

Alicia Calderón Verde; Gilma Cervantes Soliño; Ariel Hernández Hernández
Elena E. Benedicto
Universidad Tecnológica de La Habana - CENDSOR, Cuba - IELLab, Purdue University



1. Introduction

- Context for this study.
- 1) Part of a larger Project on Motion Predicate:
 - 2) Crosslinguistic and crossmodality in nature
 - 3) 9 Spoken languages (Central América, África, Asia...)
- 3 Sign languages:
1. ASL, LIS, HKSL
 2. ...+ LSCu

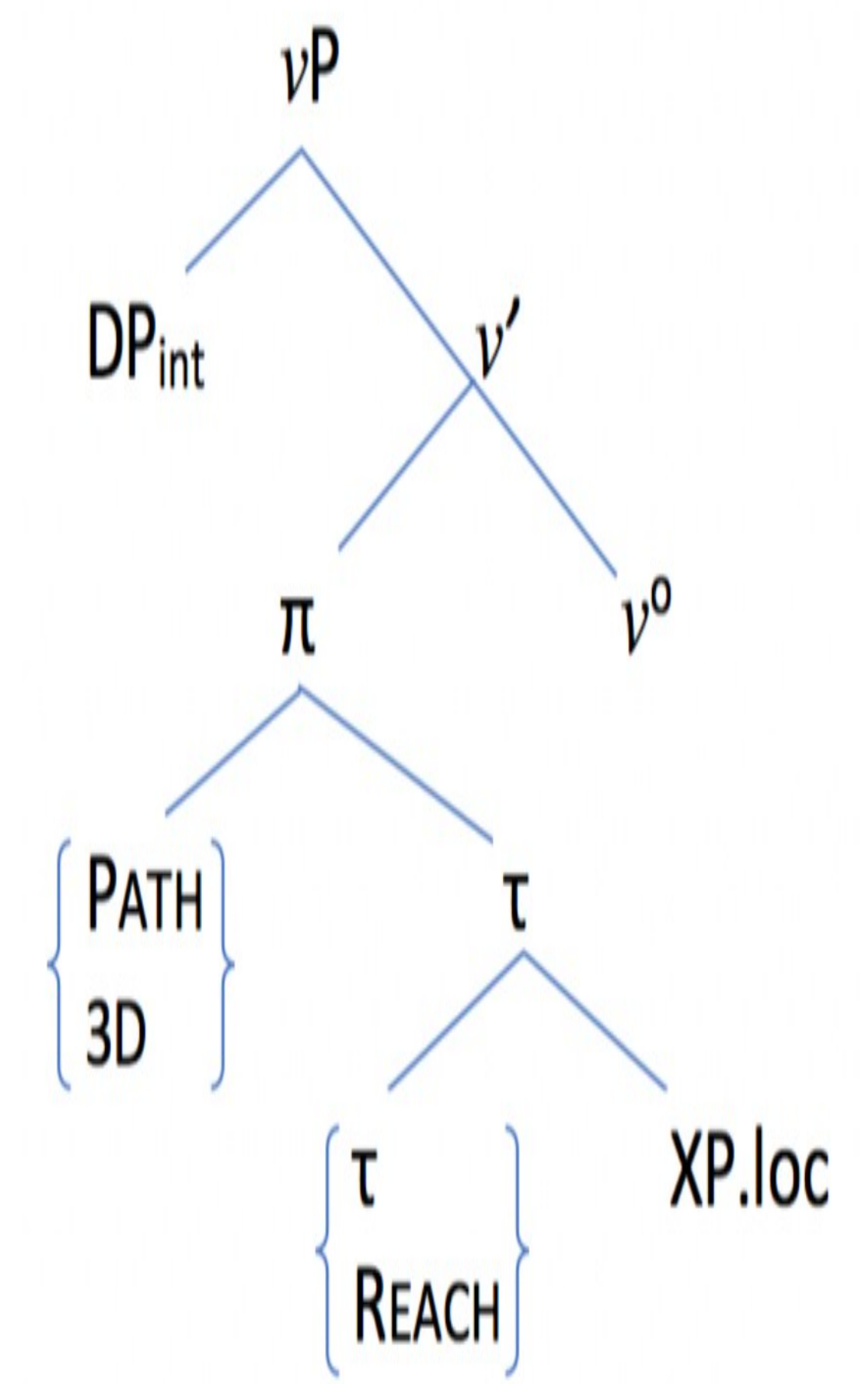
Cuba Sign Languages (LSCu)

