



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

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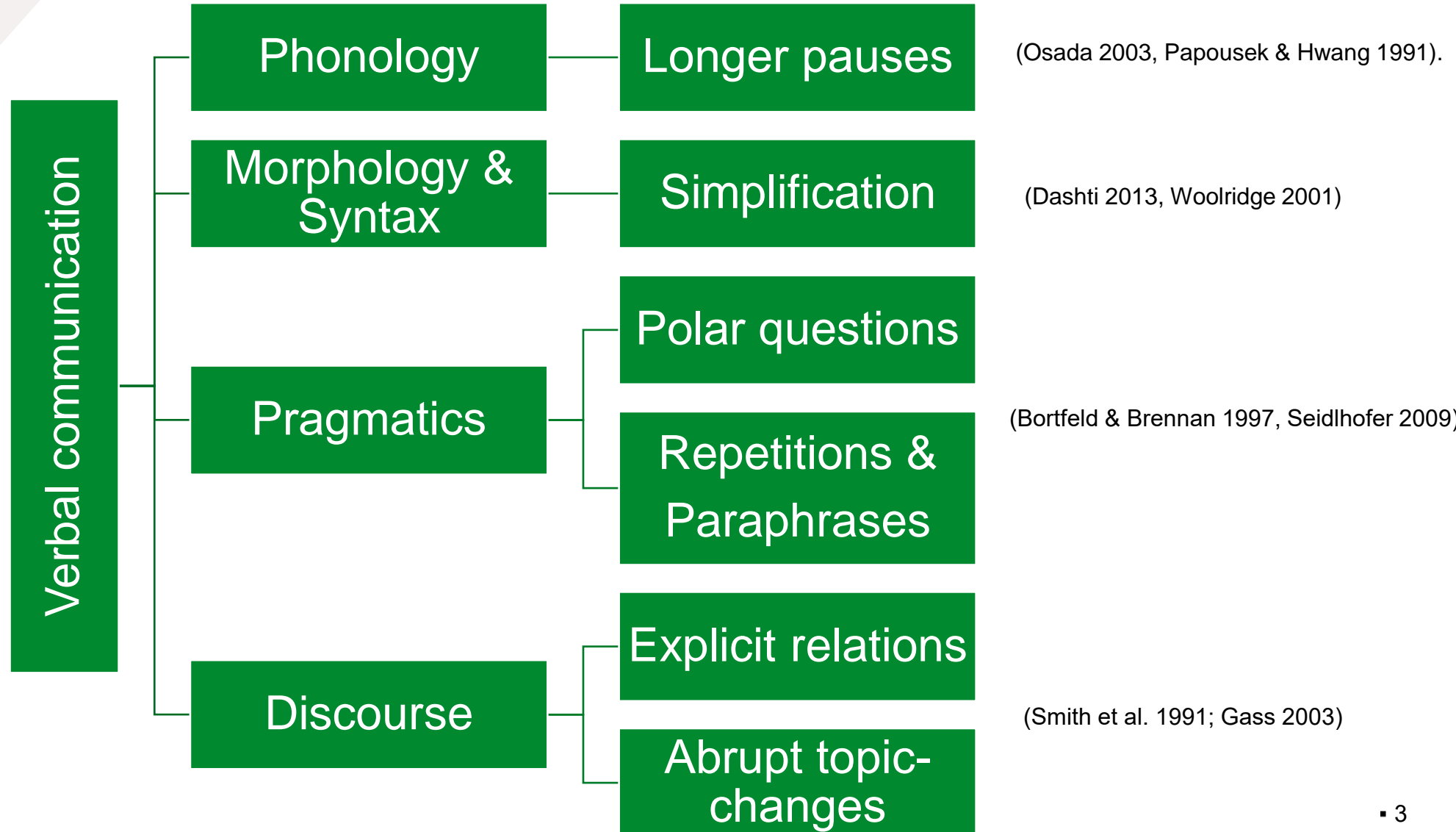


