



How do teachers adapt their multimodal behaviors when addressing L2 learners?

An exploratory study

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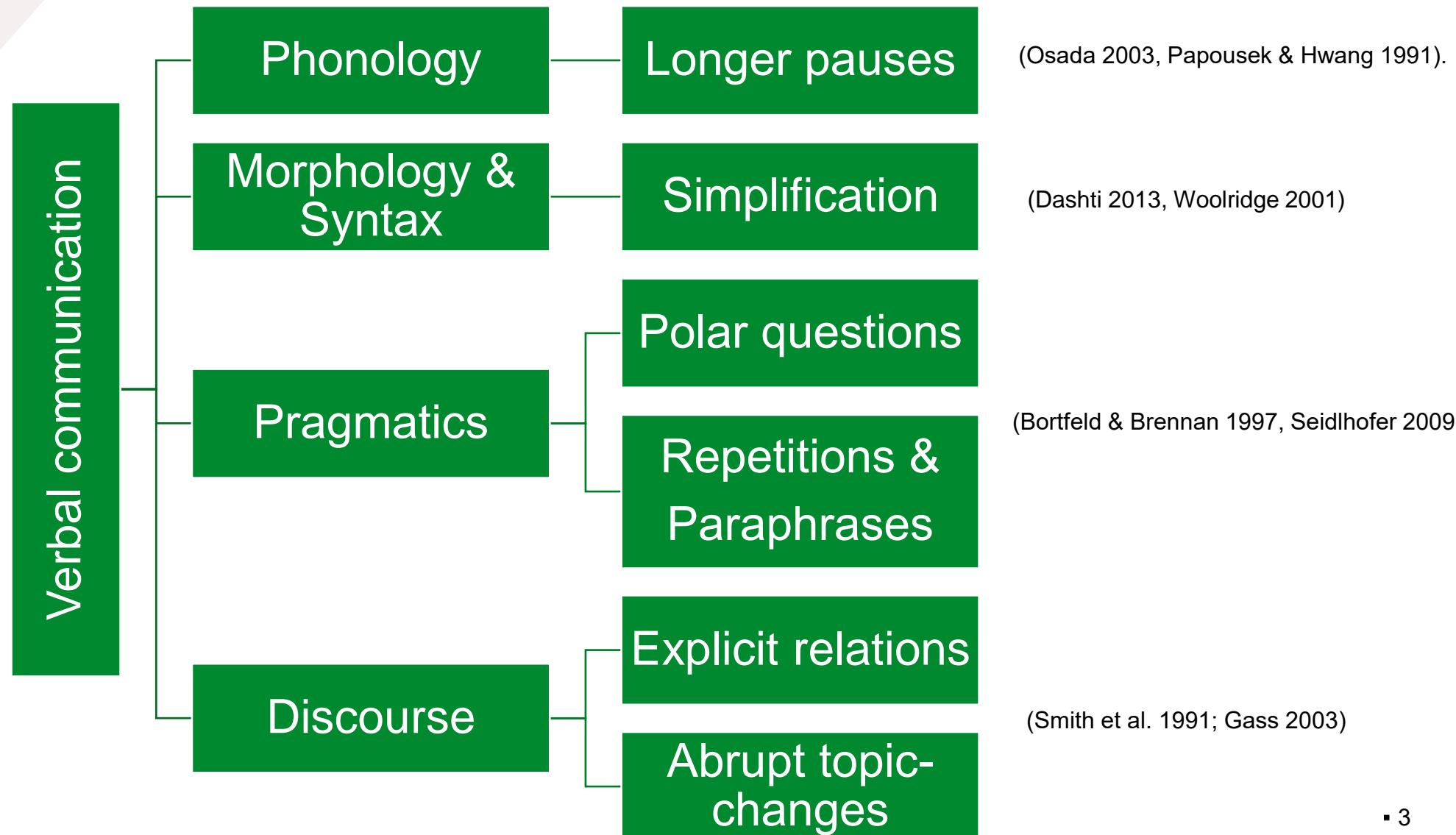


