



What do co-speech gestures tell us about conceptualization? The case of caused motion events

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► To cite this version:

Christina Piot. What do co-speech gestures tell us about conceptualization? The case of caused motion events. GESPIN, Sep 2023, Nijmegen, Netherlands. hal-04547548

HAL Id: hal-04547548

<https://hal.science/hal-04547548v1>

Submitted on 15 Apr 2024

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What do co-speech gestures tell us about conceptualization?

The case of caused motion events

Christina Piot

Introduction

Caused motion events

Motion – Figure – Ground – Manner – Path – Cause
(Talmy 2000)

Motion events in speech

Verb-framed languages [French]	Satellite-framed languages [Dutch]
Titi <i>rentre dans la cage en volant.</i> [Titi enters the cage flying.]	Tweety <i>vliegt de kooi binnen.</i> [Tweety flies into the cage.]

- Thinking-for-speaking

(Slobin 1996, Talmy 2000)

Motion events in co-speech gestures

- between V- & S-languages: reflected in co-speech gestures:
- Conflated gestures vs. two gestures;
- Semantic components;
- "Thinking-for-gesturing" (Kellerman & van Hoof 2003: 266)
(i.a. Cadierno & Ruiz 2006, Kita & Özyürek 2003, Stam et al. 2023)

→ Multimodal thinking-for-speaking pattern

Motion events in SLA

- Shift from L1's pattern to L2's: difficult
- Multimodal TFS pattern
(i.a. Cadierno & Ruiz 2006, Cadierno 2017, Negueruela et al. 2004, Stam 2010)

Caused motion events speech

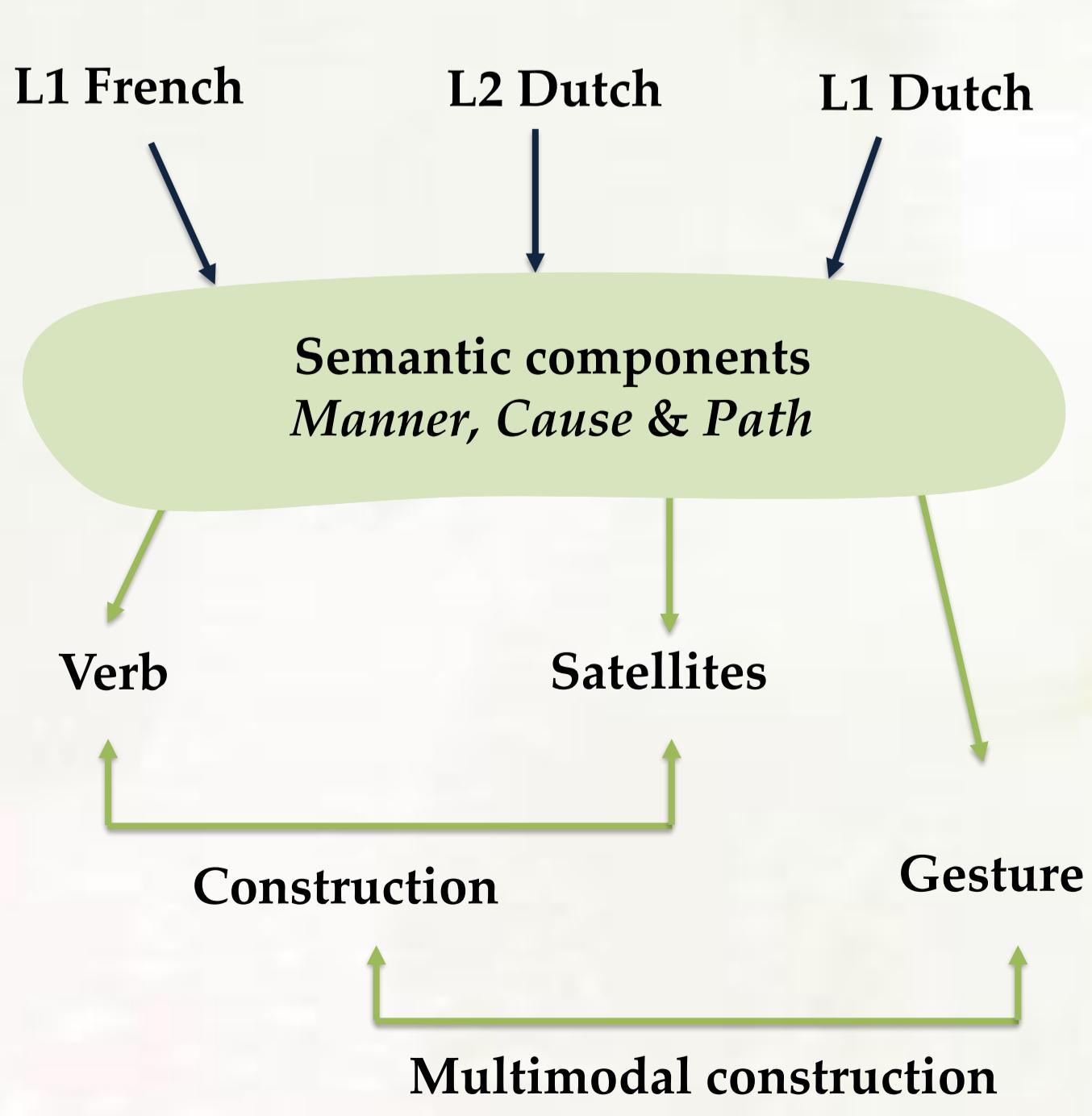
V-languages	S-languages
Using a transitive verb (1) Il a <i>monté la balle dans sa chambre.</i> [He took the ball up to his room]	Cause and/or manner in the verb & path in satellites (3) Zij <i>schopte de bal in het doel.</i> [She kicked the ball into the goal.]
Using a complex causative construction (faire 'make' + infinitive) (2) Il a <i>fait rouler la balle le long du mur.</i> [He rolled the ball along the wall]	

