

What do co-speech gestures tell us about conceptualization?

The case of caused motion events

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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 rentre dans la cage en volant . [Tweety enters the cage flying .]	Tweety vliegt de kooi binnen . [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, Nequerela et al. 2004, Stam 2010)

Caused motion events speech

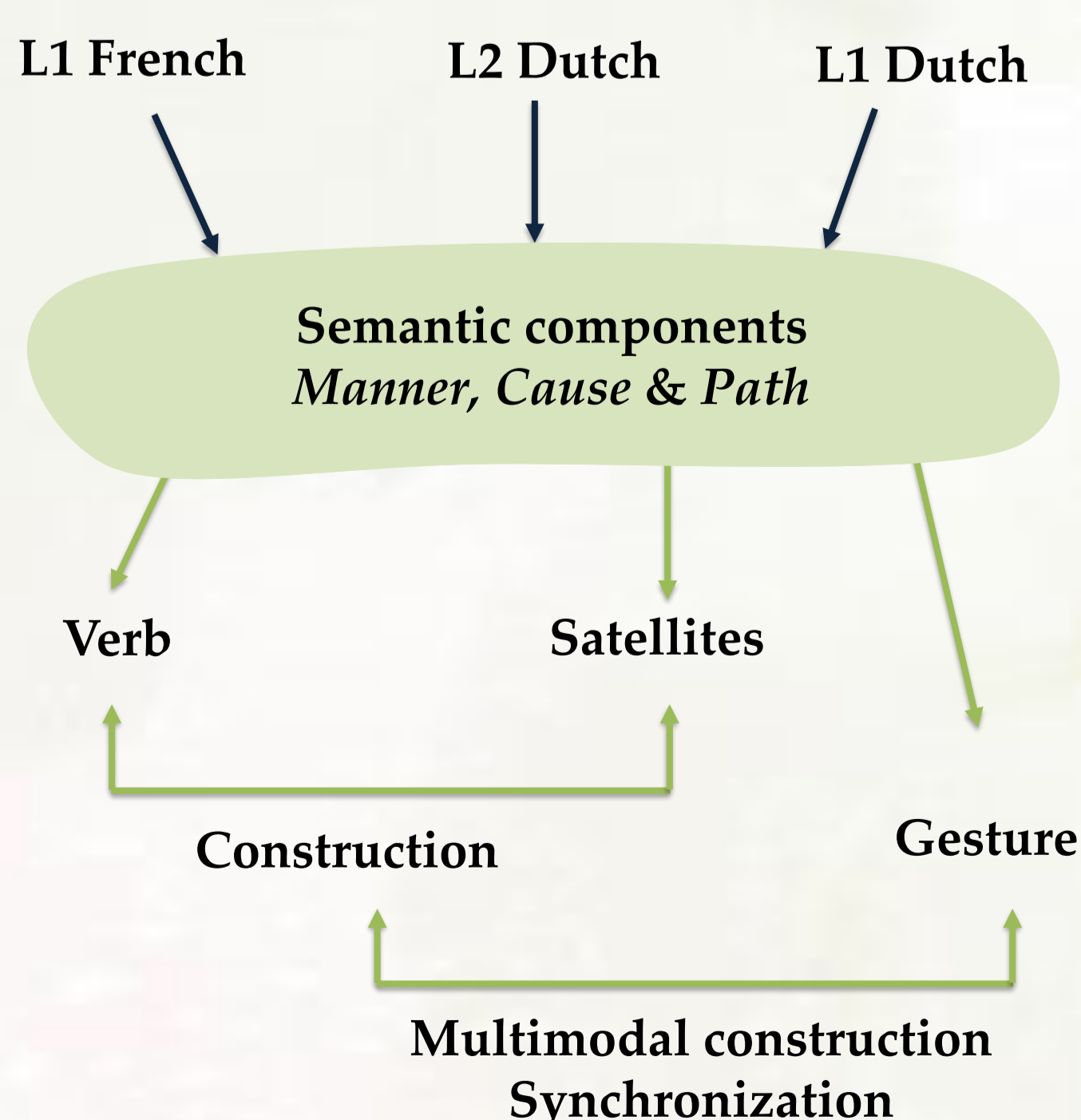
V-languages	S-languages
Using a transitive verb (1) Il a monté la balle dans sa chambre . [He took the ball up to his room]	Cause and/or manner in the verb & path in satellites (3) Zij schopte de bal in het doel . [She kicked the ball into the goal.]
Using a complex causative construction (faire 'make'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