1. Introduction
2. Research objectives
3. Method
4. Results
5. Discussion

Introduction > *Foreigner talk (FT)*



Type of communicative adaptation



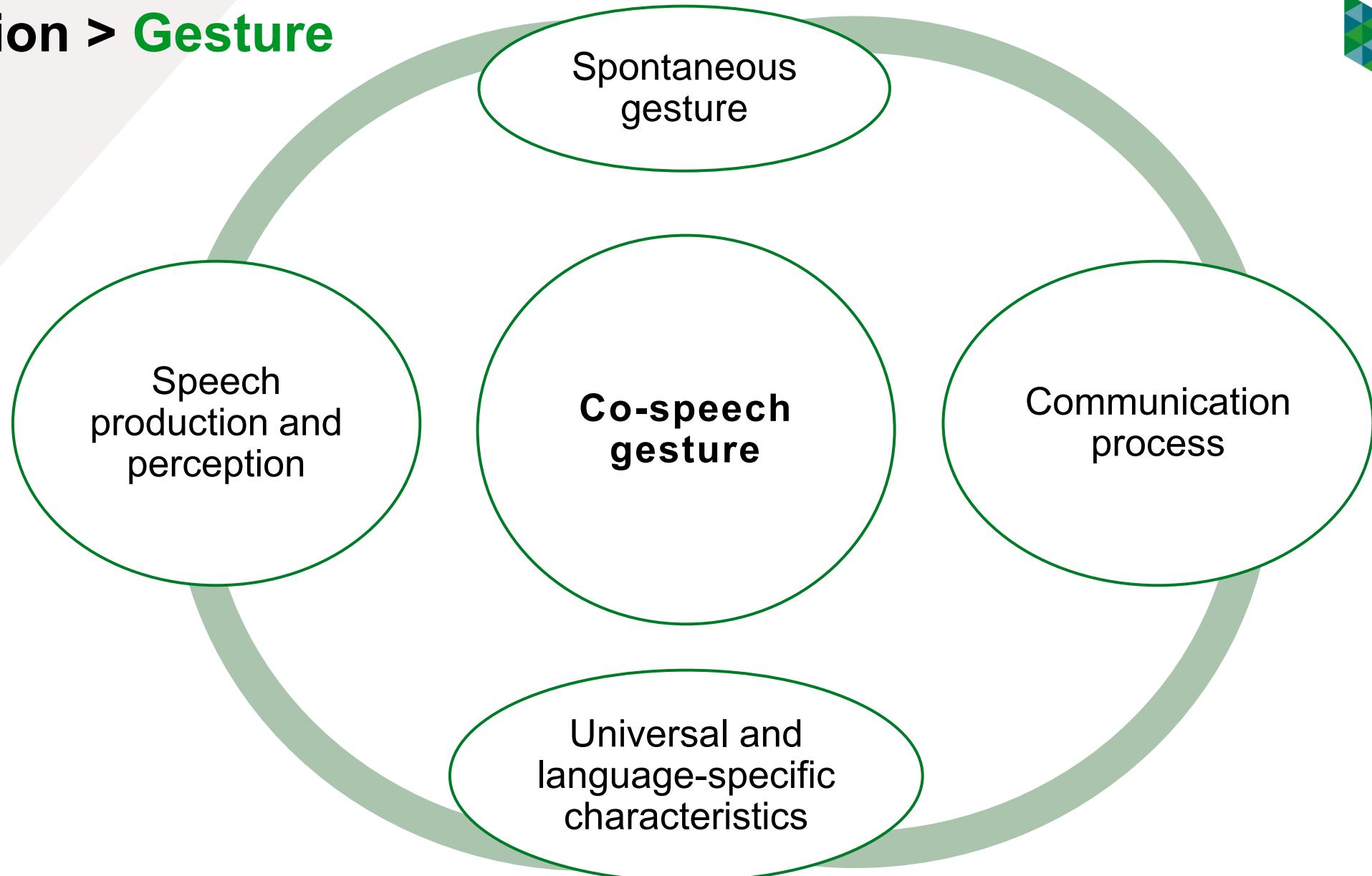
Introduction > Multimodal foreigner talk (MFT)



FT simplification strategies can also be found in hyperforms of bodily behavior.

Gesture and **space** provide powerful means for **disambiguation**
(Gullberg 2011)

Introduction > Gesture



(McNeill 1985, 2005; Kendon 1980, 1994; Alibali et al. 2000; ; Graham & Argyle 1975, Rogers 1978 and Riseborough 1981 mentioned in Kendon 1994; Kitto et al. 2017; Cassel et al. 1999)

Introduction > Multimodal foreigner talk (MFT)



| <i>L1-L2 interactions (>< L1-L1)</i> | |
|--|--|
| L1 speaker | Longer and larger gestures (Tellier & Stam 2012; Tellier, Stam & Ghio 2021) |
| | Increased gesture rate & different gesture types (Azaoui 2013) |
| | Larger gestures, faster gestures and gestures that cover a larger trajectory (Prové, Perrez & Oben 2022) |
| | More iconic gestures (Tellier & Stam 2012; Tellier, Stam & Ghio 2021) |
| | More deictic gestures (Gullberg 2011) |

Introduction > Multimodal foreigner talk (MFT)



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➤ More detailed description of FT features in co-verbal behaviors



Present study > Objectives

Do L1 speakers adapt their bodily behavior when interacting with L2 speakers?

What are the characteristics of *multimodal foreigner talk*?



Present study > Pilot study

Classroom interactions

**L1 teacher - L1
students**

**L1 teacher – L2
students**



Participants

Target group

- ▶ Teacher: L1 French
- ▶ Students: L2 French
- ▶ 15 adult learners with different backgrounds
- ▶ French as a foreign language: A2 course
- ▶ Evening classes

Control group

- ▶ Teacher: L1 French
- ▶ Students: L1 French
- ▶ Around 20 first-year students (bachelor in primary education)
- ▶ *Français et didactique de la discipline*

Present study> Method



Sample

Target group

- ▶ One class (approx. 2 hours)
- ▶ Analyzed sample
 - ▶ 25'
 - ▶ Lexical proficiency task >
idiomatic expressions

Control group

- ▶ One class (approx. 2 hours)
- ▶ Analyzed sample
 - ▶ 25'
 - ▶ Analysis of gender
stereotypes in text books
and albums