- *LSCu is the sign language of Cuba
- *CENDSOR (Center for the Development of the Deaf)
- *Research Center
- *Phonological and morphological research
- *Aspectual studies
- *Phonological and morphological properties of movement
- *Support for the teaching of LSCu and the training of deaf instructors and interpreters
- *Audiovisual production

2. Goal

- To show:**
- ⇒ Non-Manual Markers (NMMs) eyegaze and mouth gesture in relation to Motion predicate
 - ⇒ Syntactic representation of Motion Predicates subeventive structure
 - ⇒ MNM-[mirada] como marcador de Concordancia (Agreement) en los predicados de ASL Neidle et al (2000)
 - ⇒ Kinetic properties in EVH (Wilbur, Schalber), NMM in He-Tang

4. Hypothesis



3. Methodology

The instrument.

1. Self-paced application Benedicto (2017)
 2. 174 animated video clips
 3. Encodes variables for several parameters related to Motion Predicates:
- Process / Path
 - Telicity
 - Result
 - Agentivity

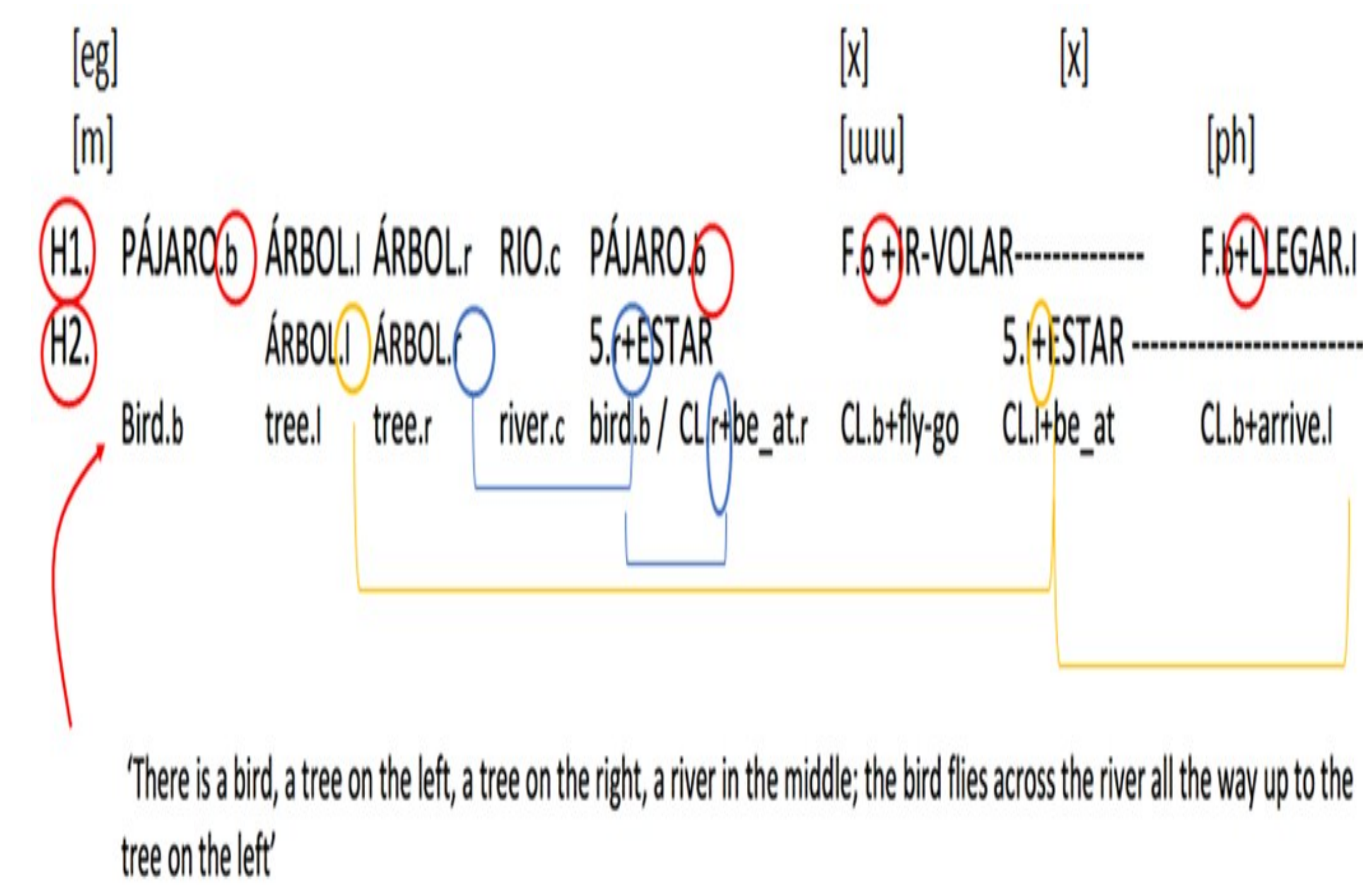
Data collection.