1. Introduction
2. Research objectives
3. Method
4. Results
5. Discussion

Introduction > *Foreigner talk (FT)*



Type of communicative adaptation



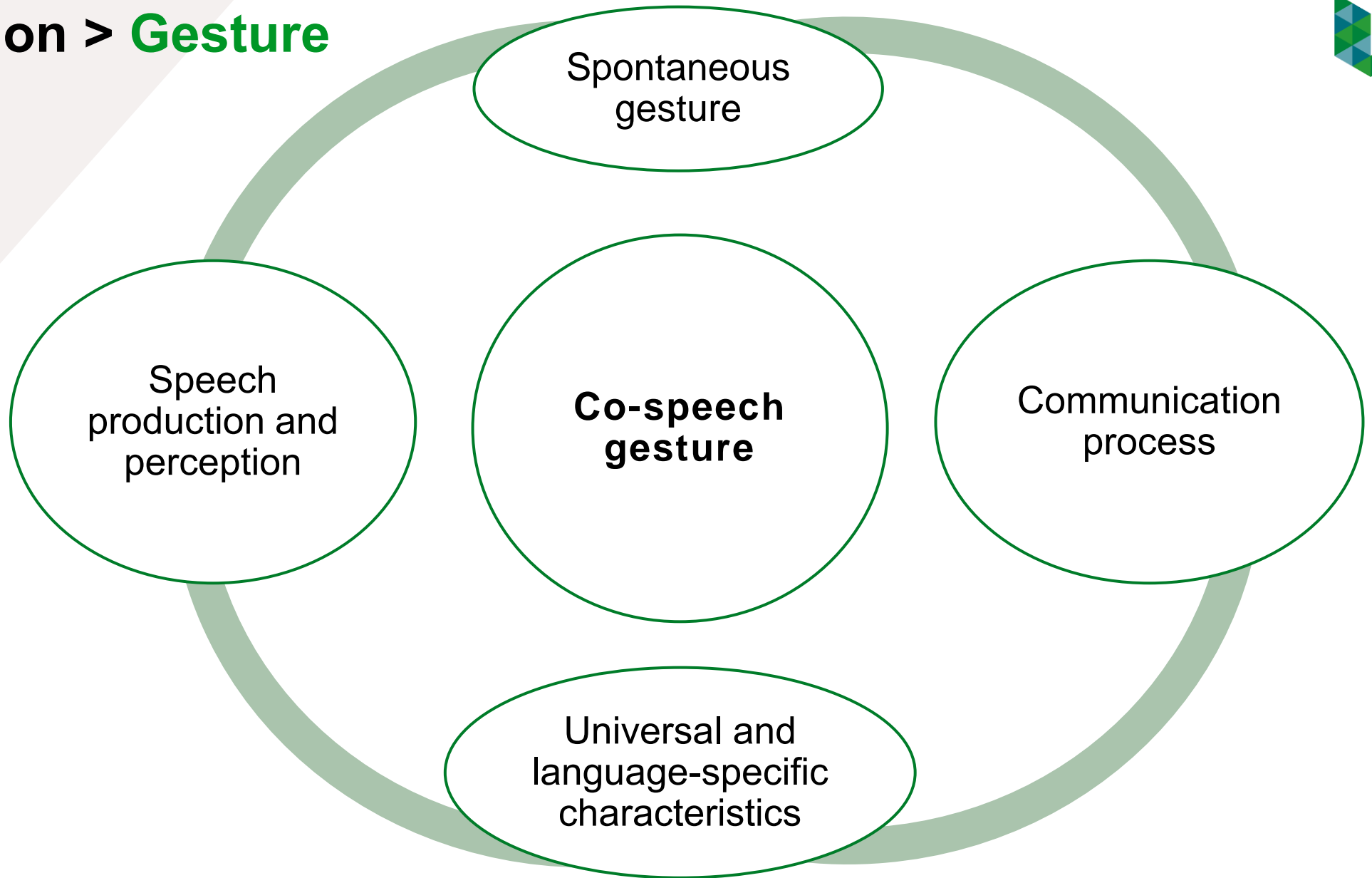
Introduction > Multimodal foreigner talk (MFT)



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

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

Introduction > Gesture



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)



L1-L2 interactions (>< L1-L1)

L1 speaker

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More deictic gestures (Gullberg 2011)

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



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**

Present study > Method



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



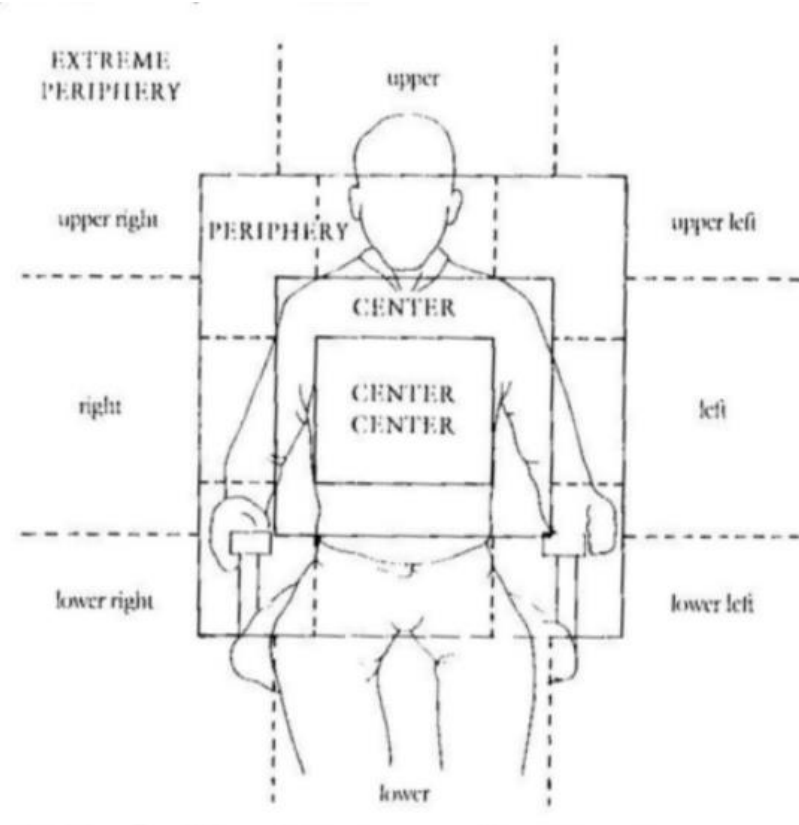
Speech	
Teacher's speech	
Verbal strategy	Definition, example, linguistic information, pedagogical recommendations, analysis...
Concept	
Interaction type	One student, several students, classroom
Teacher space	Front center, front left, front right, close to student

