

The Nottingham Multi-Modal Corpus: A Demonstration

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Introductions

- DReSS

- NMMC (Nottingham Multi-Modal Corpus) data:

- 250,000 words
- 125,000 words of 1-party data, 125,000 words of 2-party data
- Data in three different modes: textual, audio and video

- Corpus tool-bench (DRS- The Digital Replay System):

- A reusable corpus tool with the flexibility to be utilised for a wide range of qualitative social science enquiry
- Allows the analyst to search lexical, prosodic and gestural features of spoken discourse (and beyond)

Challenges

Given video records of natural conversations how can we:

- Analyse these gestures to form meaningful descriptors of the motion involved?
- Identify common classes of gesture, on the basis of these descriptors?
- Quickly search videos for gestures of interest?
- Combine gestural information with other modalities within the corpus to make it meaningful and useful to the linguist?

Tracking, defining and coding MM data

- Refining the CL approach for relevant MM corpus analyses
- A Computer Vision (CV) tracker has been built to, initially, focus upon manually detecting the existence of the following in the video data:
 1. Head nod behaviour (non-verbal backchanneling), HeadTalk
 2. Iconic hand movements (relationship to verbal discourse markers)

Tracking gestures- HeadTalk



Tracking gestures- HandTalk

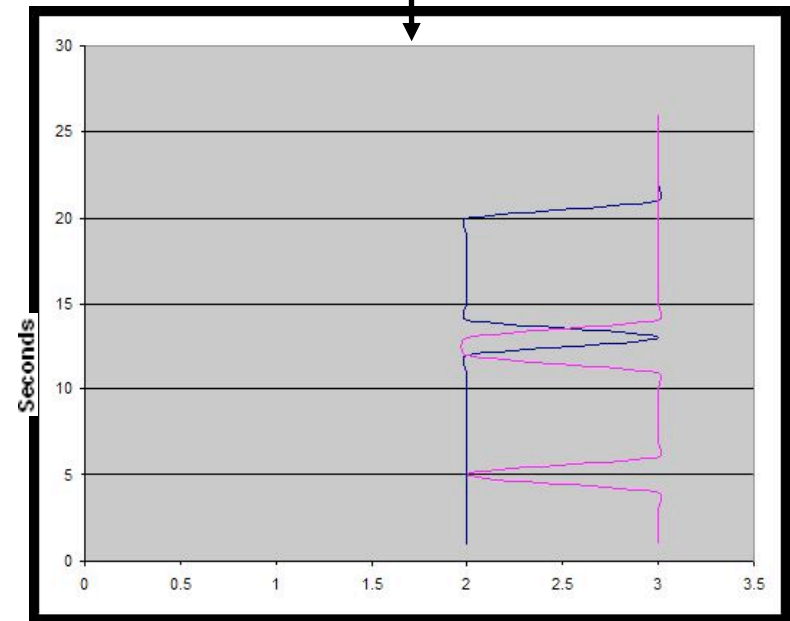


Tracking gestures- HandTalk



S09FFa.txt

	A	B	C
1	Number Of Tracked Objects = 3		
2	#####		
3			
4	frame	Y-Axis	Angle
5	1	20	7.90396
6	2	20	7.49284
7	3	21	8.96902
8	4	21	10.4333
9	5	21	11.8839
10	6	21	10.1714
11	7	22	11.5875
12	8	22	9.92225
13	9	22	9.92225
14	10	22	9.92225



— LHand
— RHand

DRS: A real-time demo

- Demonstrating:
 - The corpus tool-bench interface, for the representation and replay of individual sets of (already) encoded data (data can also be coded using the DRS facilities)
 - The concordance tool that has been developed as part of the tool to enable detailed linguistic enquiry



Digital Replay
System (DRS)

Project contacts and links

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