

Is he pushing the cart to the tiger cage or is he going to the tiger cage with the cart?

The multimodal expression of caused motion events in French and Dutch as L1 and L2

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Christina Piot



# Introduction

## 1. Motion events

### 1. Components

### 2. Types

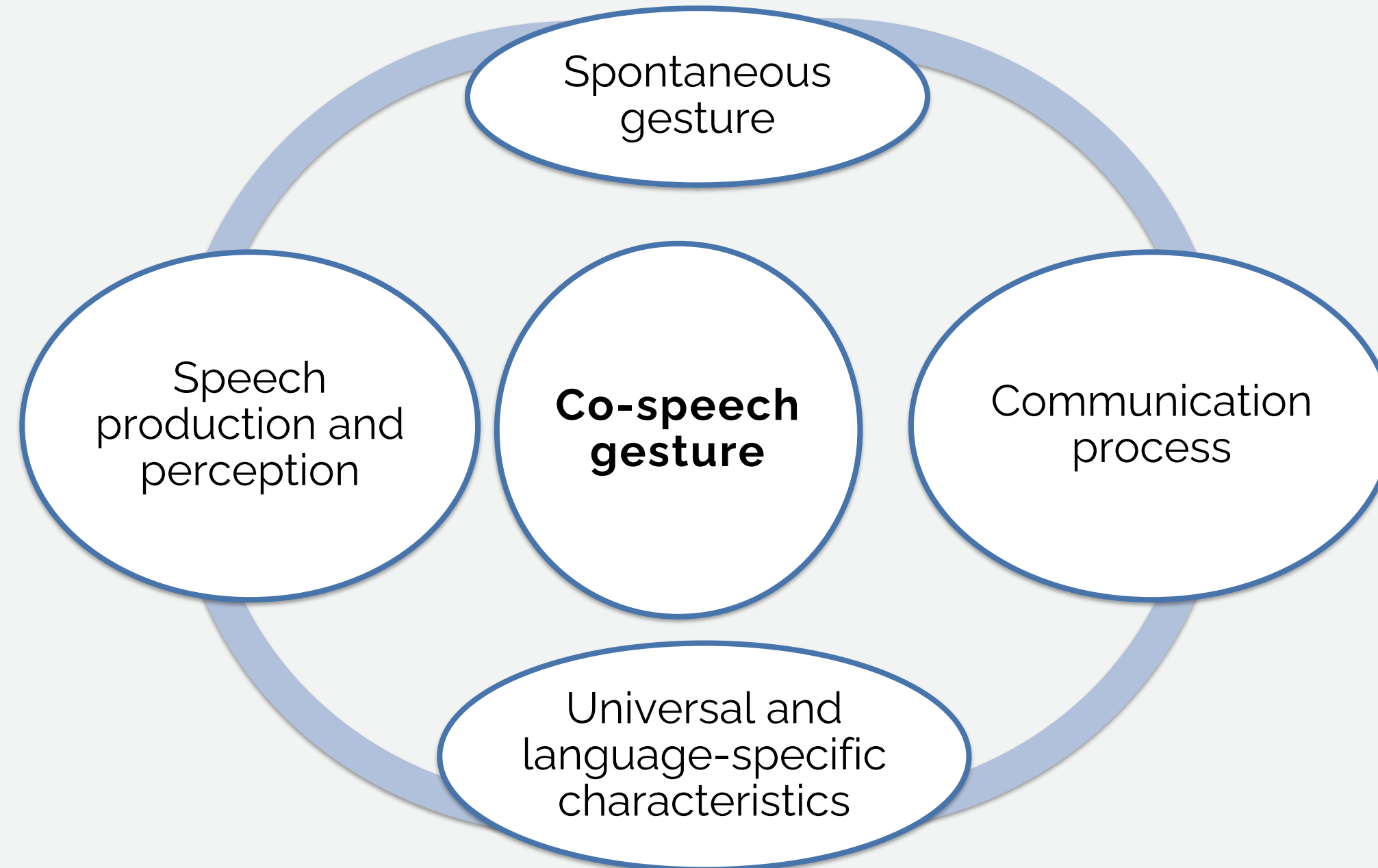
## 2. Speech

Verb-framed languages	Satellite-framed languages
French	Dutch
L'oiseau <b>rentre</b> dans la cage <b>en volant</b> . [The bird <b>enters</b> the cage <b>flying</b> .]	De vogel <b>vliegt</b> de kooi <b>binnen</b> . [The bird <b>flies into</b> the cage.]