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

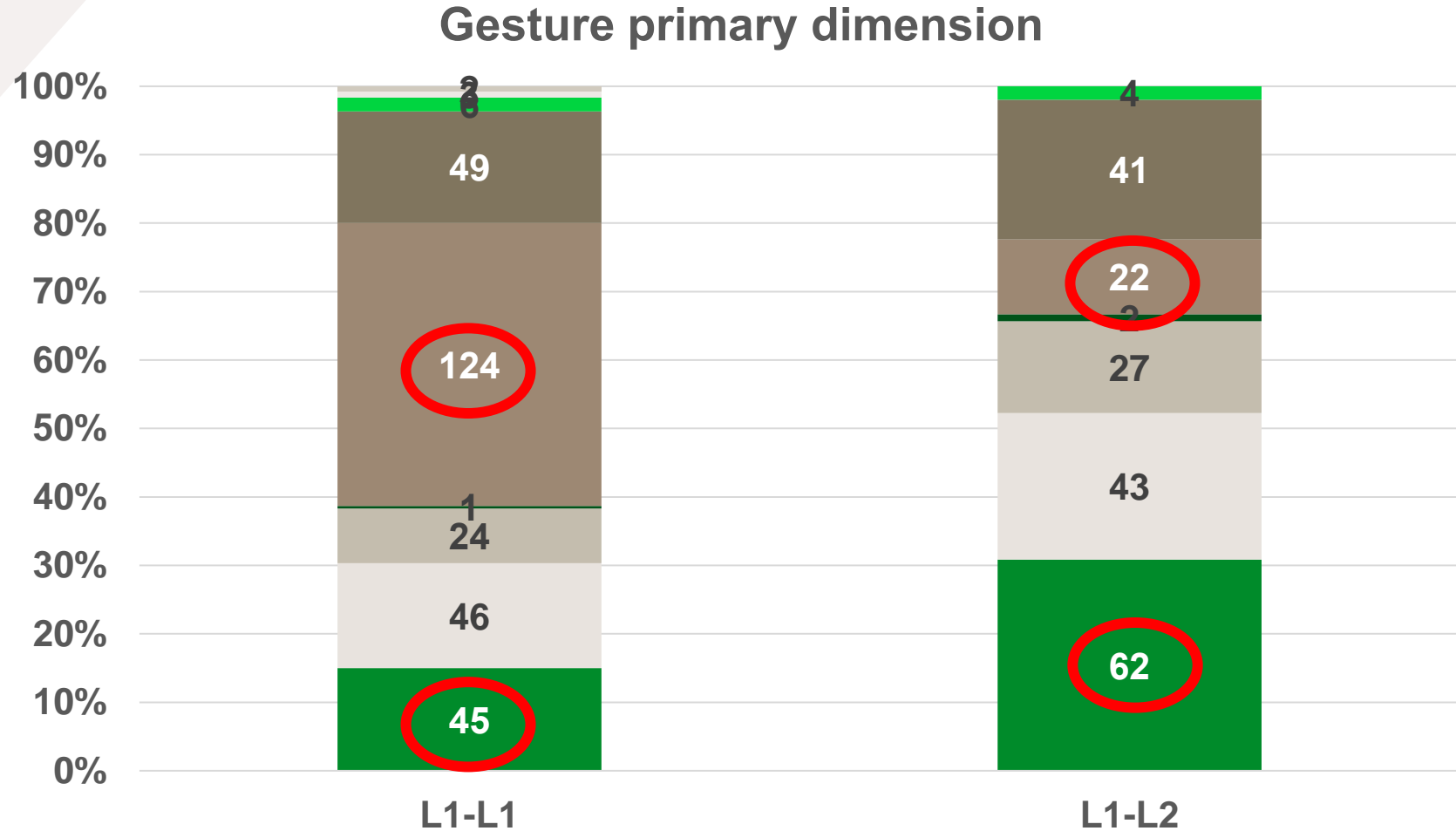


Results > General tendencies



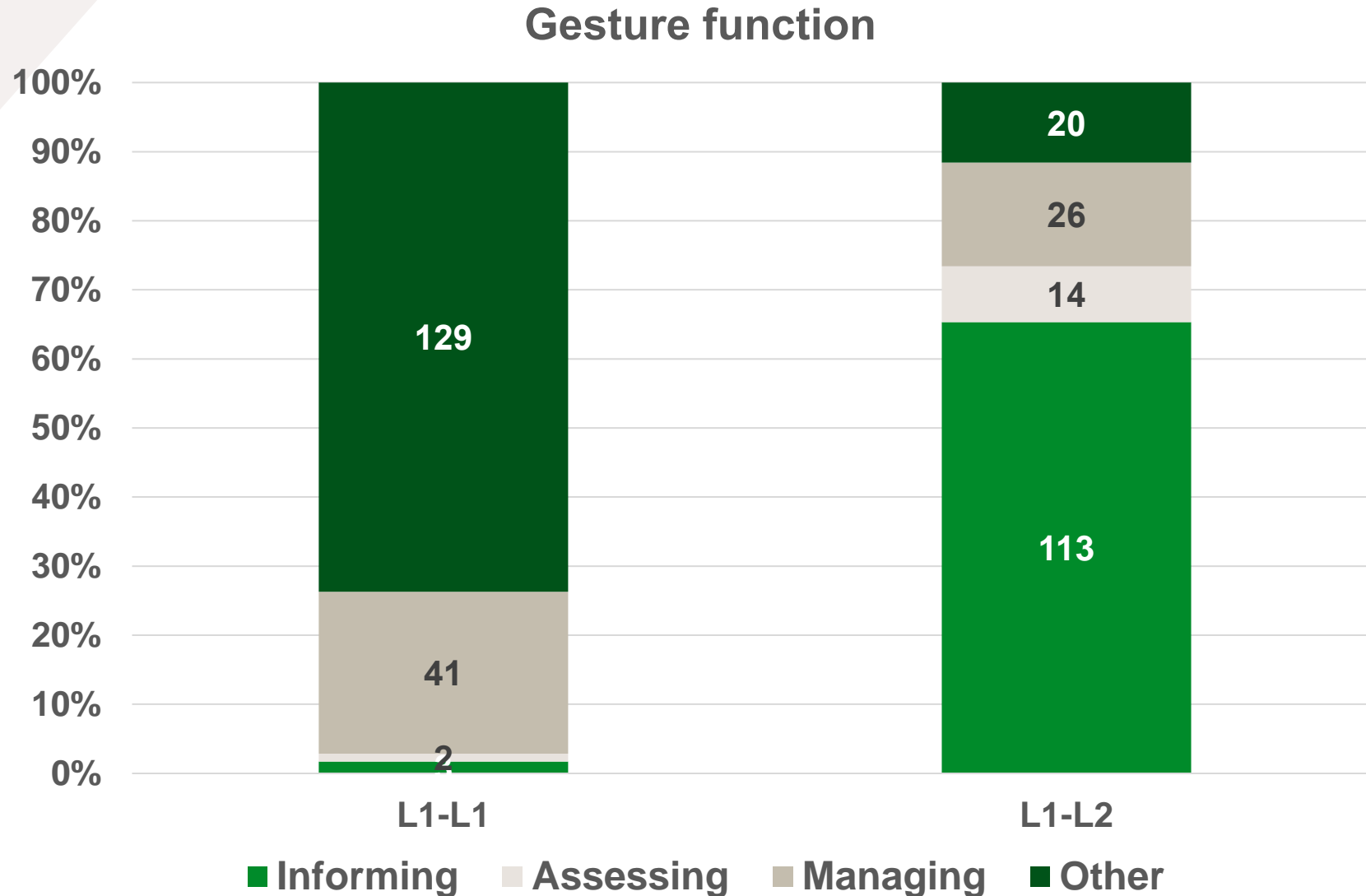
Variables	L1-L2	L1-L1
Number of gestures	206	300
Total duration	00:23:30 (hh:mm:ss)	00:21:43 (hh:mm:ss)
Gesture rate #1 (N gestures per minute)	8.76 gestures per minute	13.82 gestures per minute
Number of words	2.430	2.968
Gesture rate #2 N gesture per word	0.084 gesture per word	0.101 gesture per word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