Present study > Method > Coding



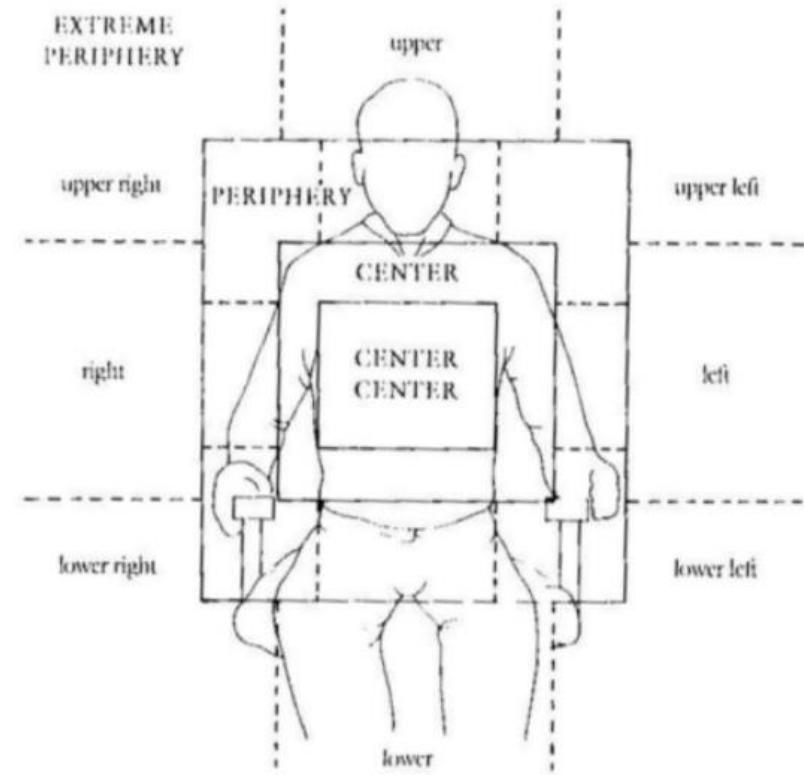
| Speech | |
|------------------|---|
| Teacher's speech | |
| Verbal strategy | Definition, example, linguistic information, pedagogical recommendations, analysis... |
| Concept | |
| Interaction type | One student, several students, classroom |
| Teacher space | Front center, front left, front right, close to student |



Present study > Method > Coding

Gesture

| | |
|--------------------------------|--|
| Primary & secondary dimensions | Iconic, metaphoric, deictic, <i>beat</i> , emblem, interactive, Butterworth, aborted |
| Gesture space | Center, center center, periphery, extreme periphery |
| Meaning | |
| Function | Inform, assess, manage, other |
| Function specification | Lexical information, instructions, support, question, structuring, explanation, recommendation |