Task

Tweet zoo (Freling, 1957)

15 fragments (69 CME)

Matching game



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

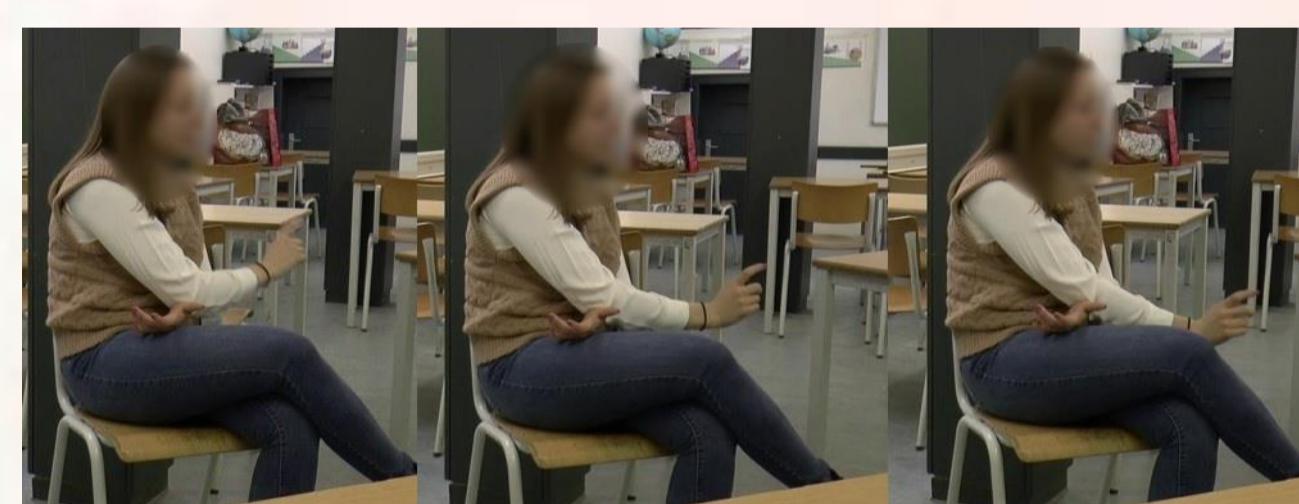
Iconic gestures

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 lions' cage.]