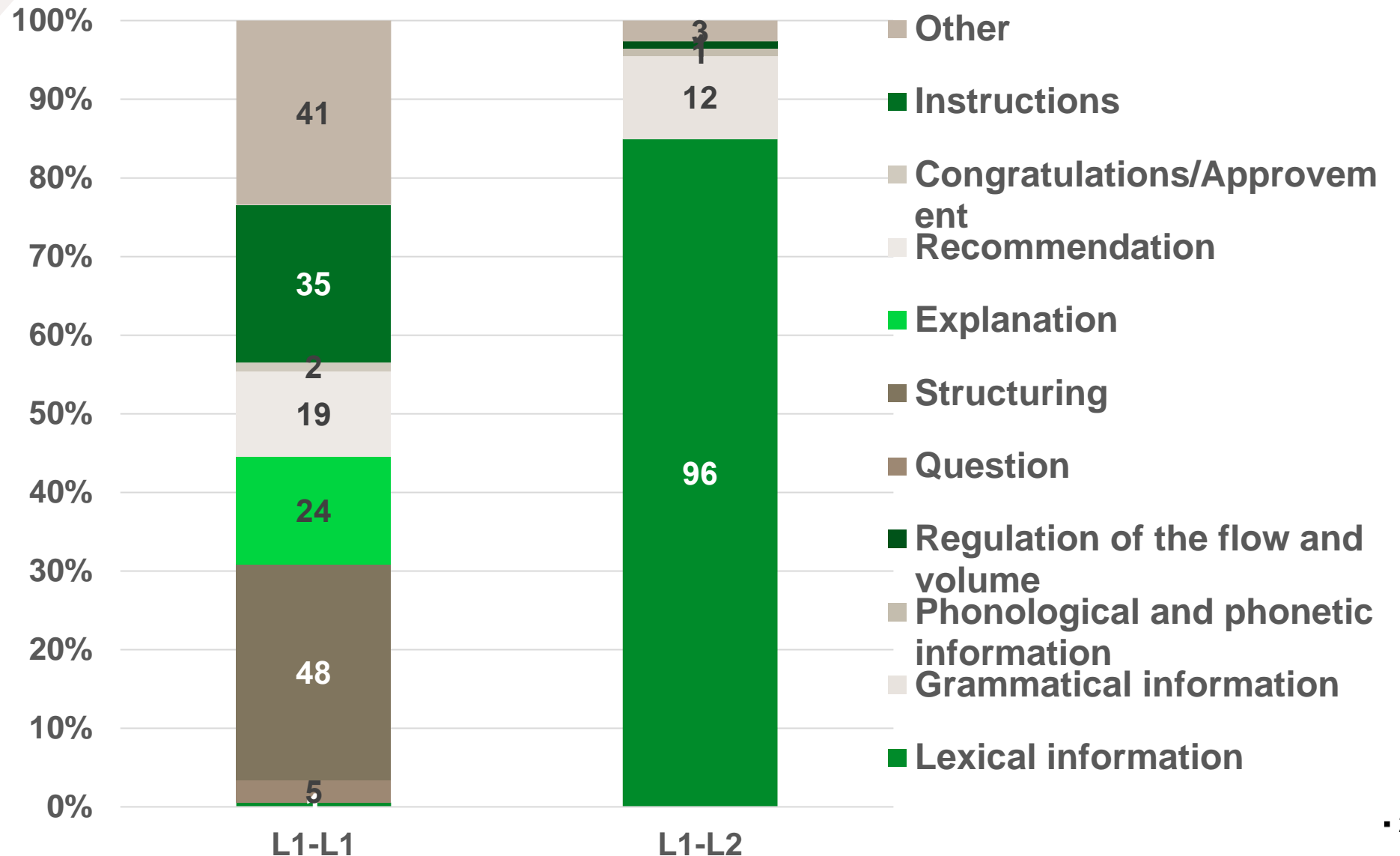
Results > Gesture function



Results > Gesture function specification



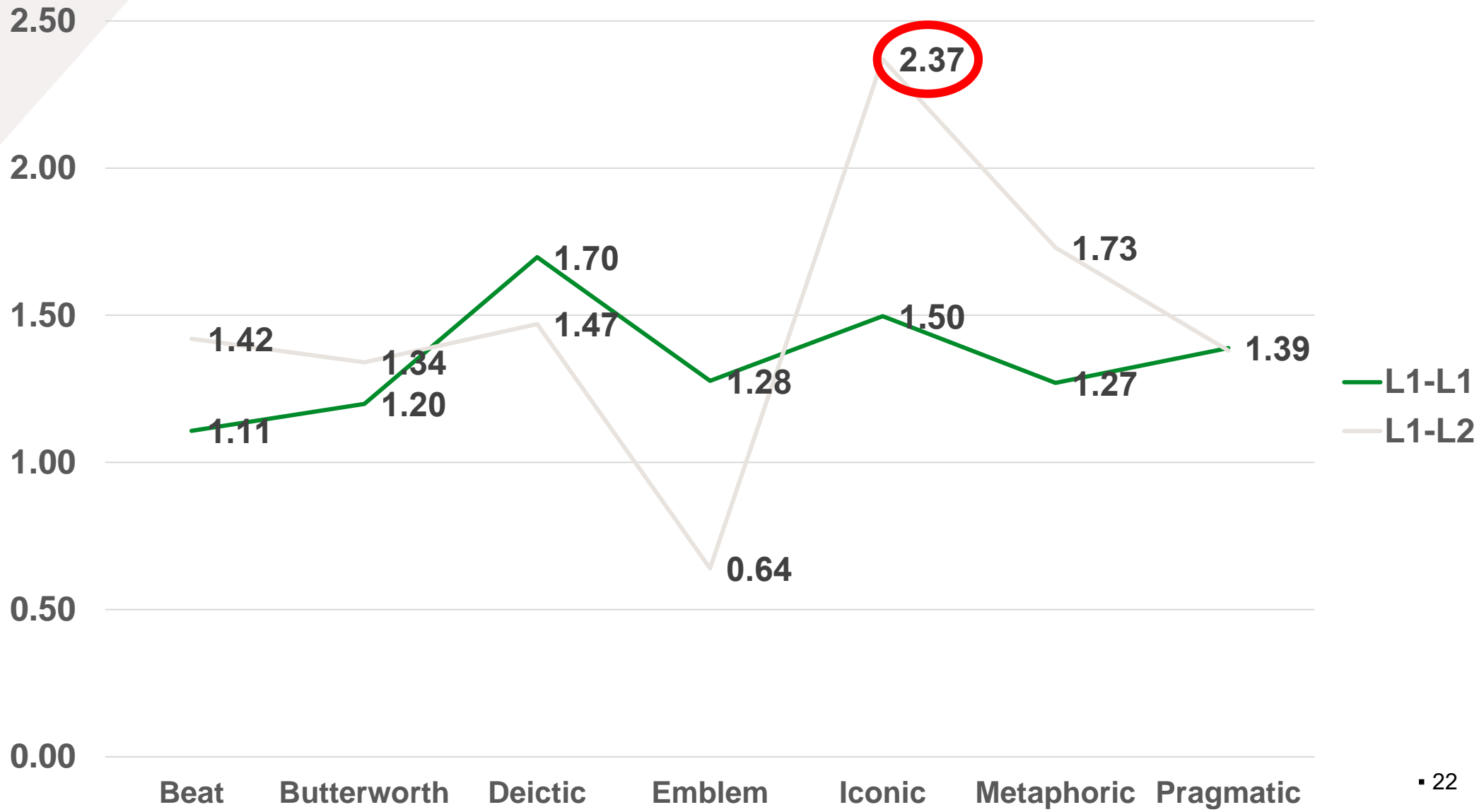