- 3 adult native signers, fluent users of LSCu.
- Two cameras: frontal and side angles
- Each signer was asked to produce 2 different renderings for each video animation total of 1050 productions
- Qualitative follow-up with the signers, as needed.
- Recordings synchronized and clipped

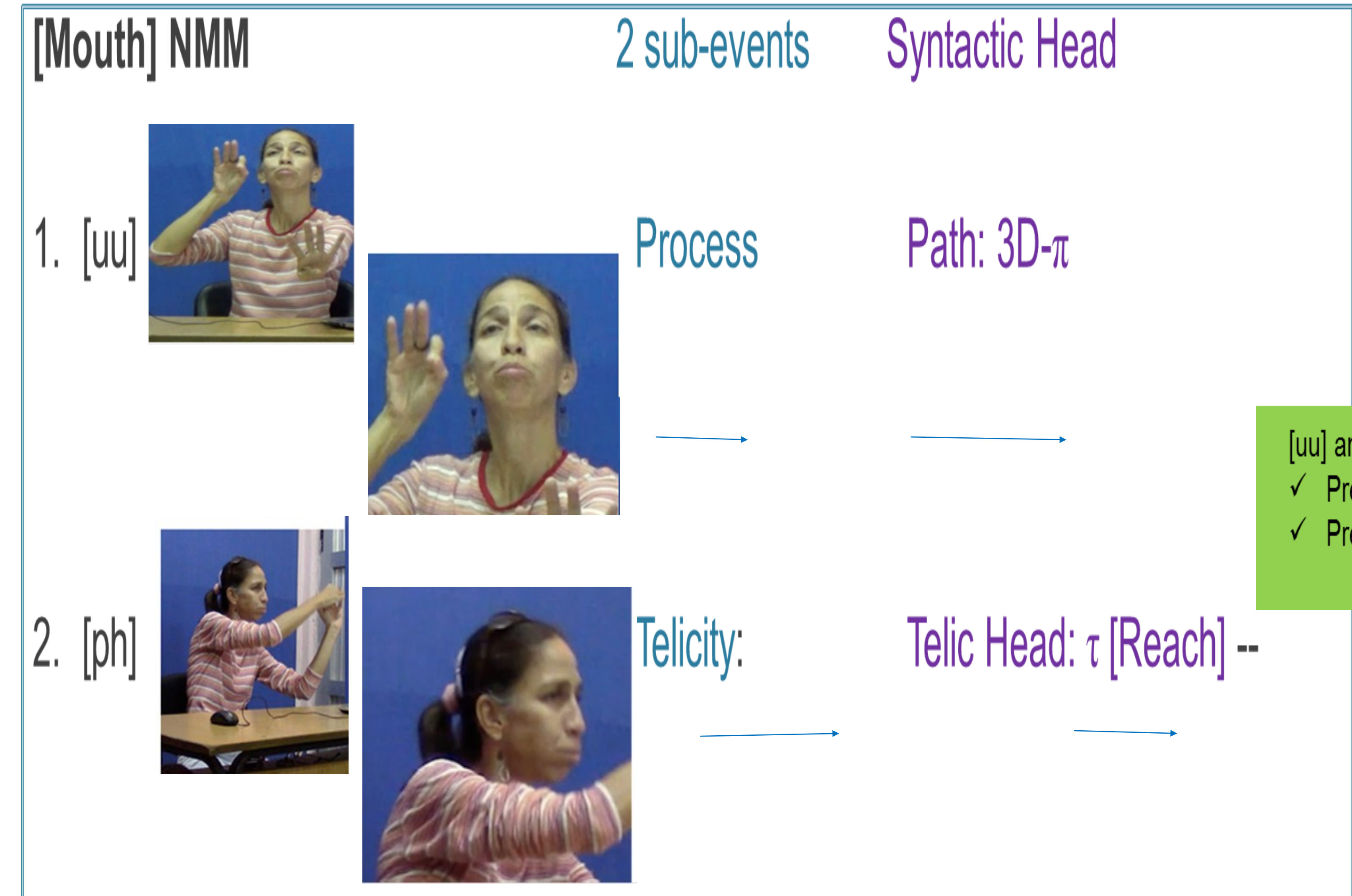
Data Processing.