(Hendriks, Hickmann & Demagny 2008)

Caused motion events in co-speech gesture

- Few studies, more on placement events
- In Turkish (V-language): Action, often in combination with Path or Figure (Furman 2012)

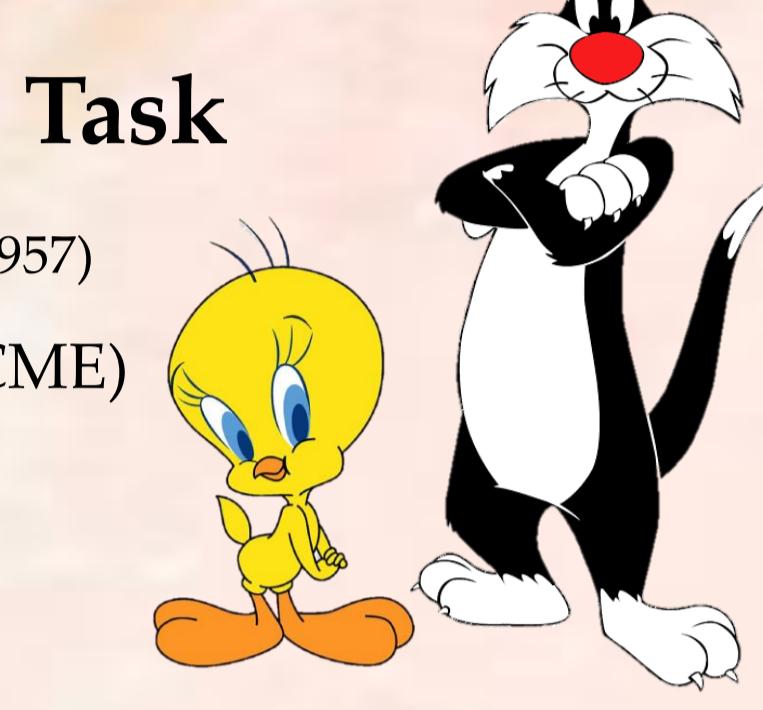
Research questions



Method

Participants

- .15 L1 French speakers
- 12 L1 Dutch speakers
- 15 CLIL French-speaking learners of Dutch (proficiency level ranging between A1 and B2)



Coding

Speech	
Verb	Neutral/Manner + Cause/Path + Cause/Manner and Path + Cause
Satellite	Manner/Path/Cause/Combination
Construction	e.g., MannerCauseV + PathS
Boundary crossing	Yes/No

Co-speech gestures	
Type	Iconic/Deictic/Pragmatic/Beat
Semantic components in deictic and iconic gestures	Manner & Cause/Path/Ground/Combination