Gesture function specification



Results > Gesture dimension and gesture duration



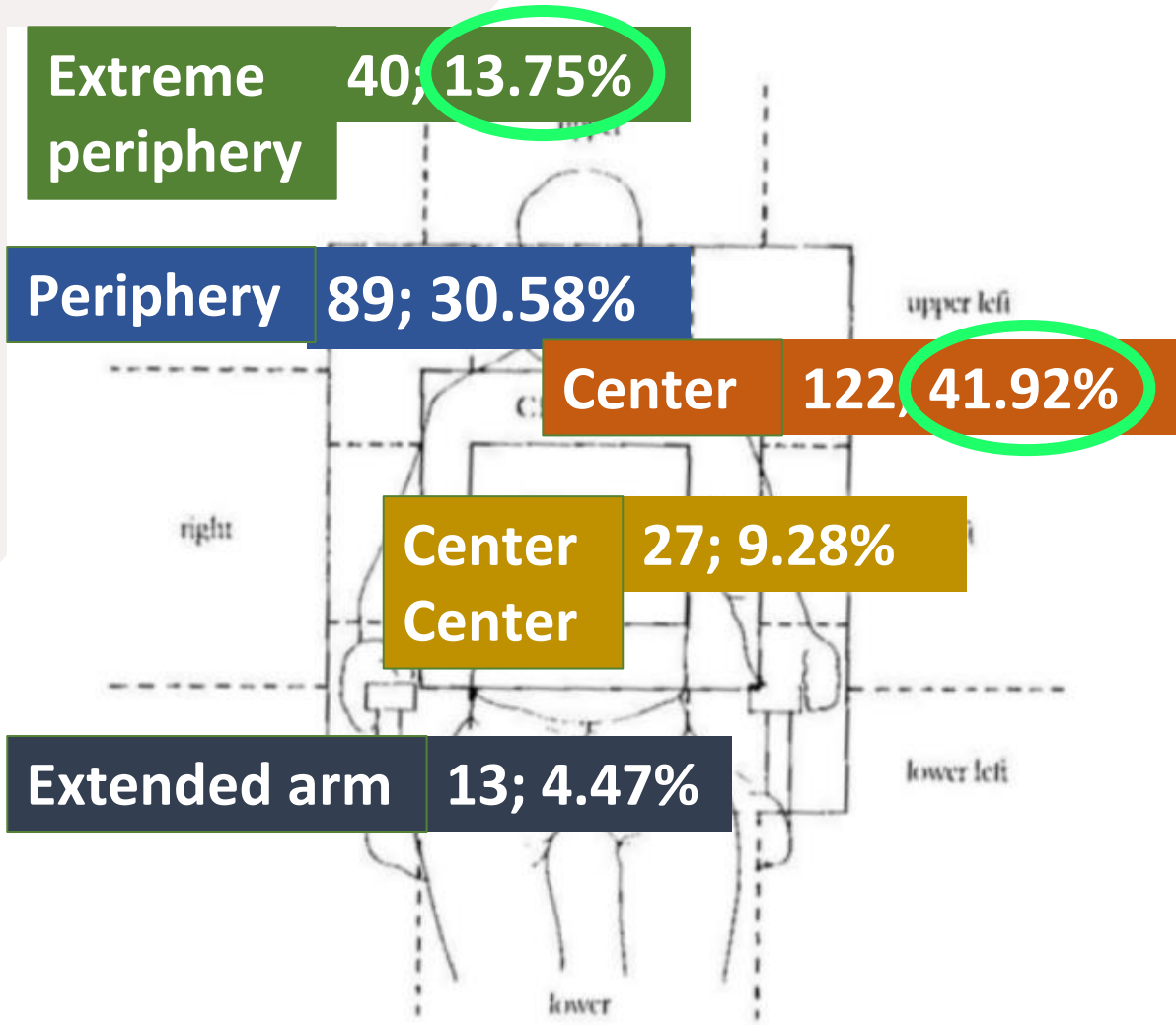
Mean gesture duration per gesture dimension