(Talmy 2000)

# Introduction

## 3. Co-speech gesture



**The typological differences between V-languages and S-languages are reflected in co-speech gesture**

(McNeill 1985, 2005; Kendon 1980, 1994; Alibali et al. 2000; Gullberg 2010; Graham & Argyle 1975, Rogers 1978 and Riseborough 1981 mentioned in Kendon 1994; Cassel et al. 1999; McNeill & Duncan 2000; Kita & Özyürek 2003; Brown & Chen 2013)

1. Theoretical background
2. Methodology
3. Results
4. Discussion & Conclusion
5. Further research

Outline  
of the  
presentation



# 1. Theoretical background

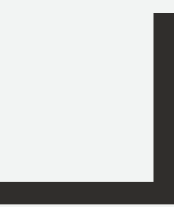
# 1.1. Thinking-for-speaking

While acquiring their first language, children learn a specific way of thinking for speaking (Slobin 1991)

Through learning grammatical constructions and lexicon,

Children are provided with “**a framework for the expression of thoughts, events and feelings**” (Stam 2010: 61);

Different patterns of thinking for speaking in L1 and L2 = necessity to learn the L2 pattern to master the language (Stam 1998, mentioned in Stam 2010)



# 1.2. Motion events – Co-speech gesture – Thinking for speaking – L2

Research on motion events to test the thinking for speaking hypothesis

First focusing on linguistic descriptions

Later also taking multimodality into account

➔ Differences between V-languages and S-languages

## 1.2. Motion events – Co-speech gesture – Thinking for speaking – L2

- Gestures give information on thinking for speaking patterns
- “Thinking for gesturing” (Kellerman & van Hoof 2003: 266)
- **Learning/acquisition of the L2 multimodal pattern**
- Study of gesture: shift from L1 TFS-pattern to L2 TFS-pattern