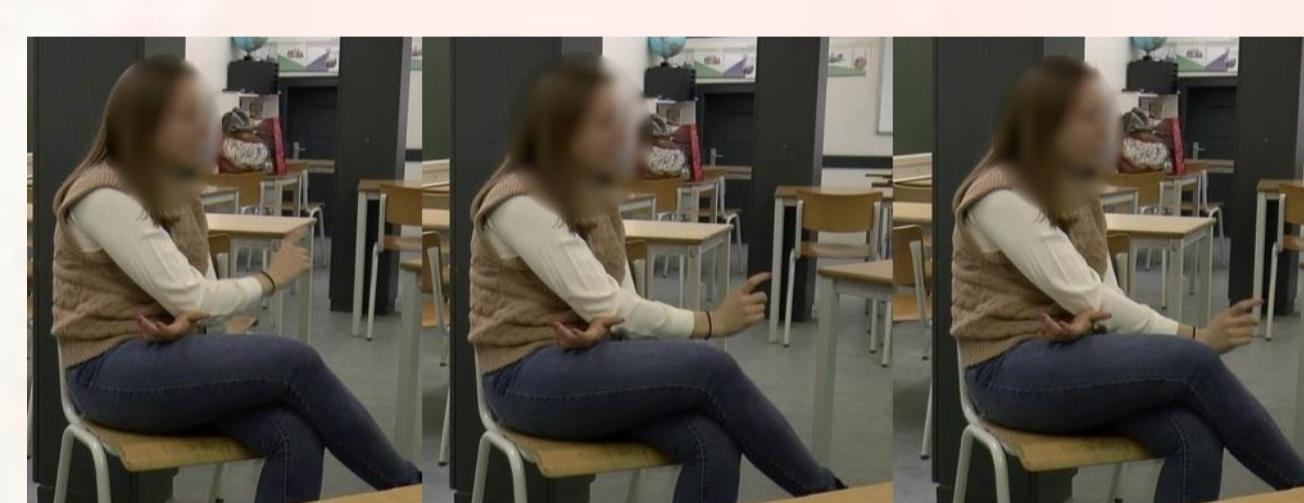
Iconic gestures

Figure 1: Manner, Path & Cause



"Dan zit iemand biefstukken **naar de tijgers te gooien**" [Then someone is throwing steaks to the tigers] (DU10, ME36)

Figure 2: Path



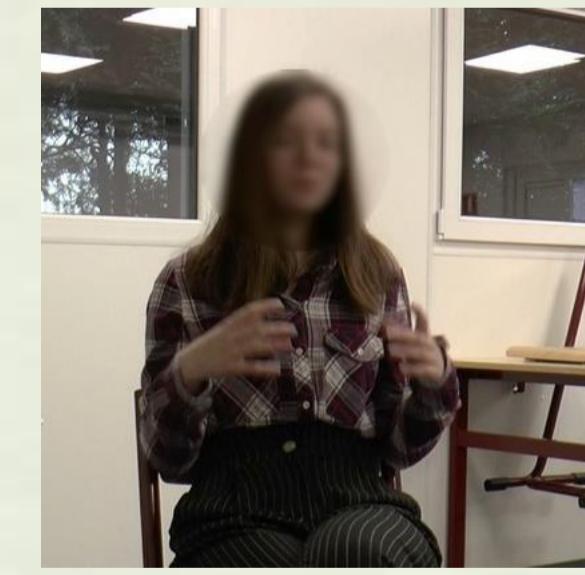
"De leeuw **gooit** ◊ de Grosminet **in de enclos van de beer.**" [The lion throws the Sylvester into the bear pen] (CLIL3, ME100)

Figure 3: Manner & Cause



"En **gaat daarmee naar de leeuwenkooi.**" (DU11, ME33 + ME34)
[And goes with it to the tigers' cage]
"Puis t's as un gars du zoo qui le ***conduit** la brouerge ◊ la brouette % **jusqu'à l'enclos des tigres.**" (FR2, ME33 & 34)
[Then there's a guy from the zoo who it *rides the brouerge ◊ the wheelbarrow % to the tiger's pen]

