Multimodal reference: Practical session

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Data

All materials are downloadable from:

http://staff.um.edu.mt/albert.gatt/refnet2014/multimodal.html

The data for this practical session consists of:

- 1. A short video excerpt from the MREDI dialogues
- 2. The transcription of the dialogue fragment (in the format of Excel spreadsheets). Note that these are broken up into separate utterances. The spreadsheets also contain separate columns marking up the various variables used in the MREDI study. **You may or may not decide to use these.**
- 3. The map for the excerpt. Note that these are the director's version (i.e. landmarks are marked on them).

Purpose

The purpose of the practical session is to give you a feel for handling "noisy", "naturalistic" data, specifically:

- 1. Formulating potentially interesting questions about the data.
- 2. Identifying features that could be annotated to address these questions.
- 3. Annotating the data accordingly and seeking answers to your questions.

So this is not intended to be a formal exercise that will result in statistically solid answers to questions. Our aim is ultimately to give you a feel for the richness of such dialogues.

Topics

We have identified four possible topics for investigation, to be tackled by different people, either individually or in groups.

The topics are not specifically formulated as research questions but as broad fields of potential inquiry. It is up to you to look at the data to formulate a question that strikes you as interesting within the topic you have chosen. Specifically, we propose the following procedure:

- 1. Look at one or both of the excerpts and formulate a question based on the given topic, using your impressions of the data as a starting point.
- 2. Devise features that are relevant to the question you want to address.

- 3. Code the features you may use the excel sheets provided, or any other tool you are familiar with.
- 4. Draw some conclusions based on your small-scale study.
- 5. Share any reflections on the method proposed, as well as problems you would expect with such a method, with the other people in the class.

The topics are as follows:

1. Pointing by speakers vs hearers

Our focus in the lectures has been on when speakers (who have the role of directors in the dialogues) actually point. Here, you'll be looking at both the speaker and the hearer, focusing on whether and when either of them chooses to point to a landmark on the map.

2. Pointing and gaze

Pointing involves a triadic form of communication, between speaker, hearer and object pointed at. In the MREDI dialogues, this is complicated also by an additional factor, the presence of both a public, shared map and private maps. We often notice interlocutors shifting their gaze between their partners, and the two maps, and this may interact in interesting ways with their pointing gestures.

3. Non-communicative gestures

An often neglected aspect of multimodal communication is what we might call "non-communicative" gestures. An example would be a "beat" gesture, where a speaker makes a rhythmic motion with their hand, but this does not have any obvious communicative role with respect to the other partner. It is not clear to what extent speakers in a task-oriented setting such as MREDI use such gestures.

4. Gestural entrainment

Entrainment has mostly been studied at the linguistic, spoken level (e.g. lexical or syntactic), though interest is growing in the question whether gestures are also entrained. The MREDI dialogues contain instances of both speakers and listeners gesturing. To what extent do we find evidence of entrainment here?