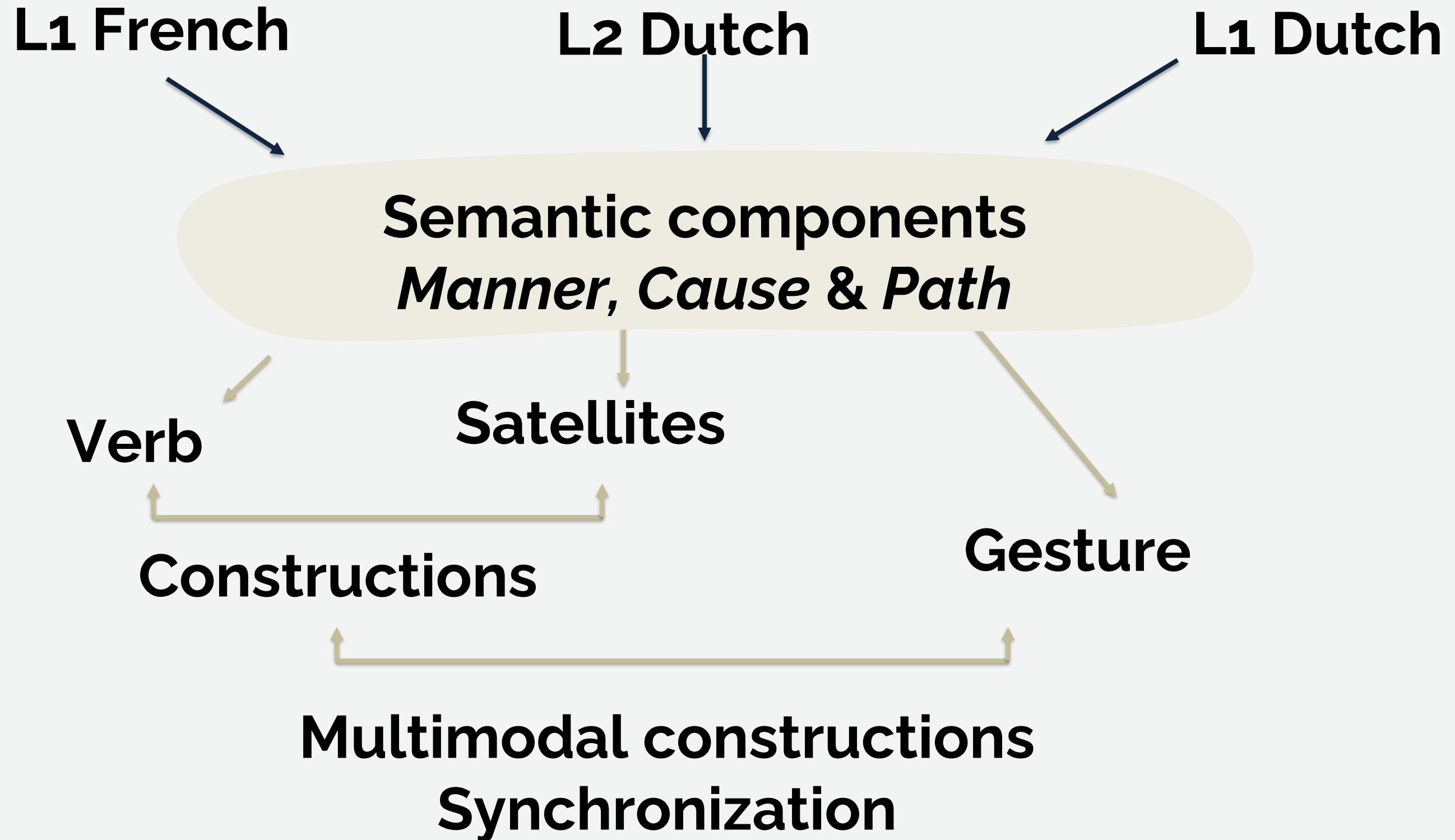
## 1.3. Caused motion events in speech

<b>V-languages</b>	<b>S-languages</b>
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 ( <i>faire</i> 'make' + infinitive)  (2) Il a fait rouler la balle le long du mur. [He rolled the ball along the wall]	

## **1.4. Caused motion events in gesture?**



# Research questions



## **2. Methodology**

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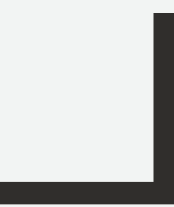
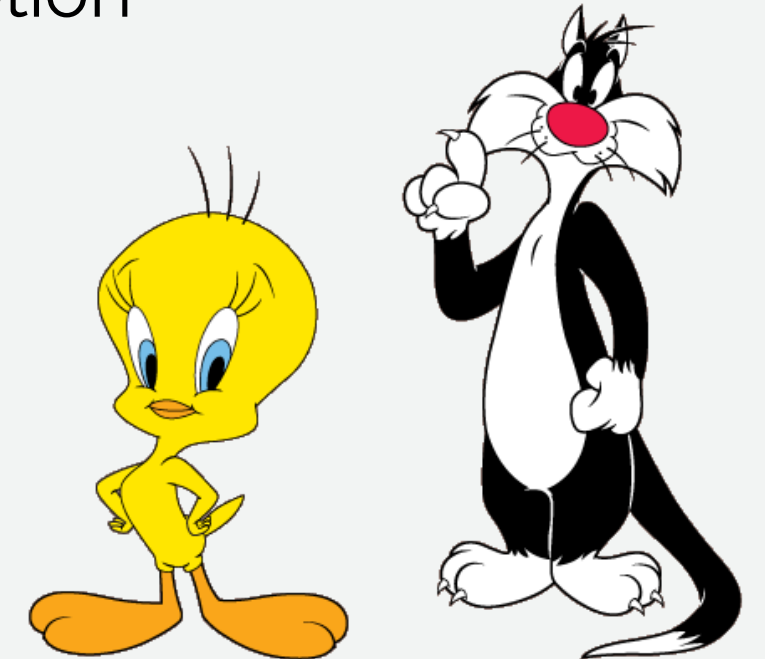
## 2. Method