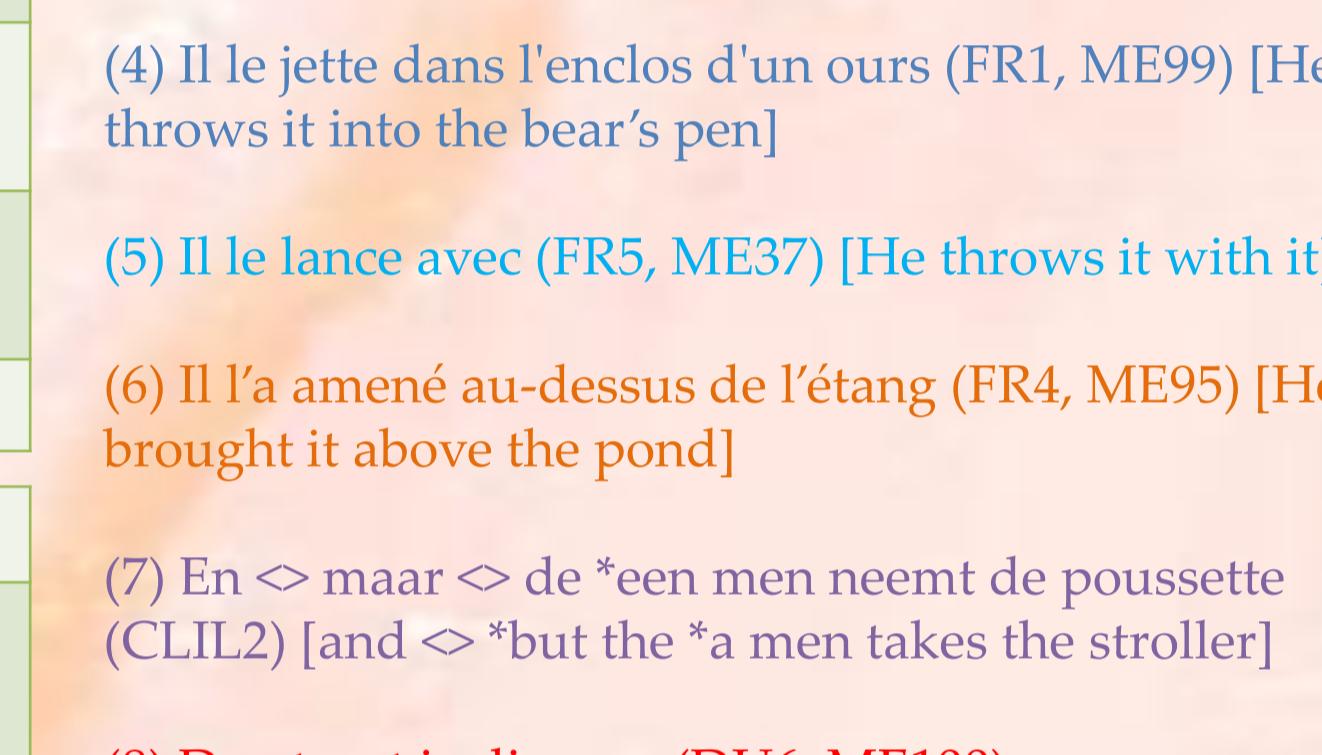
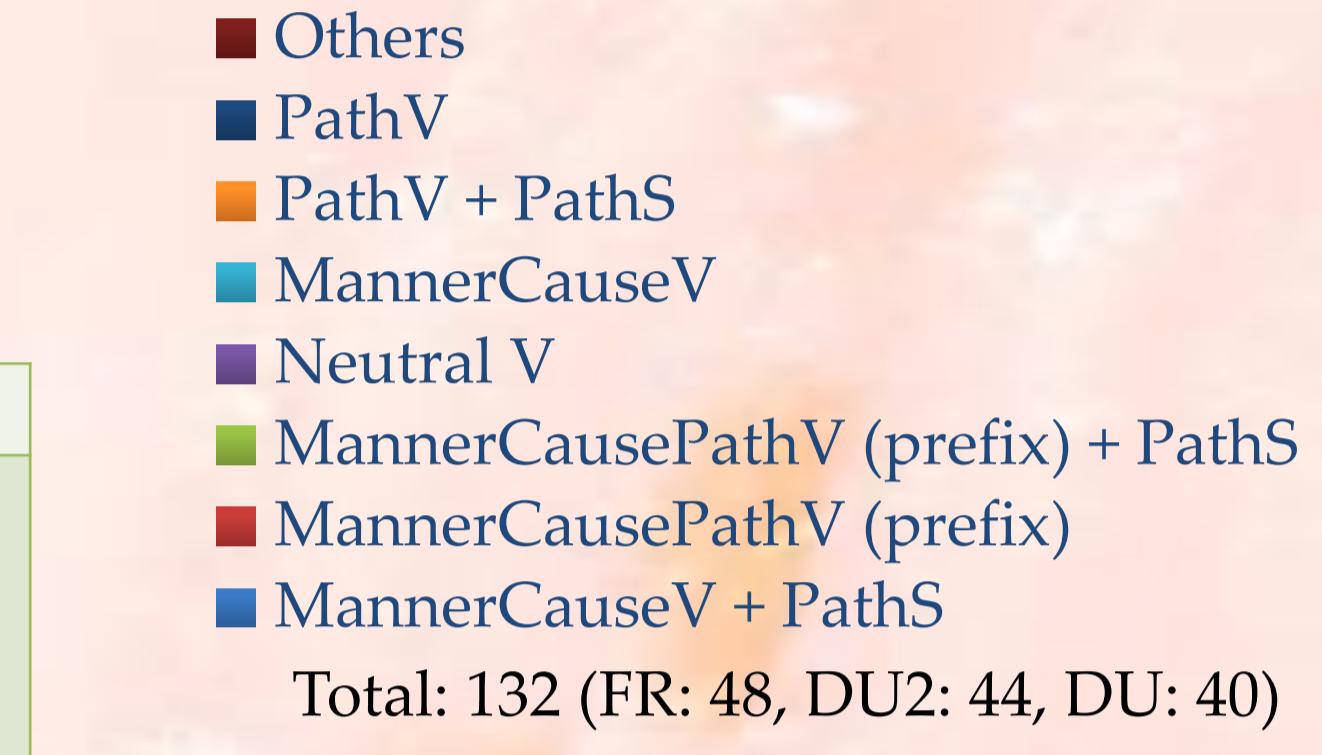