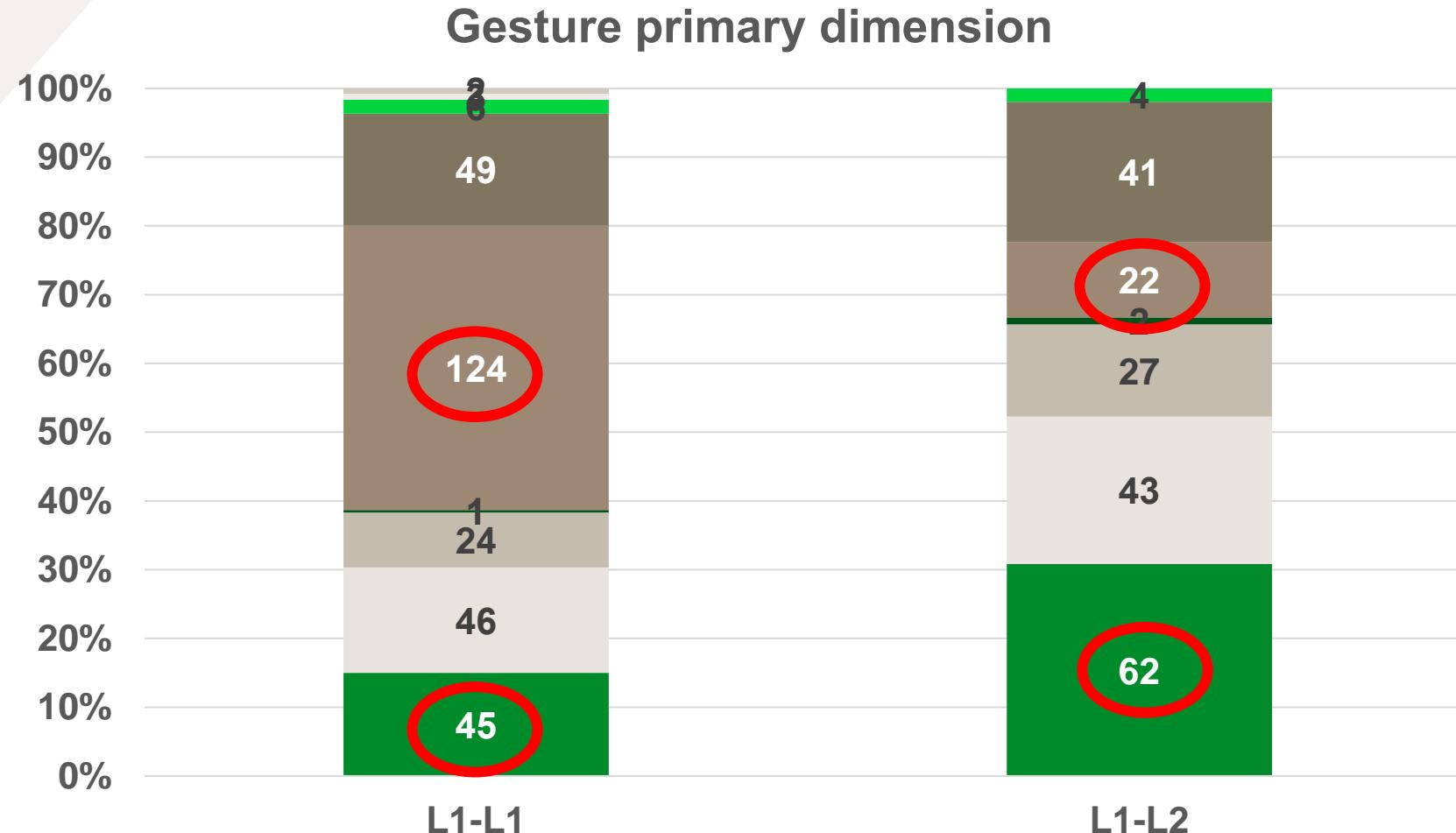


Results > General tendencies

| Variables | L1-L2 | L1-L1 |
|--|--------------------------|---------------------------|
| Number of gestures | 206 | 300 |
| Total duration | 00:23:30 (hh:mm:ss) | 00:21:43 (hh:mm:ss) |
| Gesture rate #1 (N gestures per minute) | 8.76 gestures per minute | 13.82 gestures per minute |
| Number of words | 2.430 | 2.968 |
| Gesture rate #2 N gesture per word | 0.084 gesture per word | 0.101 gesture per word |
| Average gesture duration | 1.80 sec. | 1.31 sec. |
| Average stroke duration | 0.71 sec. | 0.66 sec. |



Results > Gesture primary dimension

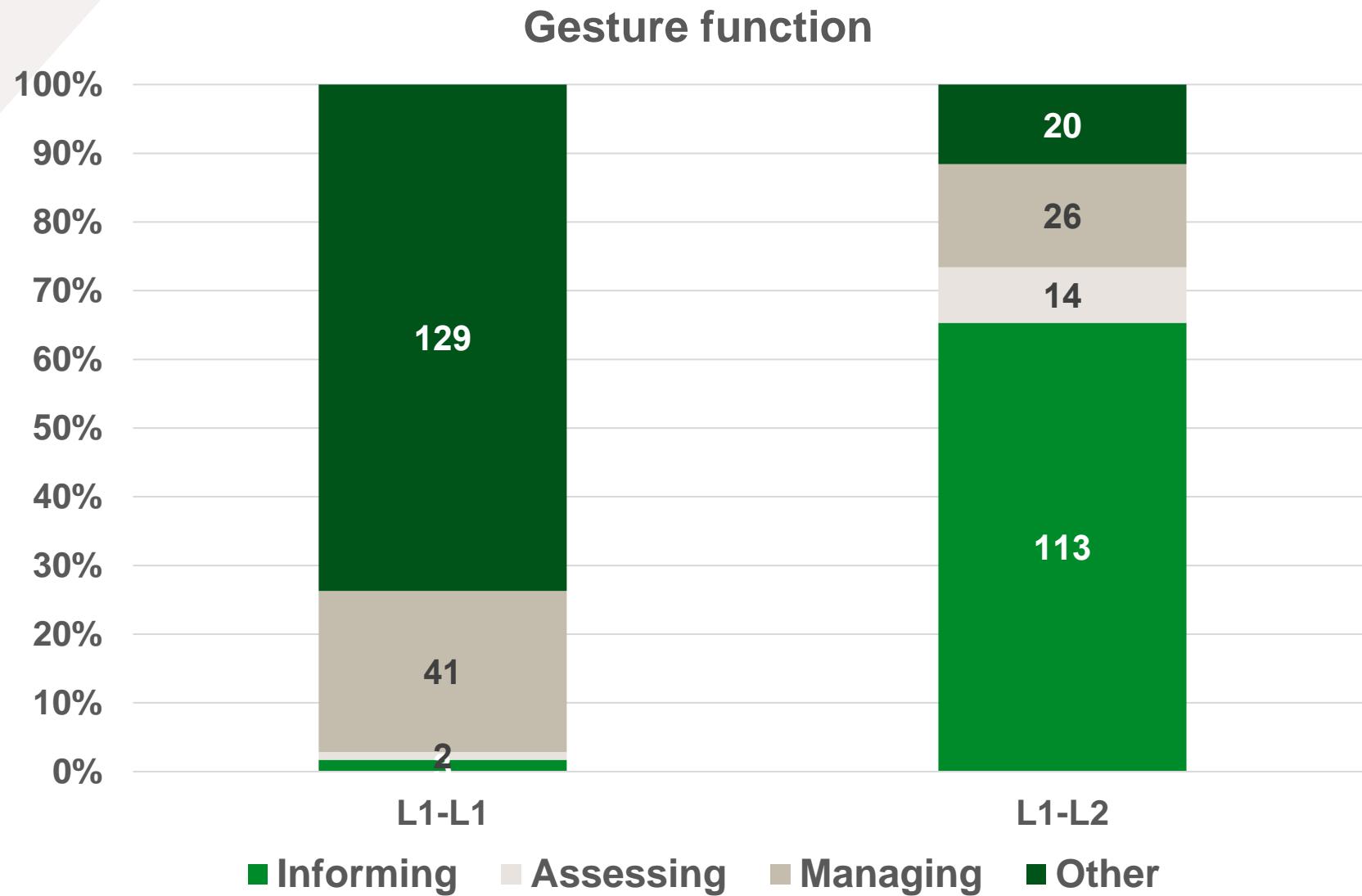


$\chi^2 = 35.7576$; p-value < .00001

■ Iconic ■ Deictic ■ Metaphoric
■ Emblem ■ Beat ■ Pragmatic
■ Butterworth ■ Aborted ■ Non-identifiable