Figure 4: Ground

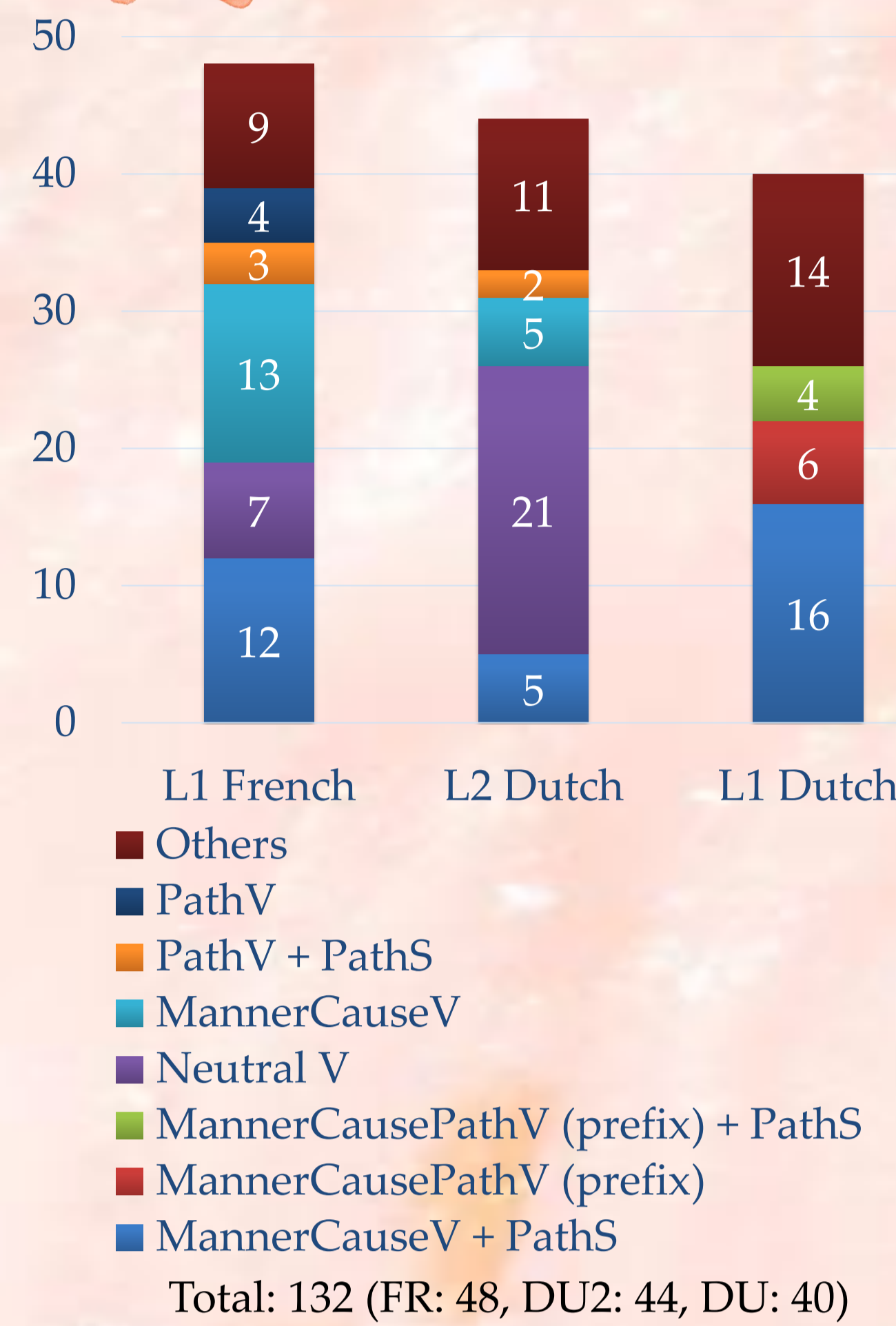


“Puis t'as un gars du zoo qui le ***conduit** la brouette **% jusqu'à l'enclos des tigrés**.” (FR2, ME33 & 34) [Then there's a guy from the zoo who it *rides the brouette <> *the wheelbarrow % to the tiger's pen]]

Synchronization between iconic and deictic gestures and speech units

Multimodal Construction: semantic components in speech units and representational gestures

