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# Multimodal focalization processes during French family dinners: a comparison between speaking and signing families

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## Background

Discourse combines **shared information** and **new information** (Lambrecht, 1994). **New information** is foregrounded, i.e. focused with a variety of processes including **speech prosody** (Rossi 1999, Di Cristo 1999, a.o.), **sign prosody** (Wilbur 1994 ; Crasborn & van der Kooij 2013 a.o.) and (hearing-deaf) **shared gestures** (Ferré, 2003, a.o.). In **interaction**, focus is implemented via **multimodal phenomena**: focalization is relatively well described in spoken dialogue, it remains understudied in signed interactions, and in both signed and spoken multiparty conversations.

## Introduction

### Family dinners

A privileged **interactive** situation as participants need to **coordinate** two kind of activities using one's **mouth and hands** :

- ✓ **acting** (eating, serving...)
- ✓ **linguaging** (transmitting information to the other family members).

### Our research questions

- ✓ How both adult and child dinner participants mark information salience in multiparty conversations, in which discourse topics are intermingled?
- ✓ How focus is shaped across modalities (audio-vocal and visuo-gestural), and which prosodic markers are used by 'gesturers-speakers' and signers?

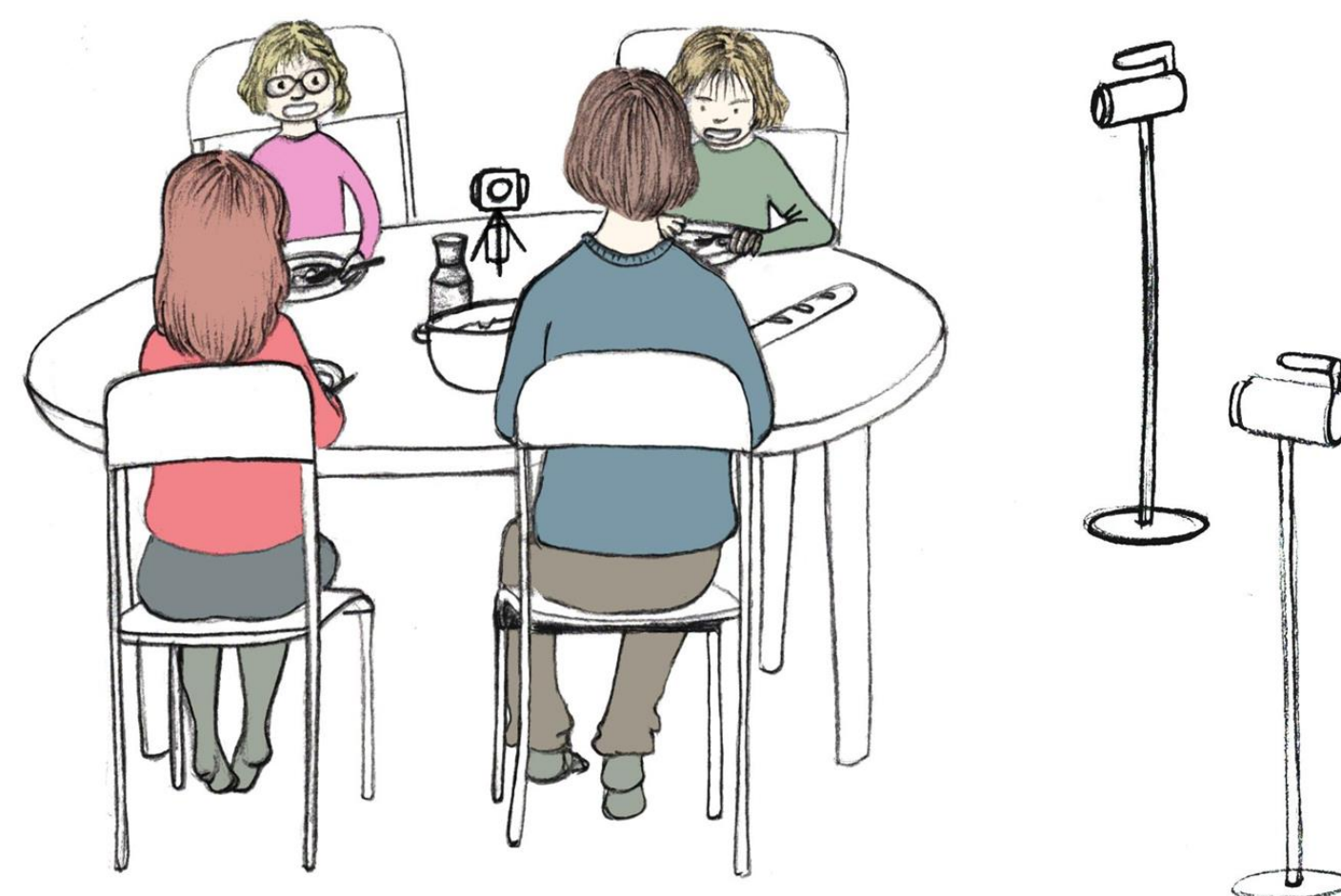
### Our hypotheses

- ✓ Focus markers are articulated in contrastive multimodal patterns
- ✓ A parallel can be drawn between 'spoken' French and LSF, in terms of the prosodic parameters and patterns used.

## Data: Family dinners

### DinLang (ANR-20-CE27-0010)

- Families who primarily use French or LSF
- Two wide-angle cameras (pilot study) + one 360° camera, one 360° sound recorder (DinLang setting)



### Selected diners

- 1 French speaking family (3 children = boys, 2, 3 and 9 y.o)
- 1 LSF family (2 children = girls, 6 and 2,6 y.o)

### Selected sample

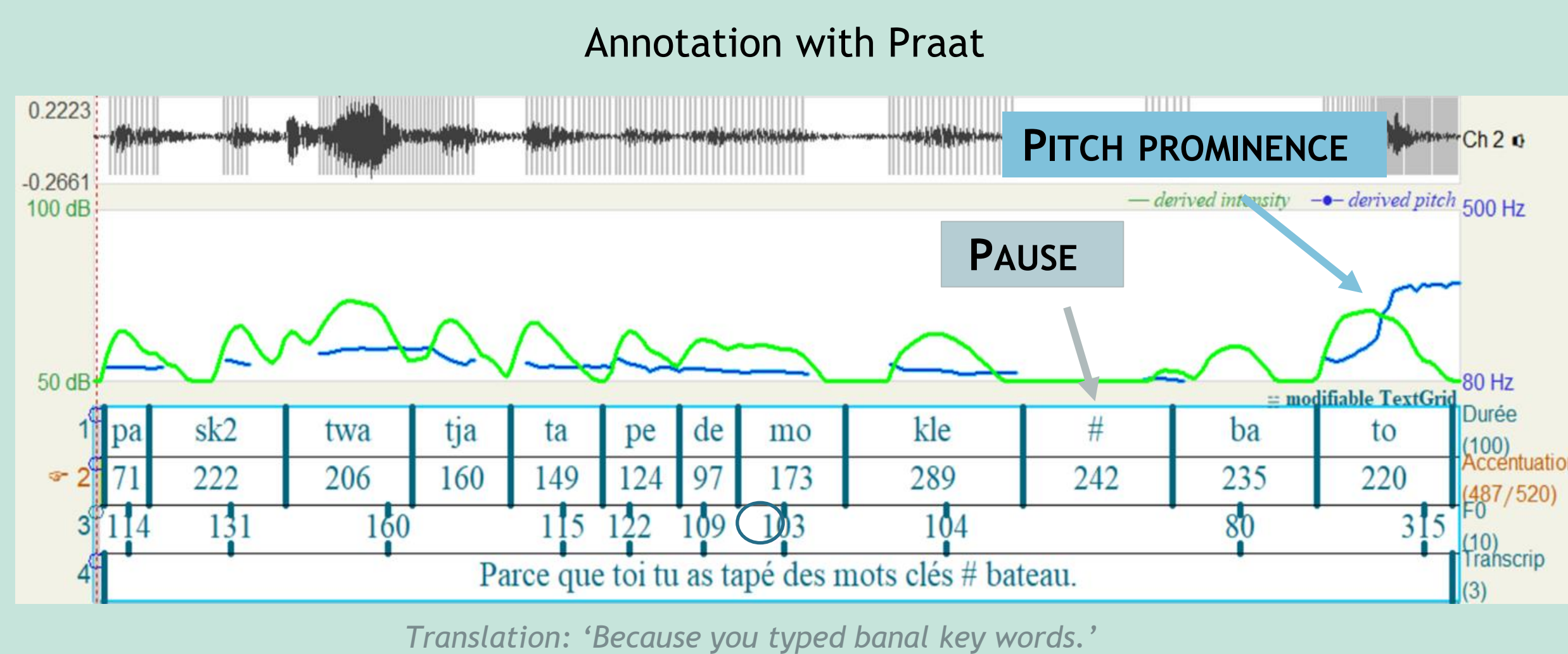
- 30 minutes of each dinner
- 60 utterances containing a focus