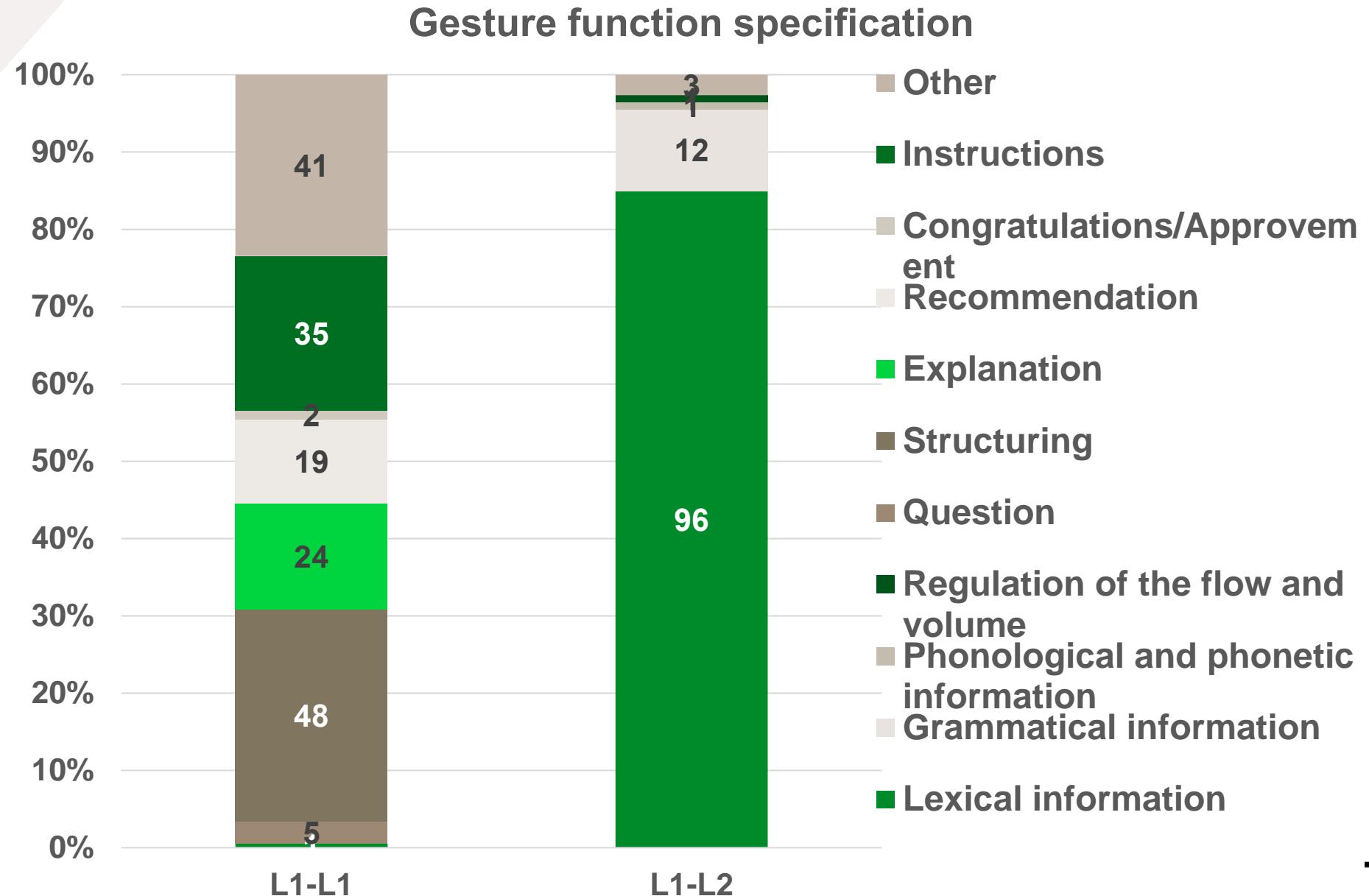


Results > Gesture function





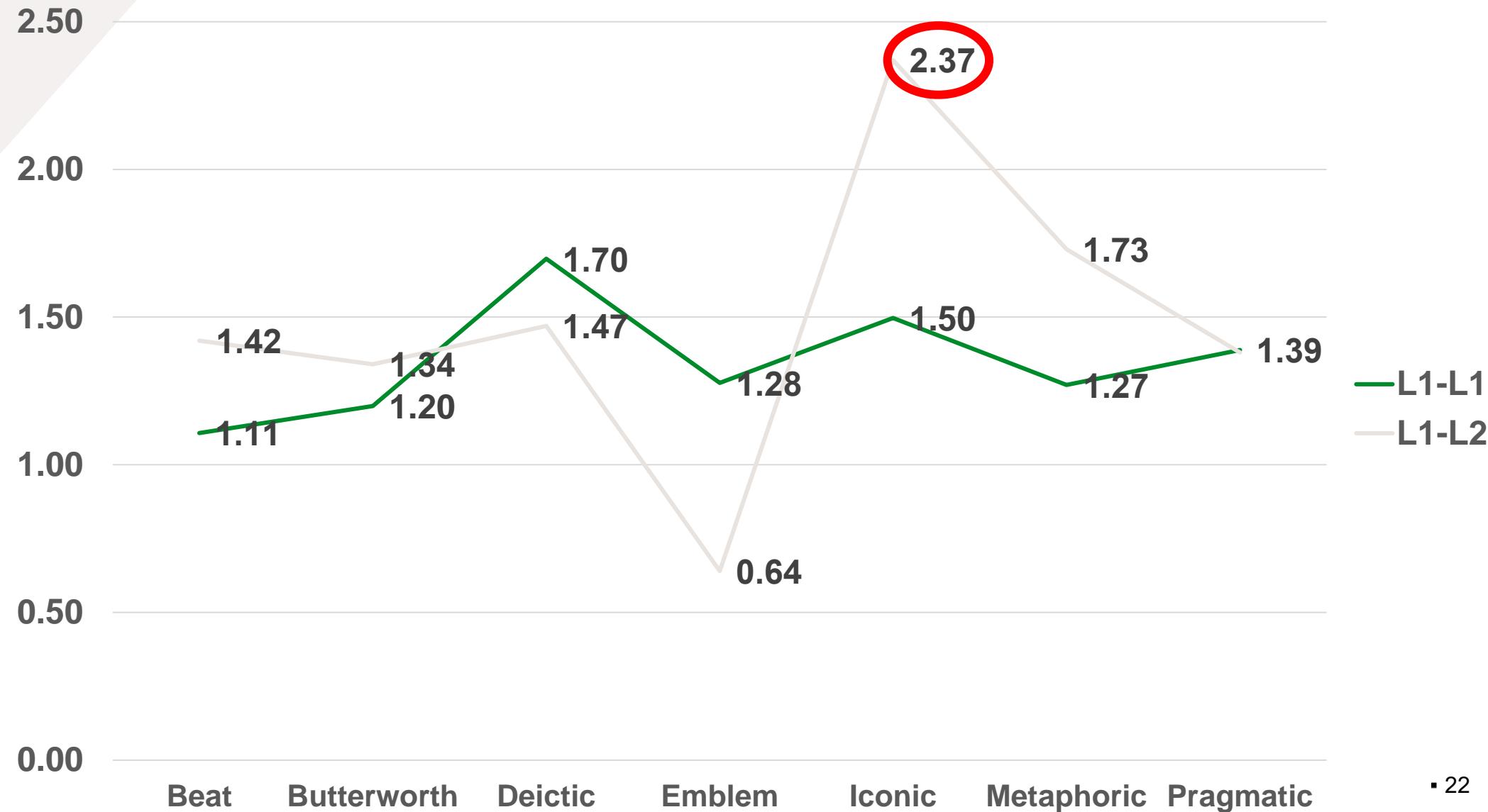
Results > Gesture function specification