- Synchronized Clips, processed in ELAN with coding tiers for:
- Dominant hand H1
 - Non-Dominant hand H2
 - NMM-eyegaze
 - NMM-mouth;
- spatial coding for Figure, Endpoint and Movement vectorization (Benedicto-Branchini-Mantovan, 2015)

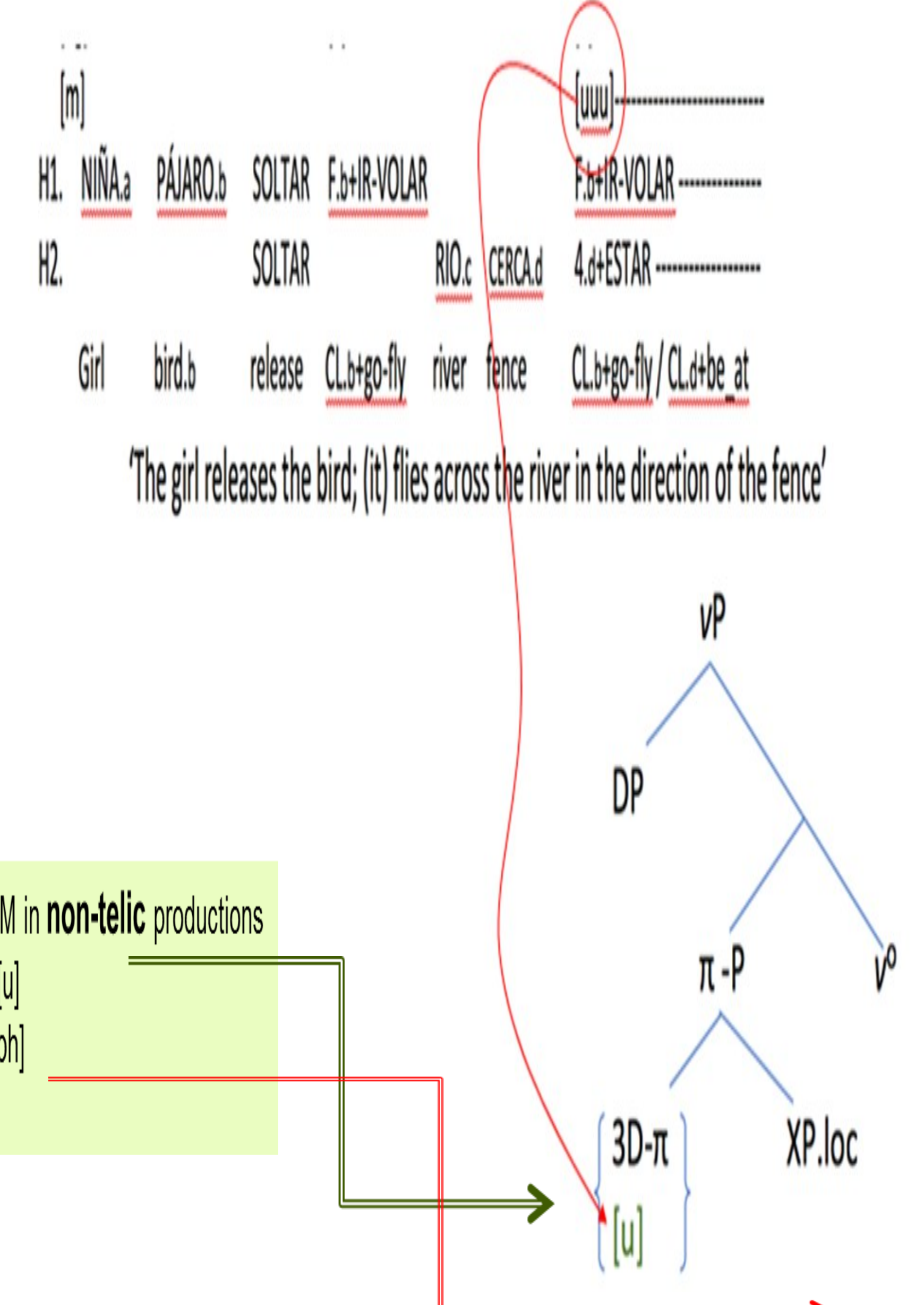