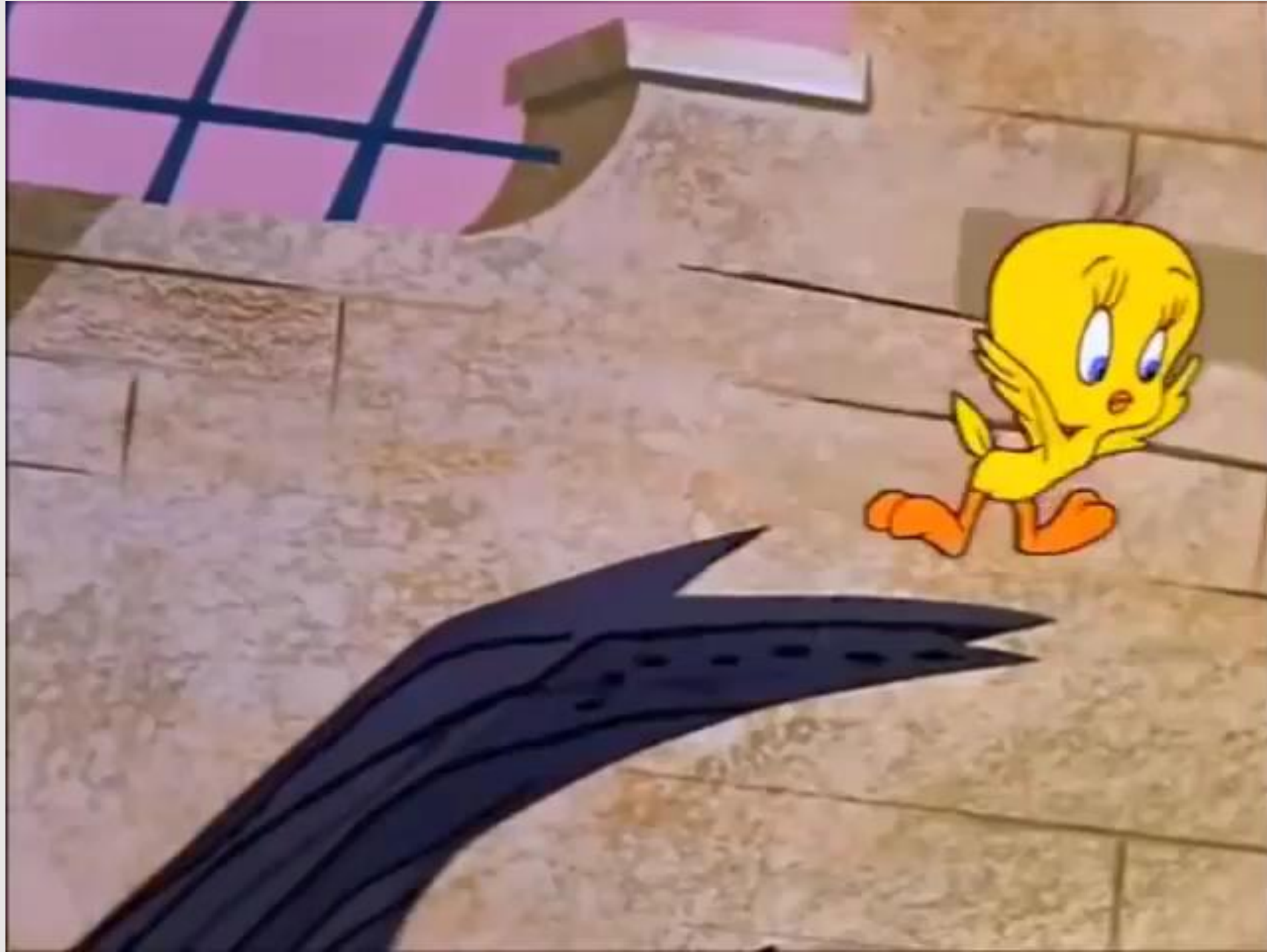
- Participants

- 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* (Freleng, 1957)
- 15 fragments (69 caused motion events)
- *Matching game*





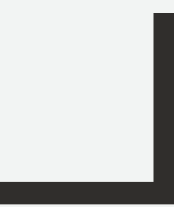
## 2. Method

- Coding



Speech	
Verb	Neutral/Manner + Cause/ Path/Manner + Cause + Path
Satellite	Manner/Path/Cause/Co mbination
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 and Cause



