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Nonmanuals and markers of (dis)fluency in French Belgian Sign Language (LSFB)

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INTRODUCTION

Collaborative project about markers of (dis)fluency in spoken English (L1-L2), French (L1) and LSFB (L1) [University of Louvain-UCL & University of Namur-UN] (*non-pathological*, Götz 2013)

In this *pilot study*: **Pauses** (113), **Palm-ups** (80) and **co-occurring Nonmanuals** under investigation

QUESTIONS

- 1 What type of **information** do **Nonmanuals (Nms)** convey about the selected **manual markers (Ms)**, i.e. pauses and palm-up signs?
- 2 Is the (time consuming) **annotation** of each non-manual component needed for each pause and each palm-up sign?

CORPUS

Unprepared monologues selected from larger dialogues

	Sex	Age	SL profile	Clip duration
Signer 1	M	33	Native	3min
Signer 2	F	22	Native	2min
Signer 3	M	25	Near-native	2min30
Signer 4	F	28	Near-native	2min30

CODING Ms

Palm-up (PU)	Upward palm orientation sign in the neutral space resulting from a wrist rotation
Pause	Stop in the hands flow
S1	Stop during a sign
S1:start	Stop at the beginning of a sign
S1:end	Stop at the end of a sign
S2	Stop between signs
S2:crossed	Stop with hands crossed
S2:body	Stop with hands along the body
S2:neutral	Stop with relaxed hands in the neutral space

METHODOLOGY

Step 1: Coding data in ELAN

Step 2: Extracting overlaps between Ms and Nms

Step 3: Querying data in Excel

- Identifying regular combinations of Nms
- Distinguishing consistent Ms categories

CODING Nms

Movement or position of **Eyebrows (B:)**, **Head (H:)** and **Mouth (M:)** in the **strict interval** of PU/S1/S2

Movement of **Eyes (E:)** and **direction of Gaze (G:)** one sign before and after PU/S1/S2

Gaze Tags (Meurant 2008)

Addressed	towards a real or a fictive interlocutor
Spatial out of a role	towards the frontal space without the actualization of a role-play
Spatial within a role	towards positions in the frontal space in relation to the actualization of a role-play
Floating	towards the floor, the side or in the air (not addressed nor related to meaningful positions in space)

PU-mod



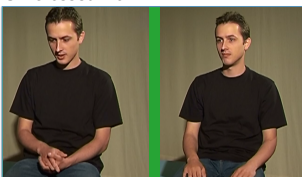
PU (lexical/filler) WELL

S1:start-str FILLED



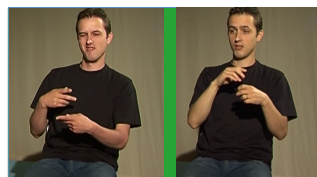
S1:start-sus WINDOW

S2:crossed-BoM



S2:body-BoE

S2:neutral-mod



S2:neutral-sus

RESULTS

1. Values/functions of Ms given by co-occurring Nms

Modality (mod)	Comment or evaluation from the point of view of the role-played character or the signer himself/herself on what is being said
Suspension (sus)	Blank in the communication
Phatic (pha)	The signer makes sure he is well understood
Stress (str)	The signer emphasizes a point of his discourse
Boundary (BoS, BoM, BoE)	Start, middle or end position of a turn

2. Nms needed for annotation (cues defining categories)

Gaze and **Head** are sufficient to distinguish these functions of PU/S1/S2. Sometimes another Nm is present but not systematically.

Manual markers	Head	Gaze	Other Nms
PU-mod		Spatial within a role	
S1:end-mod			
S2:neutral-mod			
S1:start/end-sus	Fixed	Addressed or Floating	
S2:neutral-sus			
S2:body/crossed-pha	Nod	Addressed	
S2:neutral-pha			
S1:end-pha			
S1:end-str	Movement (not Nod)	Addressed or Spatial out of a role	
S1:start-str	Chin up	Addressed or Spatial out of a role	E:wide B:raised M:closed
S2:crossed/body-BoM	Turn or /	Floating	
S2:crossed/body-BoE	Nod or /	Addressed	

FURTHER ISSUES

- Floating vs. Addressed gaze = a (dis)fluent marker in itself?
- Compare with other potential manual (dis)fluency markers: false start, self-repair, repetition, flying index, gesture/motion filler, spatial discourse organisation, connecting sign (list buoy, ALSO, AND, SAME, rhetorical question)
- Using a descriptive template for Nms or a tagset based on the marker functions?



Same nonmanuals with another manual marker

Connecting sign

Left: ALSO + G:a

Right: ALSO + G:f

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REFERENCES

Götz, S. (2013). Fluency in Native and Nonnative English Speech. *Studies in Corpus Linguistics*, 53. John Benjamins Publishing Company.
Johnston, T. (2011). Auslan Corpus annotation guidelines.
Meurant, L. (2008). The speakers' eye gaze. Creating deictic, anaphoric and pseudo-deictic spaces of reference. In R. M. de Quadros (ed.) *Sign Languages: spinning and unraveling the past, present and future*. TILSR 9, Florianopolis, Brazil, pp. 403-414.



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Needle, C. (2002). Sign Stream™ Annotation: Conventions used for the American Sign Language Linguistic Research Project. Boston, MA: American Sign Language Linguistic Research Project Report No.11, Boston University.

Nonhebel, A.; Crasborn, O.; van der Kooij, E. (2004). Sign language transcription conventions for the ECHO Project. Version 9, SSL mouth annotations and BSL and NGT mouth annotations version 2. University of Nijmegen
<http://www.let.kun.nl/sign-lang/echo/docs/>

van Loon, E. (2012). What's in the palm of your hands? Discourse functions of Palm-up in Sign Language of the Netherlands, Master Thesis. University of Amsterdam, Netherlands.