Results > Gesture dimension and gesture duration

Mean gesture duration per gesture dimension





Results > Gesture space

L1-L1

Extreme periphery 40; 13.75%

Periphery 89; 30.58%

Center 122; 41.92%

Center Center 27; 9.28%

Extended arm 13; 4.47%

L1-L2

Extreme periphery 50; 25%

Periphery 49; 25%

Center 57; 28%

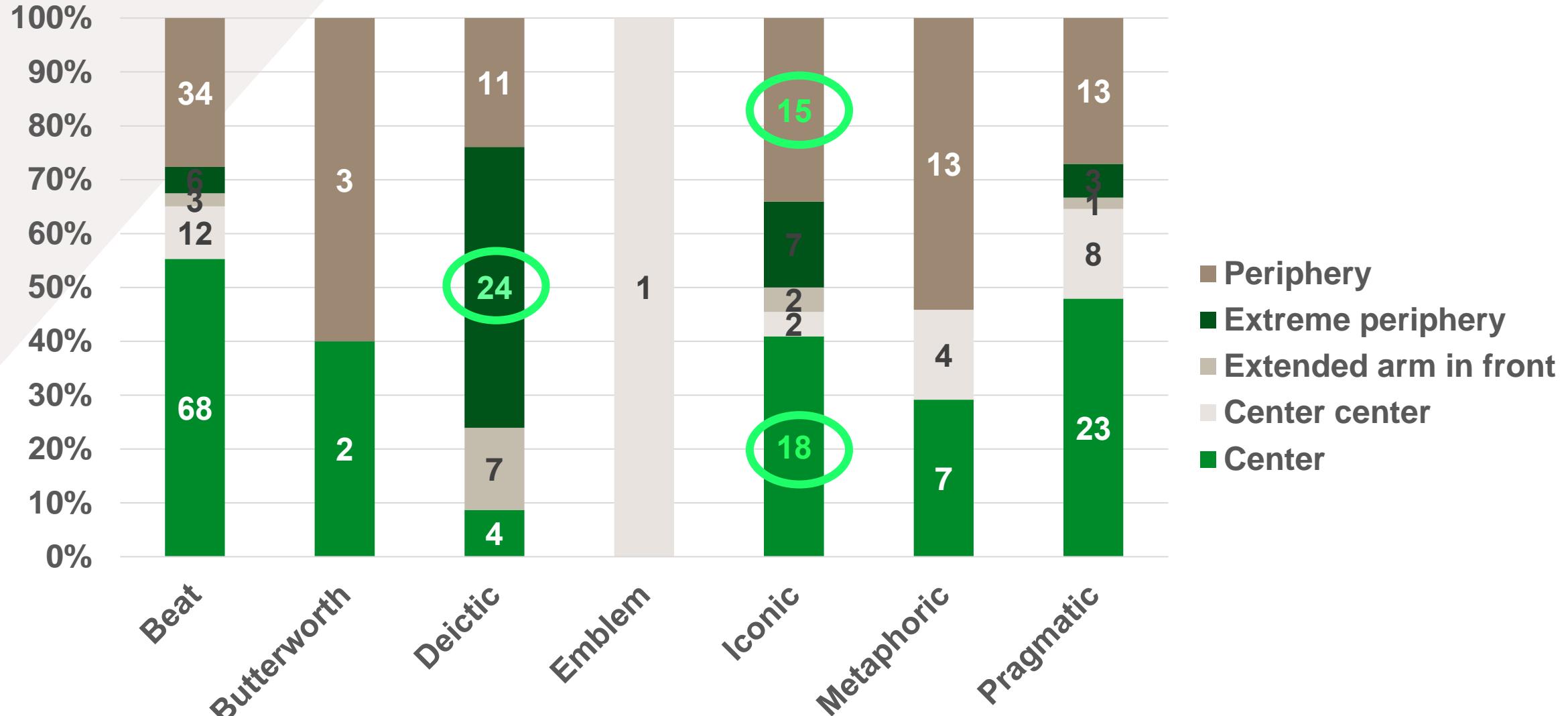
Center Center 25; 13%

Extended arm 17; 8%



Results > Gesture dimension and gesture space

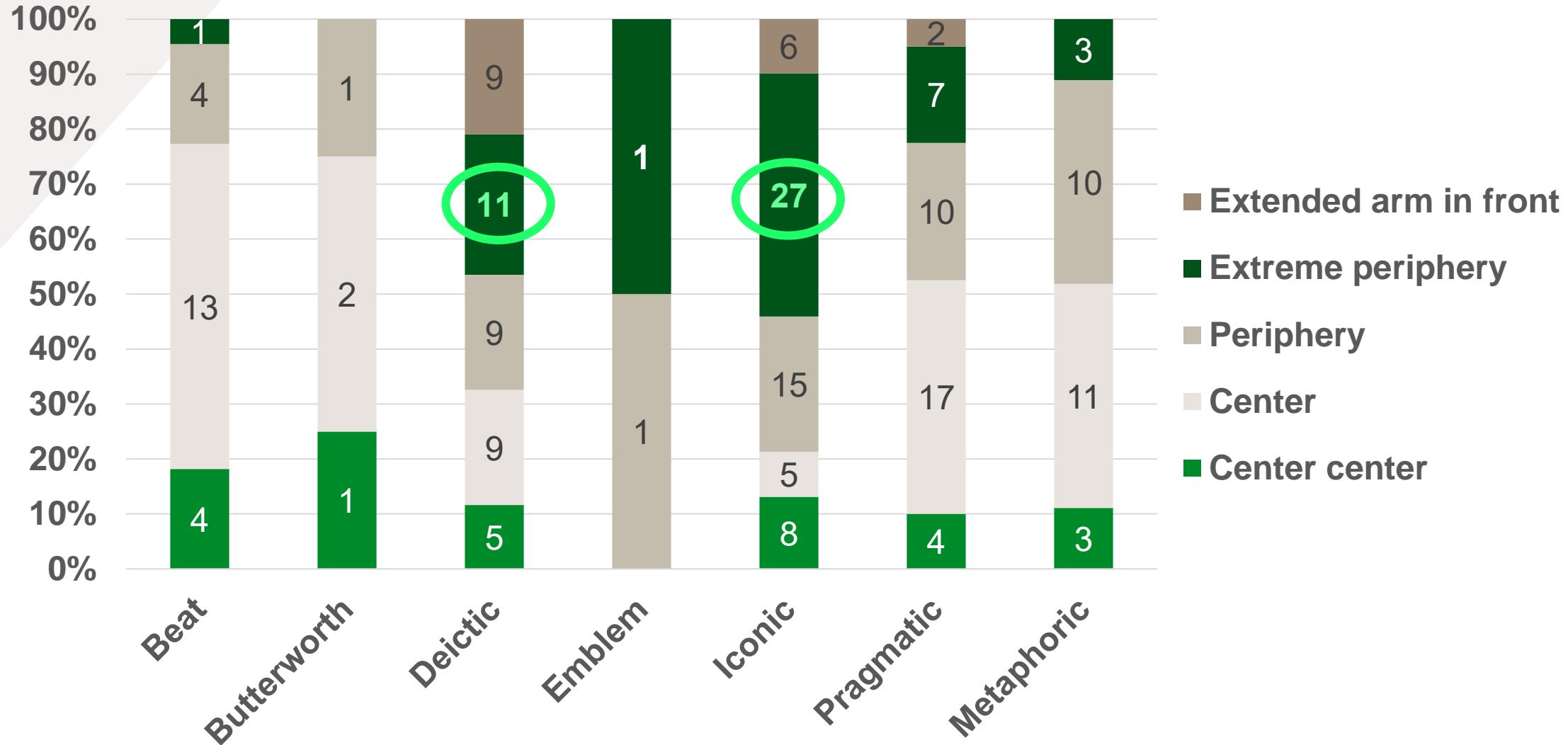
Distribution of gesture dimension across gesture space L1-L1



Results > Gesture dimension and gesture space



Distribution of gesture dimension across gesture space L1-L2



Examples of iconic gestures (L1-L2)



Example 1

[Example 1 – Gesture 73]

Context : the students have to explain this idiom.

Fr. « Décrocher la lune. »

En. “to take the stars out of the sky.” (in French: the moon)

[Example 2 – Gesture 28]

Context : the students have to explain this idiom.

Fr. « être lessivé. Si vous êtes dans une machine à laver et que elle tourne elle tourne elle tourne elle tourne, vous allez être comment après? »

En. “To be exhausted. If you're in a washing machine and it's spinning it's spinning it's spinning it's spinning, how are you going to be afterwards?” (être lessivé: to be washed (literally))

Examples of deictic gestures (L1-L2)



[Gestures 20-23]