Results



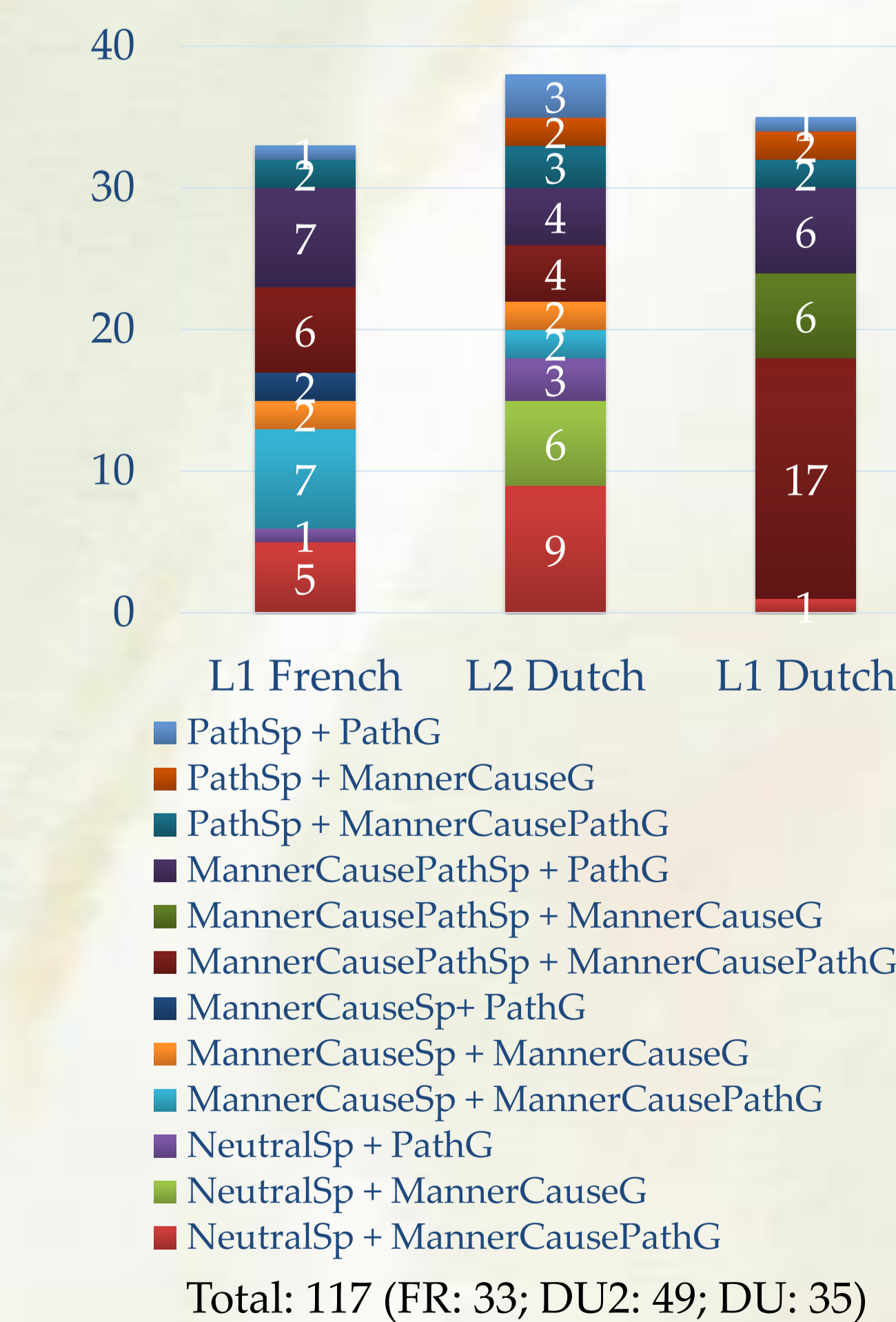
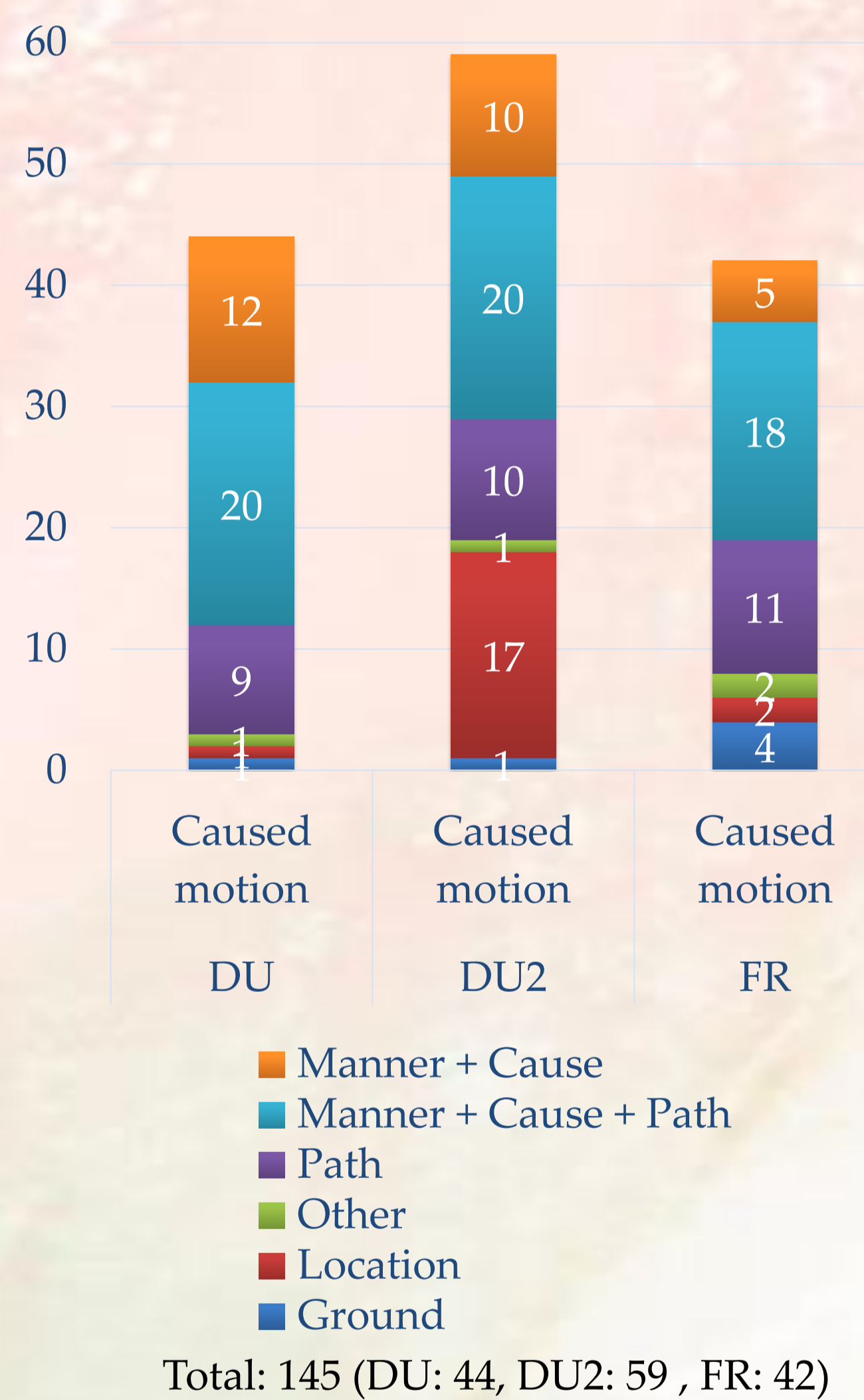
(4) Il le jette dans l'enclos d'un ours (FR1, ME99) [He throws it into the bear's pen]

(5) Il le lance avec (FR5, ME37) [He throws it with it]

(6) Il l'a amené au-dessus de l'étang (FR4, ME95) [He brought it above the pond]

(7) En <> maar <> de *een men neemt de poussette (CLIL2) [and <> *but the *a men takes the stroller]

(8) Dan trapt ie die weg (DU6, ME100) [And then he kicks it away]



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 // Stam (2018)

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