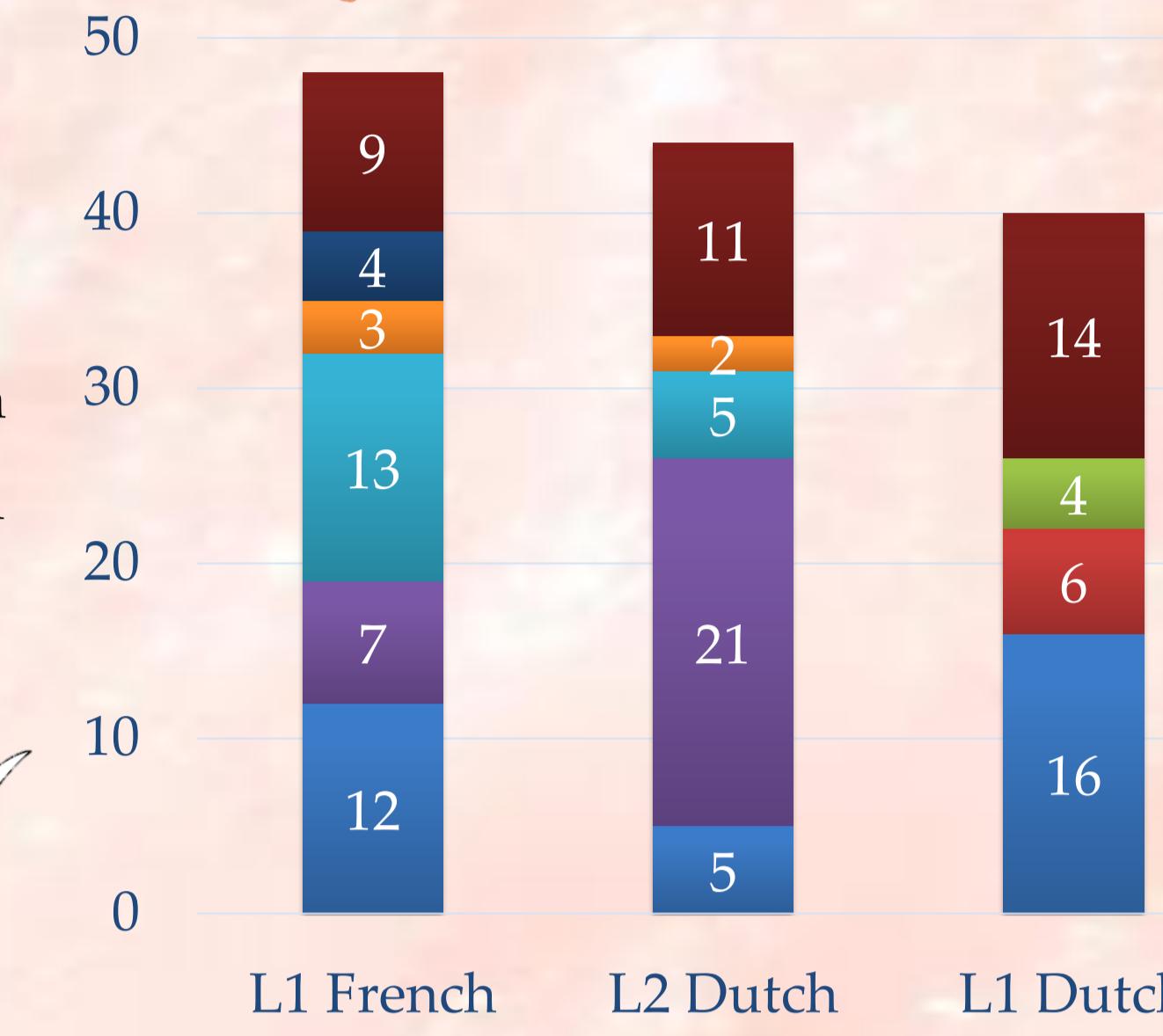
Figure 4: Ground