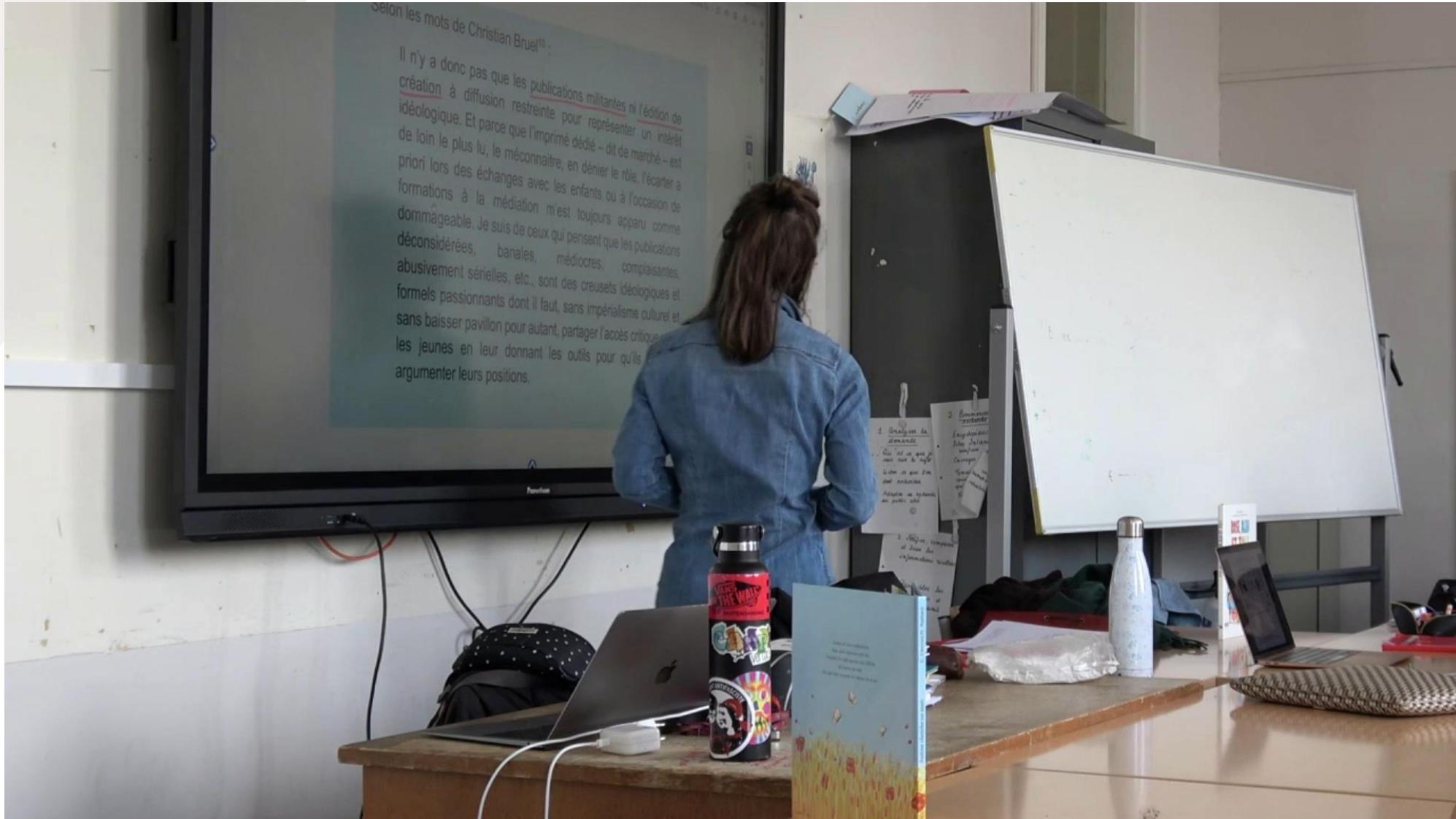
Context : a student has just defined an idiom and he has made a mistake. The teacher comes back on his mistake.

Fr. « Avec les infinitifs la négation vient devant donc ‘ne pas venir’ c'est pas ‘ne venir pas.’ »

En. “With infinitives the negation comes before so ‘ne pas venir’ it’s not ‘ne venir pas.’”



Examples of beats (L1-L1)





Examples of deictic gestures (L1-L1)



Present study> Discussion & Conclusion



- ▶ L1-L1 vs. L1-L2 interactions
 - ▶ **More** gestures in L1-L1 (>< Azaoui 2013)
 - ▶ **Higher gesture density** in L1-L1 (number of gestures per minute, per word) (>< Azaoui 2013)
 - ▶ Gestures: significantly **wider** in L1-L2 (periphery > center)
 - ▶ // Tellier & Stam 2012; Tellier, Stam & Ghio 2021; Prové, Perrez & Oben 2022
 - ▶ Especially iconic gestures
 - ▶ But deictic gestures in periphery and extreme periphery in L1-L1
 - ▶ Gestures: **longer duration** in L1-L2 (gesture + stroke)
 - ▶ // Tellier & Stam 2012; Tellier, Stam & Ghio 2021
 - ▶ >< Prové, Perrez & Oben 2022
 - ▶ Especially iconic gestures
 - ▶ But deictic gestures in L1-L1

Present study> Discussion & Conclusion



- ▶ L1-L1 vs. L1-L2 interactions
 - ▶ Significantly more **referential** gestures (iconic, deictic, metaphoric, emblems) in **L1-L2** and **non-referential gestures** in **L1-L1** (beats, pragmatic, Butterworth)
 - ▶ L1-L1: gesture functions > “common” co-verbal gestures, class management, discourse structuring, pedagogical gestures, instructions
 - ▶ L1-L2: gesture functions > lexical and grammatical information



Present study> Further research

- ▶ **Further research** > interaction between **formal features** (gesture rate, gesture size, gesture space), **functional features** (gesture functions) and **contextual features** (types of tasks).
- ▶ More samples of different tasks
- ▶ More participants
- ▶ Within design

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