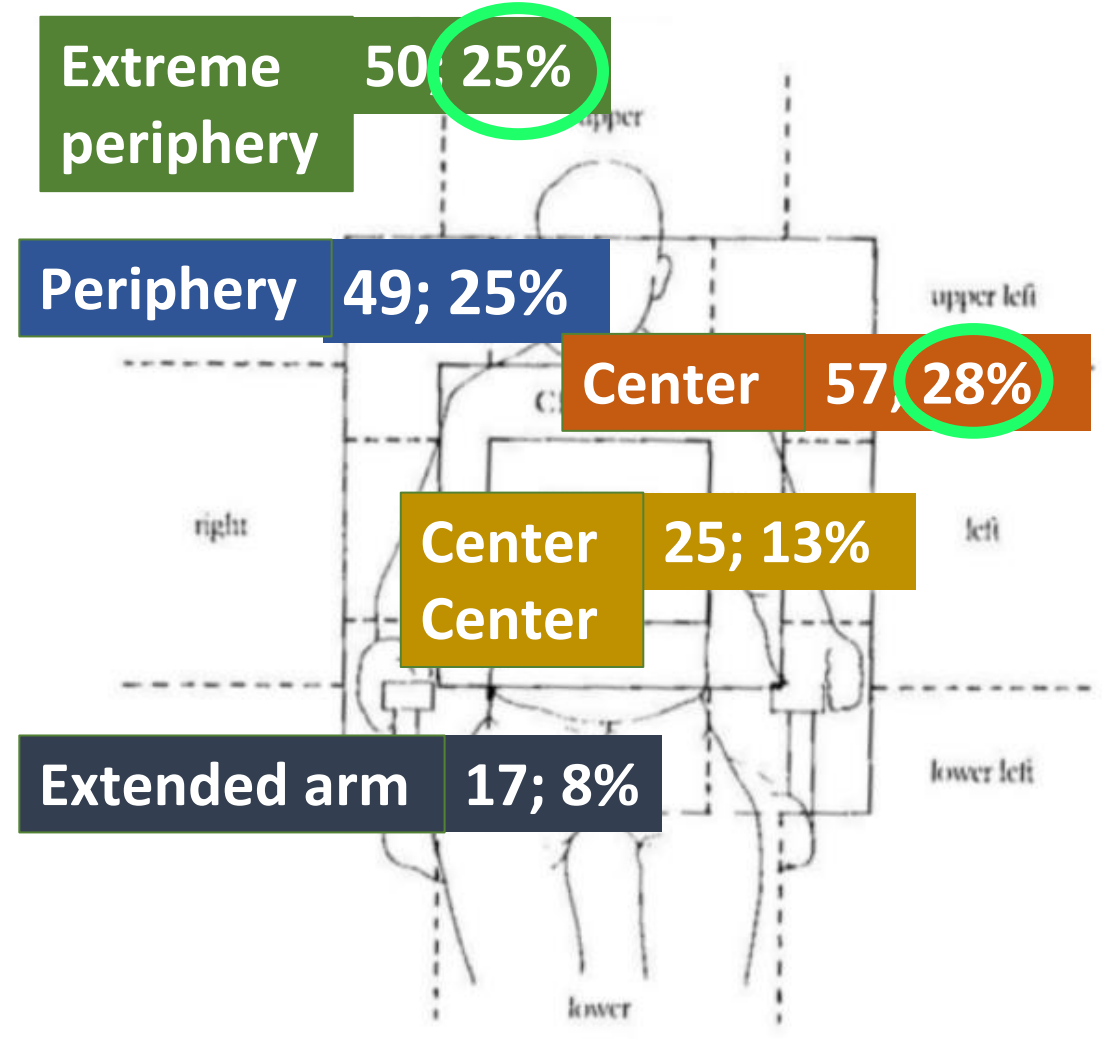


Results > Gesture space

L1-L1



L1-L2

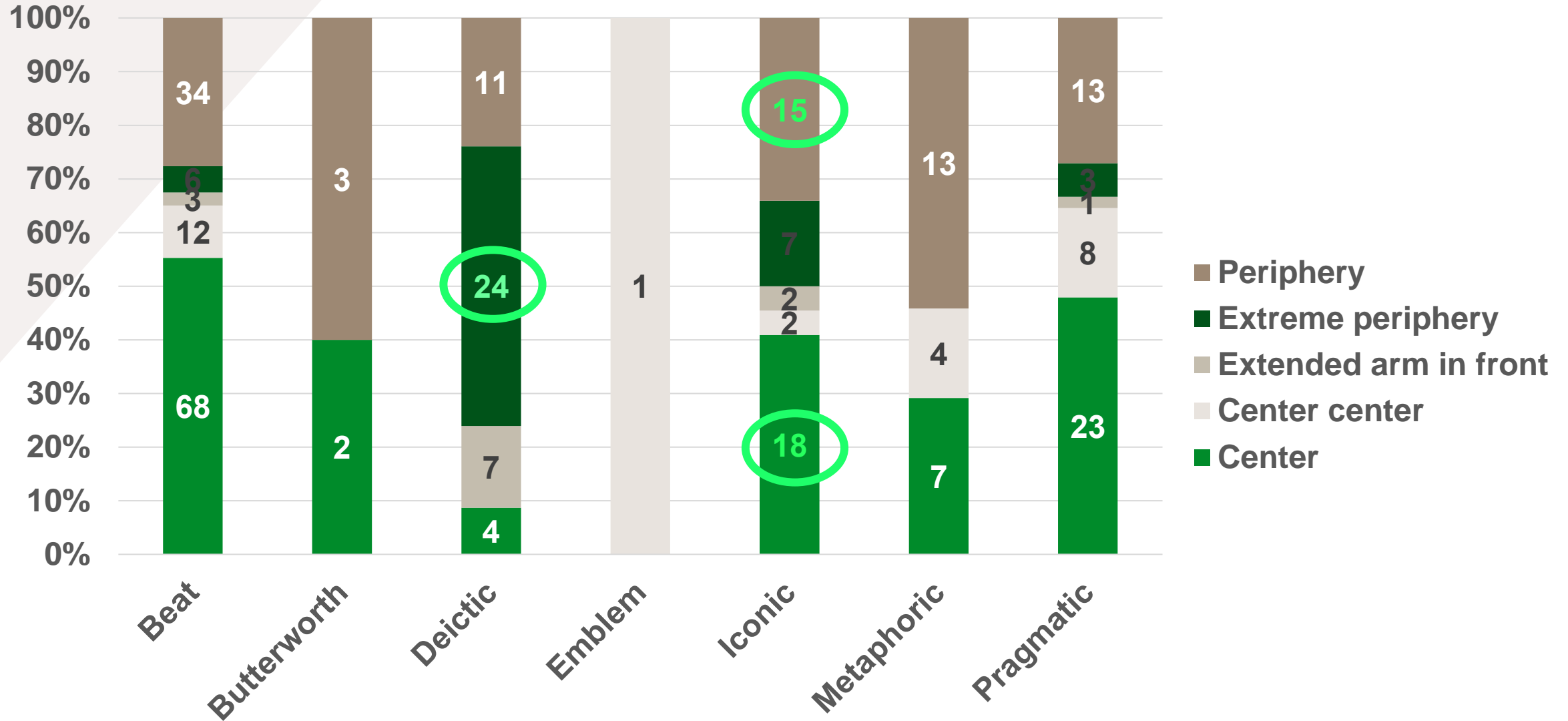


$\chi^2 = 4.5298$; p-value = 0.03331