Synchronization between iconic and deictic gestures and speech units

Multimodal Construction: semantic components in speech units and representational gestures

Results



Discussion & Conclusion

L1 French

- More variation than in Dutch in terms of speech combinations: // Hendriks, Hickmann & Demagny (2008)'s findings on French and English.
- Most frequent construction: MannerCauseV + PathS
- Sometimes only manner and cause in speech (+ conflated gesture).
- Manner: due to the motion events described?

L1 Dutch

- Most frequent constructions: MannerCauseV + PathS and MannerCausePathV (prefix)
- Manner and cause in the verb + a path-satellite and a gesture conveying manner, cause, and path
- Conflated gestures: more frequent than in French
- Multimodal constructions: more variation

L2 Dutch

- Neutral verbs
- MannerCauseV
- LocationG
- Conflated gestures
- Compensation?
- No MannerCausePathV (prefix) // almost no MannerPathV (prefix) when expressing self-propelled motion events
- Thinking-for-speaking pattern?

Conceptualization

- Caused motion events in speech: sometimes described as transfer events or actions vs. in gestures
- Gestures allow us to see how the event is perceived by the speaker

References

- Cadierno, T. (2017). Thinking for speaking about motion in a second language. In I. Ibarretxe-Antuñano (Ed.), *Motion and space across languages: Theory and applications* (pp. 279–300). John Benjamins Publishing Company.
- Cadierno, T., & Ruiz, L. (2006). Motion events in Spanish L2 acquisition. *Annual Review of Cognitive Linguistics*, 4(1), 183–216.
- Freleng, F. (Director). (1957). *Tweet Zoo*. In *Merrie Melodies*. <https://www.youtube.com/watch?v=5qhwImIrd74>
- Furman, R. (2012). *Caused motion events in Turkish: Verbal and gestural representation in adults and children*. LOT.
- Hendriks, H., Hickmann, M., & Demagny, A.-C. (2008). How adult English learners of French express caused motion: A comparison with English and French natives. *Acquisition et Interaction En Langue Etrangère*, 2/7, 15–41. <https://doi.org/10.4000/aile.3973>
- Kellerman, E., van Hoof, A.-M. (2003). Manual accents. *IRAL - International Review of Applied Linguistics in Language Teaching*, 41(3), 251–269. <https://doi.org/10.1515/iral.2003.011>
- Kita, S., & Özyürek, A. (2003). What does cross-linguistic variation in semantic coordination of speech and gesture reveal? Evidence for an interface representation of spatial thinking and speaking. *Journal of Memory and Language*, 48(1), 16–32. [https://doi.org/10.1016/S0747-596X\(02\)00505-3](https://doi.org/10.1016/S0747-596X(02)00505-3)
- Negueruela, E., Lantolf, J. P., Jordan, S. R., & Gelabert, J. (2004). The "private function" of gesture in second language speaking activity: A study of motion verbs and gesturing in English and Spanish. *International Journal of Applied Linguistics*, 14(1), 113–147. <https://doi.org/10.1111/j.1473-4192.2004.00056.x>
- Slobin, D. I. (1996). From "thought and language" to "thinking for speaking." In J. J. Gumperz (Ed.), *Rethinking linguistic relativity* (pp. 70–96). Cambridge University Press.
- Stam, G. (2010). Can an L2 Speaker's Patterns of Thinking for Speaking Change? In Z. Han & T. Cadierno (Eds.), *Linguistic Relativity in SLA: Thinking for Speaking* (pp. 59–83). Multilingual Matters. <https://www.degruyter.com/document/doi/10.21832/9781847288-005/html>
- Stam, G., & Urbanski, K. (Eds.). (2023). *Gesture and multimodality in second language acquisition: A research guide*. Routledge.
- Talmy, L. (2000). *Toward a cognitive semantics* (Vol. 2). MIT Press.