“dan zit iemand biefstukken naar de tijgers te gooien”  
[Then someone is throwing steaks to the tigers] (DU10, ME36)

## Figure 2: Path



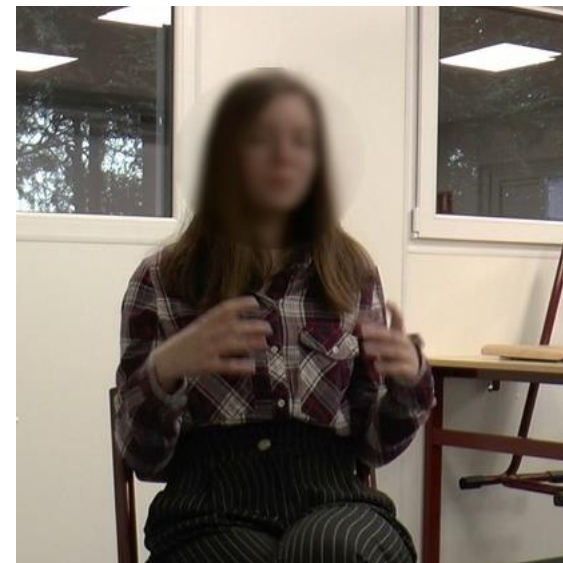
“De leeuw gooit <> de Grosminet **in de enclos** van de beer.”  
[The lion throws the Sylvester into the bear pen] (CLIL3, ME100)

## Figure 3 : Manner



“En gaat daarmee  
naar  
**de leeuwenkooi.**”  
(DU11, ME33 + ME34)  
[And goes with it  
to the tigers' cage.]

## Figure 4: Ground



“ Puis t'as un gars du zoo qui le  
\*conduit la brouerge \* <> là..  
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 5: Beat



## Figure 6: Pragmatic gesture



“En dan stopt het” (DU4)  
[And then it stops]



# 2. Method

- Coding



Speech	
Verb	Neutral/Manner + Cause/ Path + Cause/Manner and path + Cause
Satellite	Manner/Path/Cause/Co mbination
Construction	e.g. MannerCauseV + PathS
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**Synchronization** between iconic and deictic gestures and linguistic units

**Multimodal Construction:** semantic components in linguistic units and representational gestures

(Levy & McNeill mentioned in McNeill 2006; Kendon 2004; Stam 2006; Woerfel 2019)

# 3. Results

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“ Après y'a un guide du zoo, une personne qui s'occupe du zoo, il **prend**, **il s'en va** et il va donner à manger aux animaux. [...]. Donc il **vient**, il ouvre le bac, le gros truc en bois, **il donne** ses \*il **donne deux viandes** et puis après en fait il **jette Grosminet** sans le regarder, **il l'jette dans** l'enclos des Bengales. ”

“Then there is a zoo guide, a person who takes care of the zoo, he **takes**, **he goes away** and goes to feed the animals. [...]. So he comes, opens the bin, the big thing in wood, and **he gives** his \***he gives two pieces of meat** and then afterwards, in fact, **he throws Sylvester** without looking at him, **he throws him into the Bengals' pen.**”

(FR5)



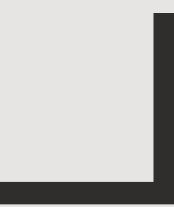
“Dan **komt** er een man met een blauwe pet en **duwt** die koets **verder** en <> **komen die bij** de \*bij de kooi van de tijgers [...]. Dan **zit iemand biefstukken naar de tijgers te gooien** en dus \*en dan **gooit** ie ook opeens de kat **in de kooi van de tijgers.**”

“Then a man **comes** with a blue hat and **pushes the coach further** and <> they **come to the \*to the tigers.** [...] Then there is someone **throwing steaks to the tigers** and thus \*and then he **suddenly throws the cat into the tigers' cage.**”

