort of planned on seeing you (0.2) on
10. our return_z (0.3) [to Sydney_z (.) on Sunday.
11. M: [hh
12. (0.4)
13. M: o:kay_z
14. O: is that (0.4) okay with you? =[or or:
15. M: [hh eh-eh-w-we-well look, uh uh (.)
16. probably it's okay, .hh a- we- we've been d'invited for a bir-a
17. fiftieth birth[day ah:, (0.2)] <celebration: > at twelve thirty

sək,s'ndəd ɪm mærkɪŋ ðə ʌreɪtə 'værk hɪz kləʊk ɒf ʃu:bi:kən sɪdæd 'stʌŋgə
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1. Recording factors

- often quite bad even in transcript³
 - other factors enable reliable transcript
- transcript⁴ poor quality adds to other problems
- different kinds of 'poor quality'

The quick brown fox jumped over the lazy dog

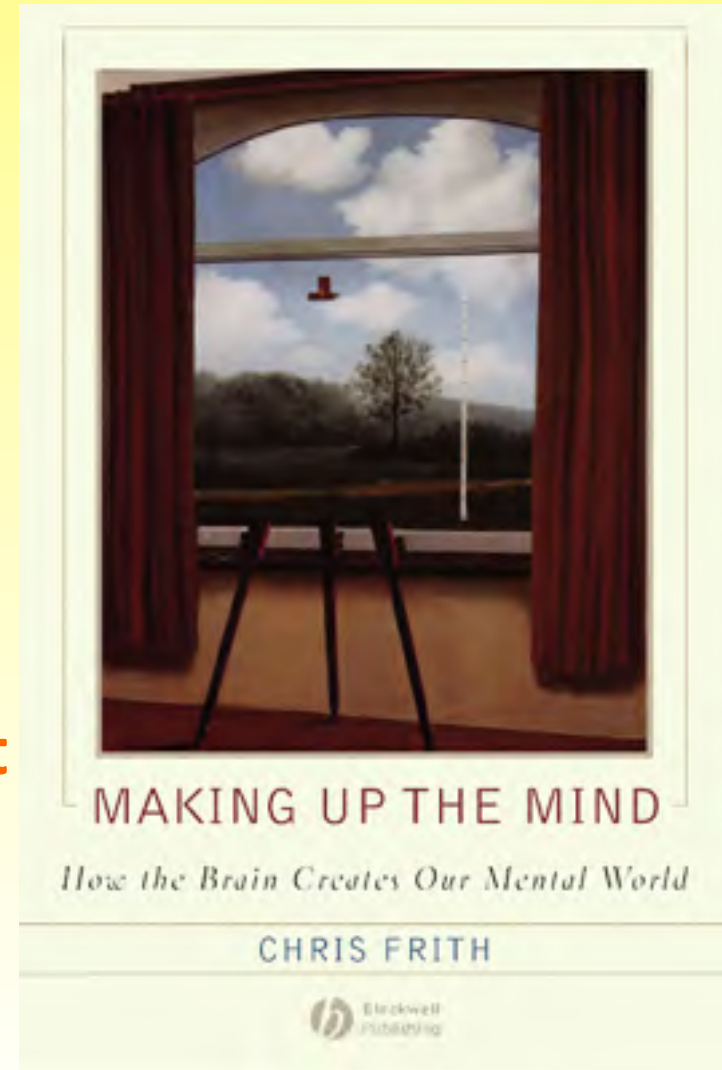
The quick brown fox jumped over the lazy dog

The quick brown fox jumped over the lazy dog

The quick brown fox jumped over the lazy dog

What does it all mean?

- what is heard is as much an **interpretation** as what it means
 - just less conscious awareness
 - the same as all other cognitive skills
- but we ascribe perception to stimulus
 - ignoring our own contribution
- what is transcribed is a **judgment**
- evaluating a transcript as 'accurate' or 'reliable' is an **opinion**



Poor practice?

- transcript as ‘aide memoire’
 - someone else’s memory, and interpretation
 - known but using the term affects the concept
- ad hoc expert
 - police evaluating own transcript
 - oxymoron!
 - expert can work **with** police transcriber
- audio engineer
 - experts in audio, not in speech!
 - ‘enhance’, measure, compare
 - looks ‘scientific’ but can be very wrong
 - CSI effect not just juries!

Acoustic phonetics

- useful in some disputed utterance cases
- can significantly enhance bottom up information
- but bottom up is only part of information needed

lighter

klighter

Kennedy lighter

Cognitive Phonetics

- all 6 factors
- some skill in transcription
 - e.g. transcribe instead of confirming untranscribable!
 - not necessarily more than general ling/phon background
 - with patience
- real value is evaluation
 - cf IAFPA Code of Practice
- **importance of 'untranscribable'**

Suggestion

- **not** every forensic recording fully evaluated by cognitive phonetics expert
 - many perfectly straightforward
 - every forensic transcript be evaluated at voir dire in terms of all six factors
 - simple checklist to eliminate main problems
 - in cases of doubt require evaluation by expert in cognitive phonetics
 - if doubt unresolved, present to jury with advice from expert in cognitive phonetics
1. recording factors
 2. speech factors
 3. contextual factors
 4. listener factors
 5. **transcriber factors**
 6. **situational factors**

Thankyou!

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The tape recording (which is defined in s 281(4) Criminal Procedure Act) is an exhibit when it is tendered in court. The transcript of the videotape is called the aide memoire. It assists the court but is not the actual exhibit.

Practitioners Guide to Criminal Law p. 172

It is important to watch the ERISP or listen to audio tapes of records of interview. It will not only help you work out whether the transcript is accurate, but it may also indicate important aspects of the questioning and your client's manner and condition at the time of questioning which may be relevant in your case (for example, being intoxicated or not in a fit mental state).

Practitioners Guide to Criminal Law p. 172

Example of a transcript

What we're doing when we talk about natural concepts, we're talking about ways people sort stuff that turns out to be fruitful or not fruitful. I think the real contrast to the notion of natural kind is the notion of a nominal kind, the idea of a kind that's defined by whatever criteria we happen to choose. So if I have a kind that consists of all things that are either pencils or glasses of water, that's an arbitrary kind, they're not going to be any interesting explanatory laws or inducted generalisations about those things. Whereas if I have either acids or late capitalist economies, or flightless birds, those are all going to be low sign (?) interesting properties that figure an explanation and induction.

Transcript of discussion on radio program 'The Philosophers Zone'
Australian Broadcasting Corporation Radio National 9 August 2008