Results > Gesture dimension and gesture space



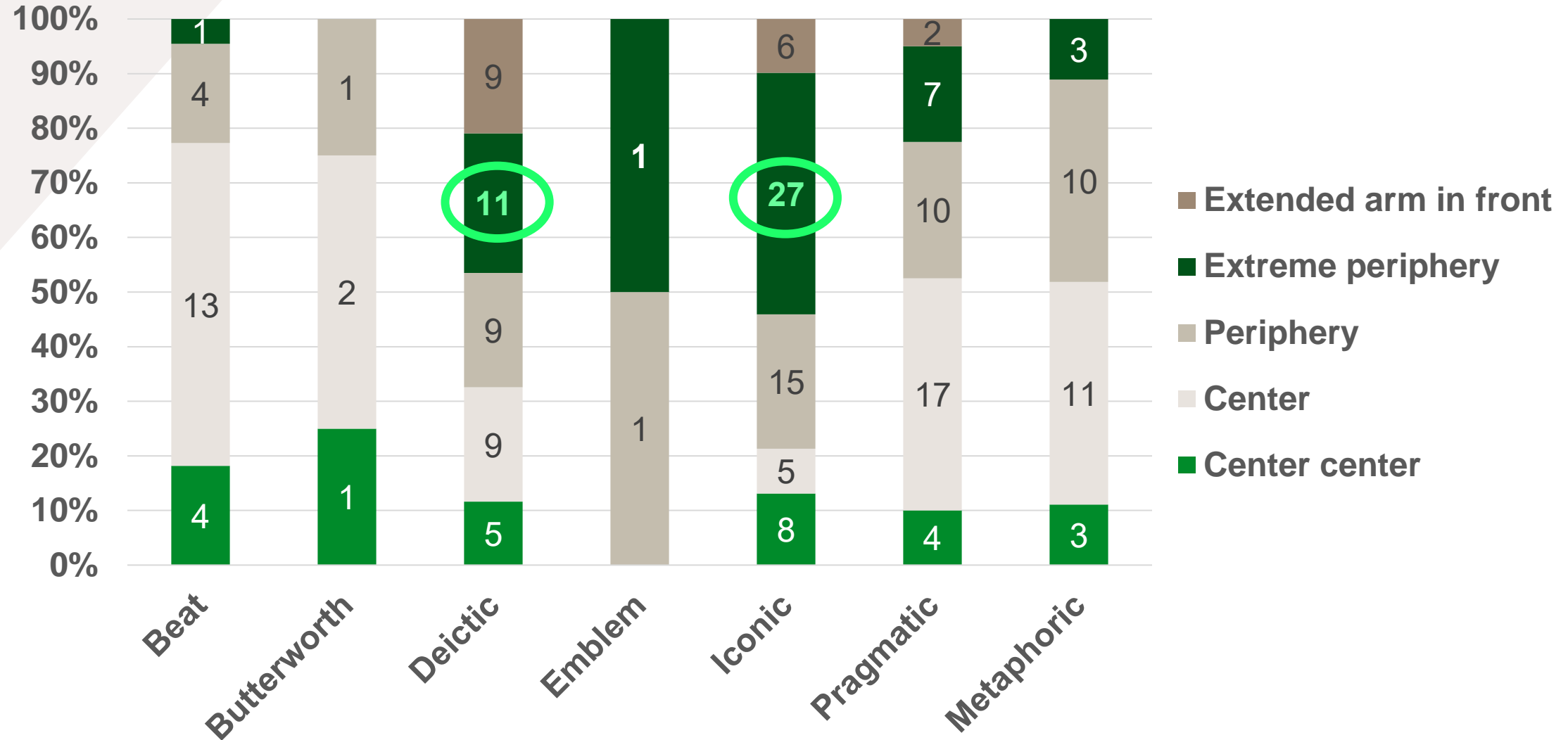
Distribution of gesture dimension across gesture space L1-L1