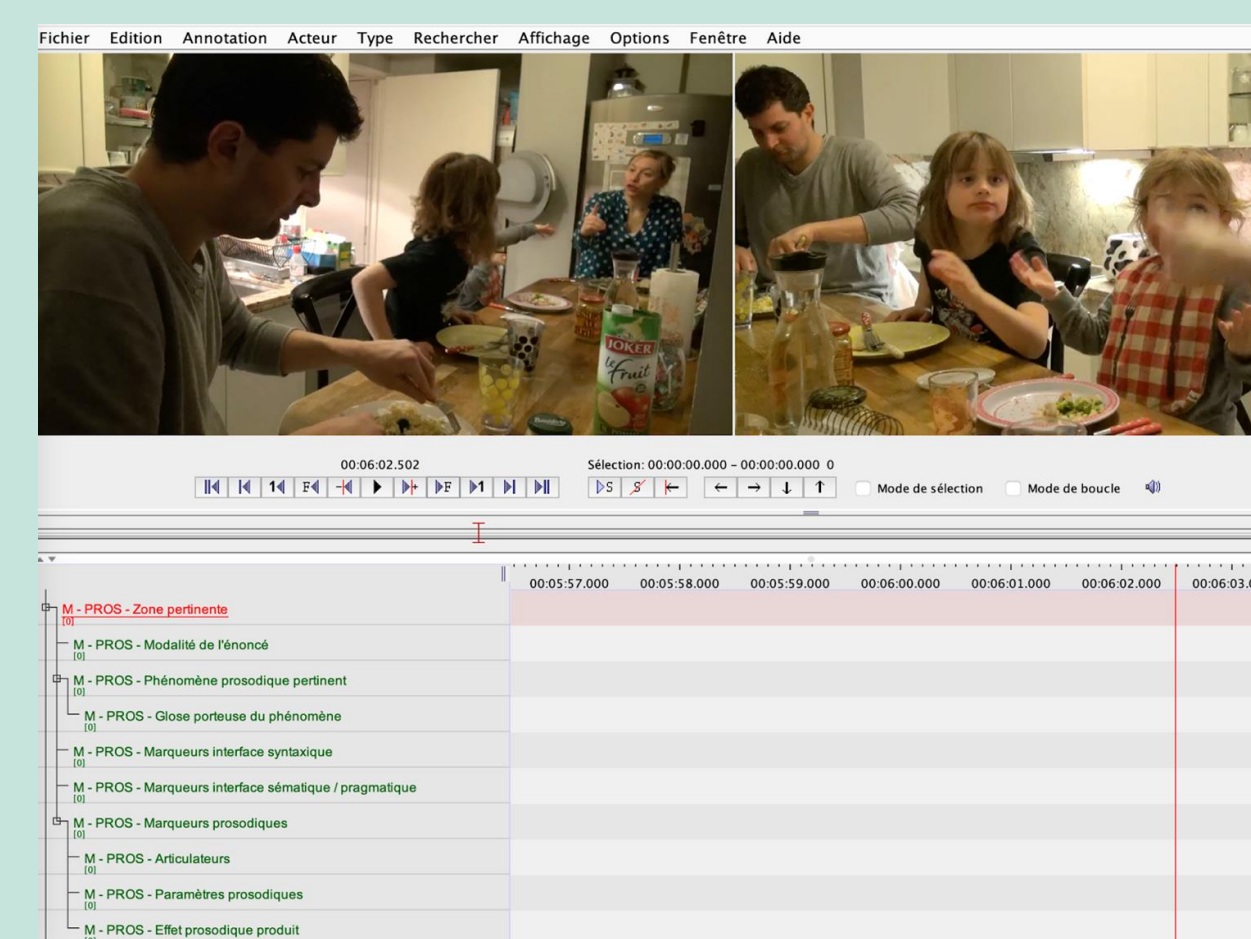
## A set of intermodal prosodic markers

### Vocal markers

- Increasing of pitch and intensity
- Syllabic lengthening
- Hyperarticulation
- Pauses
- Glottal stops