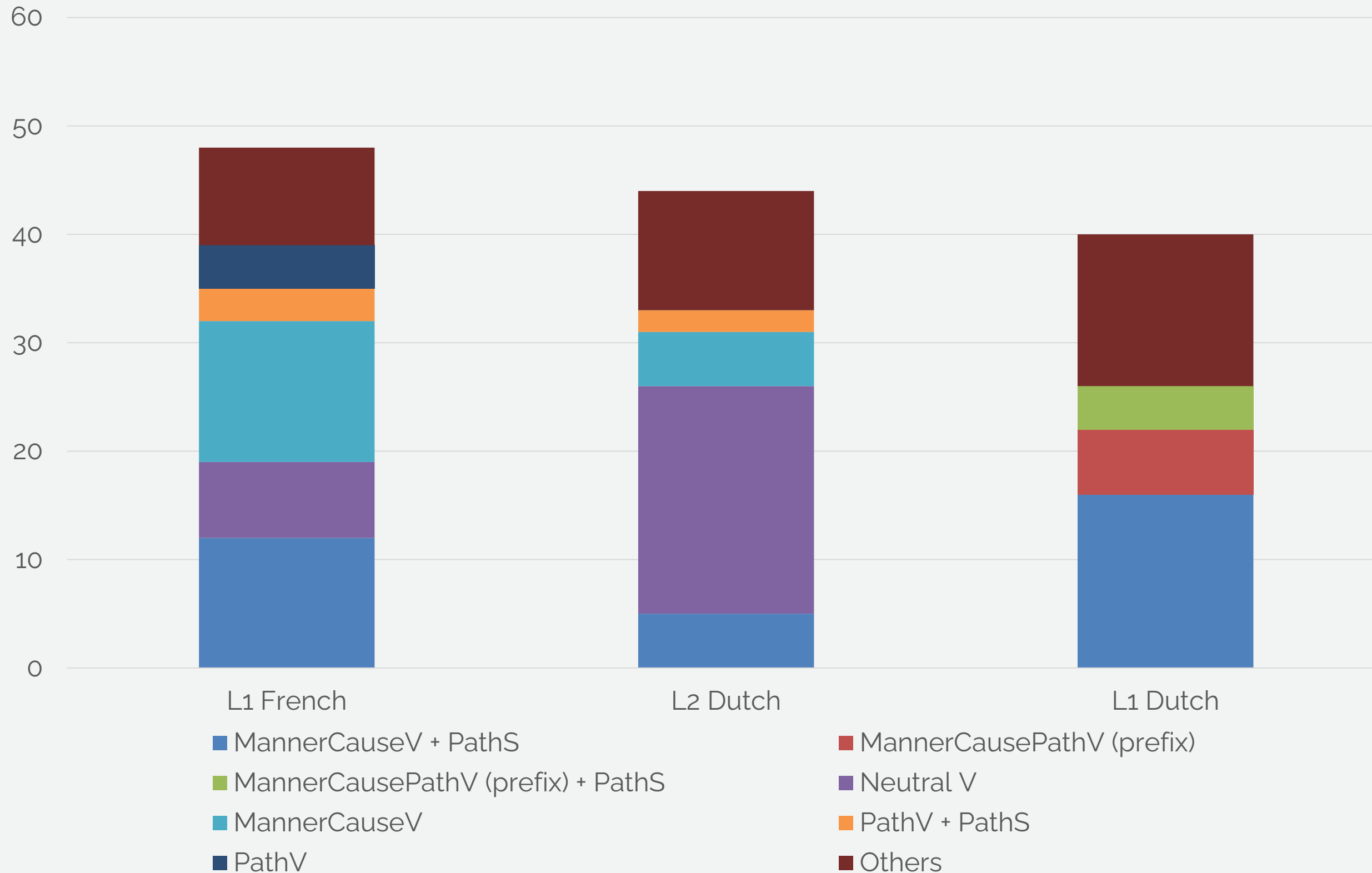


“Maar de zoodirecteur **neemt** de <> \***neemt** Grosminet om <> \***neem** Grosminet **naar de enclos van de tiger** en dus <> de zoodirecteur **neemt** **aan de tiger de vlees de vlees de vlees** en aan het eind **Grosminet.**”

“But the zoo director **takes** the <> \***takes** **Sylvester** to <> \***take** Sylvester **to the tiger's pen** and thus <> the zoo director **takes** to the tiger **the meat the meat the meat** and in the end Sylvester”