Results > Gesture dimension and gesture space



Distribution of gesture dimension across gesture space L1-L2





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)



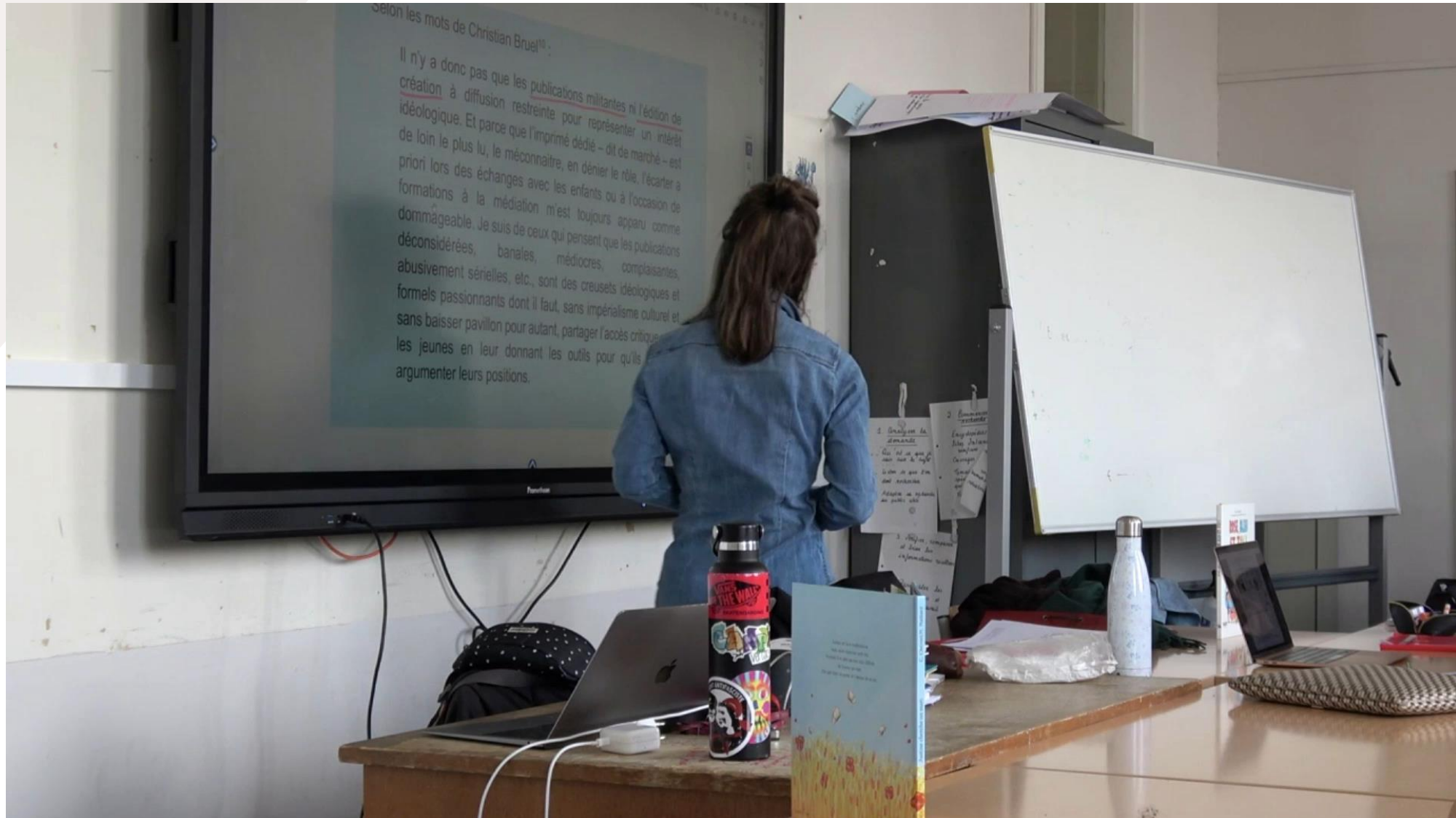
[**Gestures 20-23**]

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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