### Annotation with ELAN



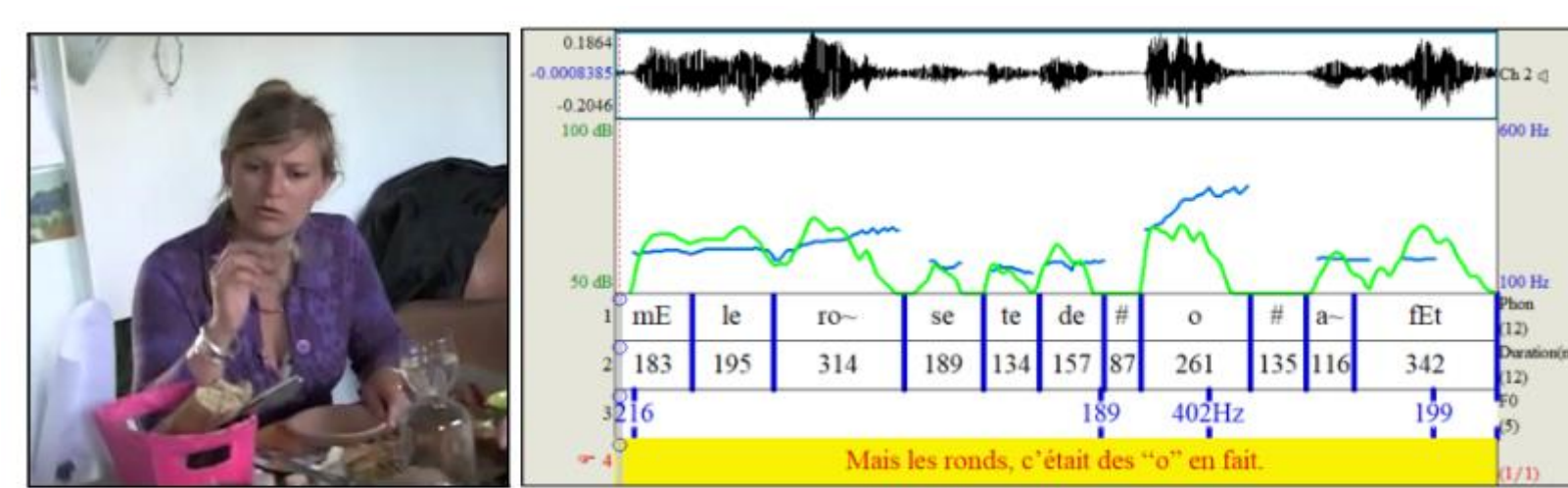
### Gestural markers

Manual and non-manual cues

- Elongations of the movement
  - hold
  - amplitude
  - repetition
- Hyperarticulation
  - acceleration
  - extended fingers
  - mouthing

## Focalization in spoken French

- Prosodic focalization on "o":
  - Syllable lengthening
  - Pitch and intensity peaks
  - Presence of a pause
  - Glottal stop
  - Hyperarticulation
- Body markers:
  - Head movements
  - Right hand (iconic gesture)
  - Eyebrows & mimic
  - Speech synchronization



SPOKEN FRENCH : 'Mais les ronds, c'était des "o" en fait !'

Translation: 'But the circles were actually o's.'