# 3.1. Caused motion events in speech



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

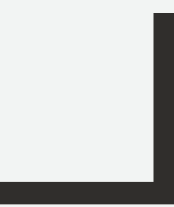
(5) Il le lance avec (FR5, ME37)  
[He throws it with it]

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

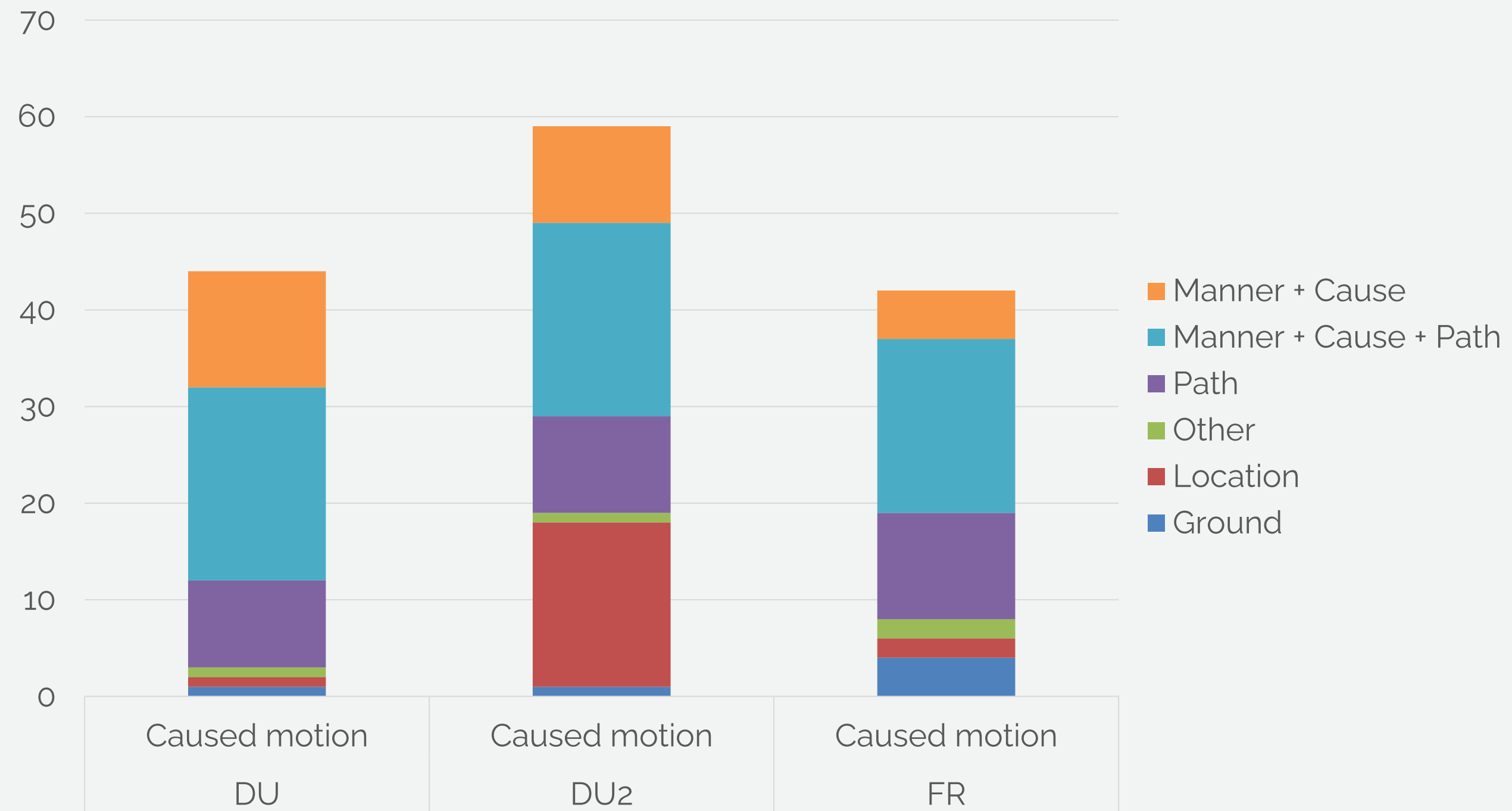
(7) en <> maar <> de \*een men neemt de poussette (CLIL2)  
[and <> \*but the \*a men take the stroller]