### With scansion pattern

- Prosodic focalization on each syllable:
  - Syllable lengthening
  - Pitch and intensity peaks
  - Hyperarticulation
  - Rhythmic scansion pattern
- Body markers:
  - Left arm movement
  - Speech synchronization

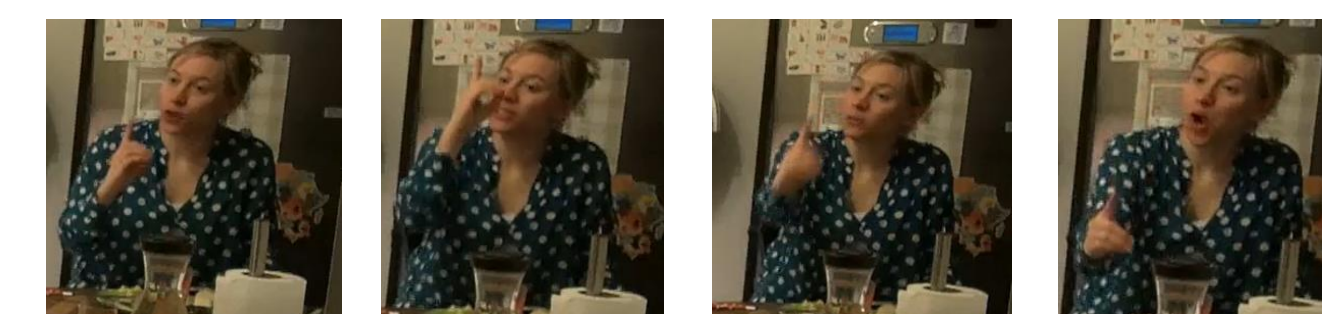


SPOKEN FRENCH : 'Non, c'est pas beaucoup, c'est pas beaucoup !'

Translation: 'No it's not a lot ! It's not a lot !'

## Prosodic markers and patterns

### Adult



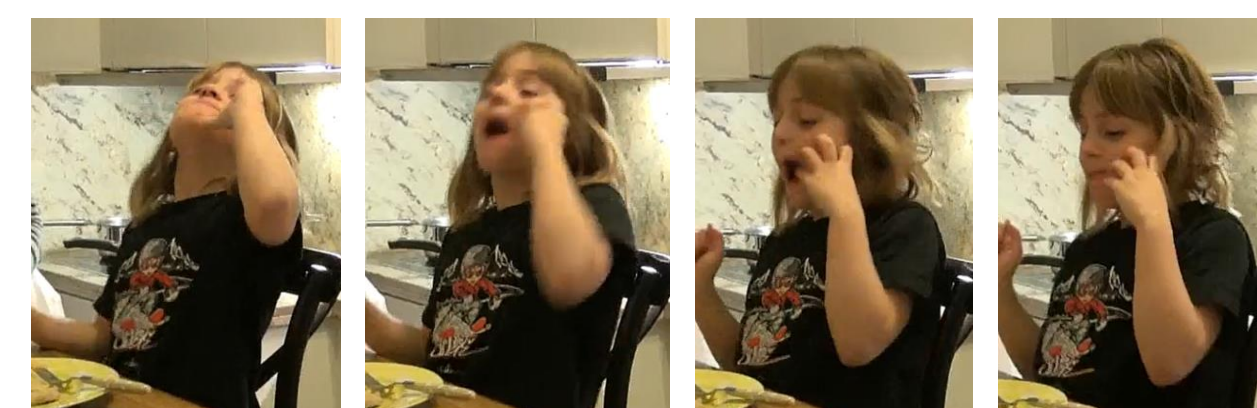
LSF: SIGN-NAME(Ea) FORGET QUESTION SUNDAY!, KNOW GO SIGN-NAME(asso)?

Translation: 'Oh, Charlotte, I forgot, I have a question for you: on (next) Sunday, do you know who is coming to (the association) DLS?'

## Focalization in LSF

### With scansion pattern

### Child



LSF: PLEASE JUICE 'PEACH/APPLE', handshake IDIOT, PLEASE JUICE 'ORANGE/APPLE', knock-gesture PLEASE! JUICE! APPLE! gesture

Translation: 'Please, some ape..., uh no, I'm stupid, please some apor... Ah! I'm really stupid, please some apple juice!!!'

## Conclusion

Spoken French

LSF

Common markers and patterns

Amplified parameters value / Hyperarticulation / Contrastive patterns (including scansion)/ Markedness with (de)synchronisation and coarticulation  
Intermodal parameters for embodied languages



## Bibliography