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

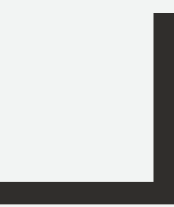
Total: 132 (FR: 48, DU2: 44, DU: 40)



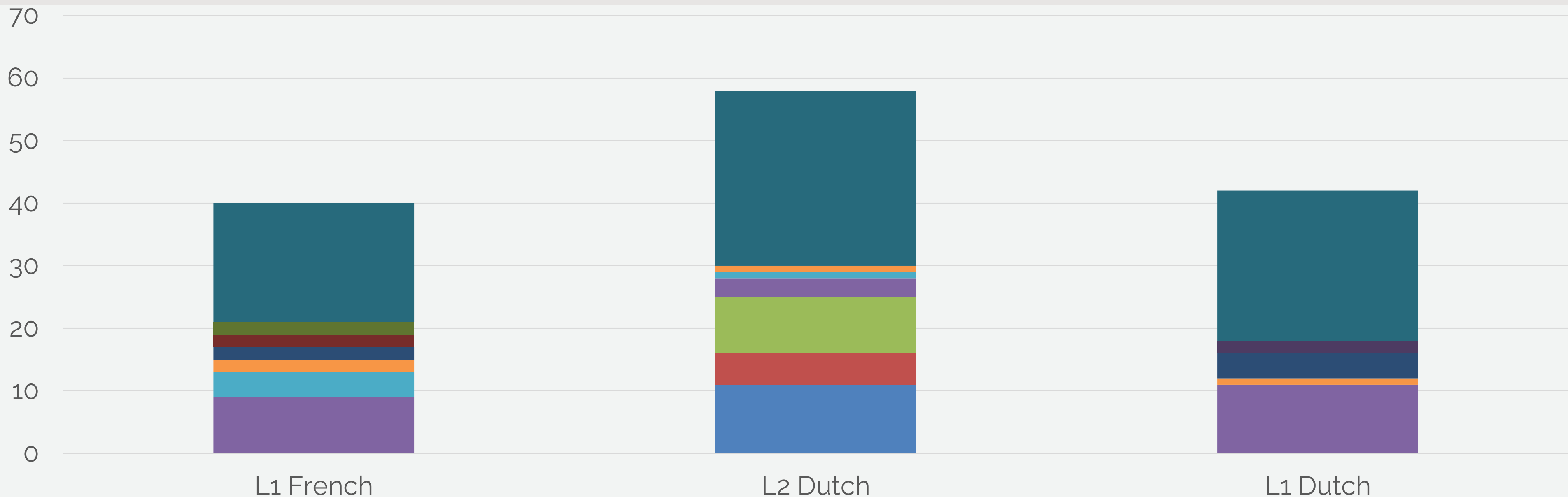
## 3.2. Caused motion events in gesture



Total: 145 (DU: 44, DU2: 59, FR: 42)

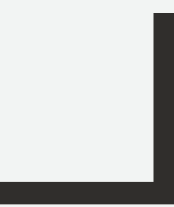


# 3.3. The multimodal expression of caused motion events



- LocationG
- NeutralV + MannerCauseG
- MannerCauseV + MannerCausePathG
- MannerCauseV+ MannerCauseG
- MannerCausePathV + MannerCauseG
- Others
- NeutralV + MannerCausePathG
- MannerCauseV + PathS + MannerCausePathG
- MannerCauseV + PathS + PathG
- MannerCauseV + PathG
- MannerCausePathV + PathS + PathG

Total: 140 (FR: 40, DU2: 58, DU1: 42)





# 4. Discussion & Conclusion

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## 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?

## 4. Discussion & Conclusion

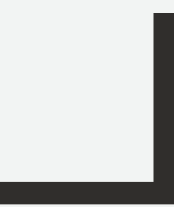
- Caused motion events described as other types of events: a matter of conceptualization?
- What about L2?

# 5. Further research

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- More data
- Density
- L2 learners' evolution (individual + according to their proficiency level)



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