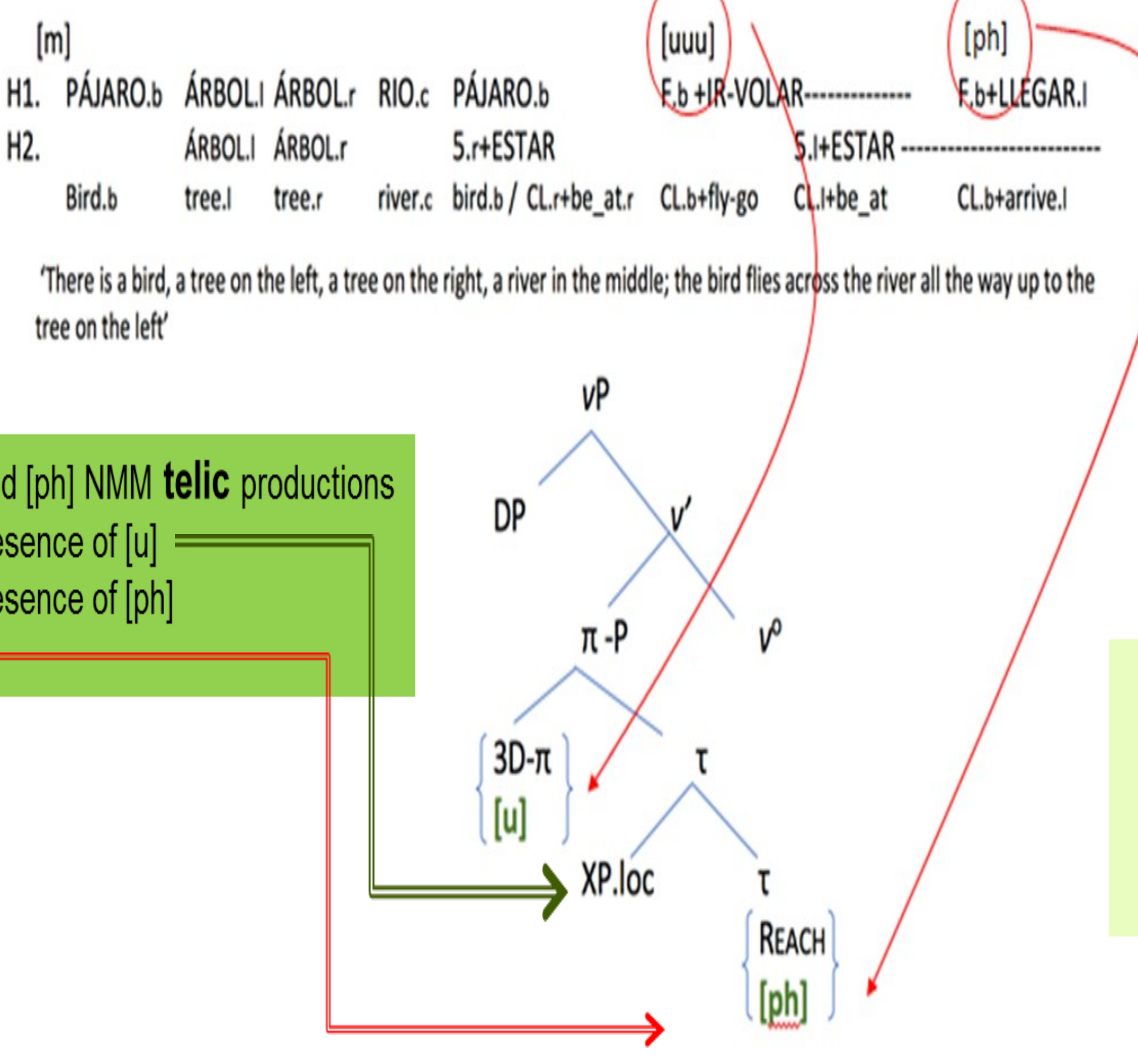
Glossing conventions



5. Pattern characterization 1: Mouth NMMs LSCu



[uu] and [ph] NMM



6. Pattern characterization 2: EyeGaze NMMs

- In Telic productions**
- 2 sub-eventive structures:
 - Process / Undergoer (Figure)
 - Telicity / EndPoint:

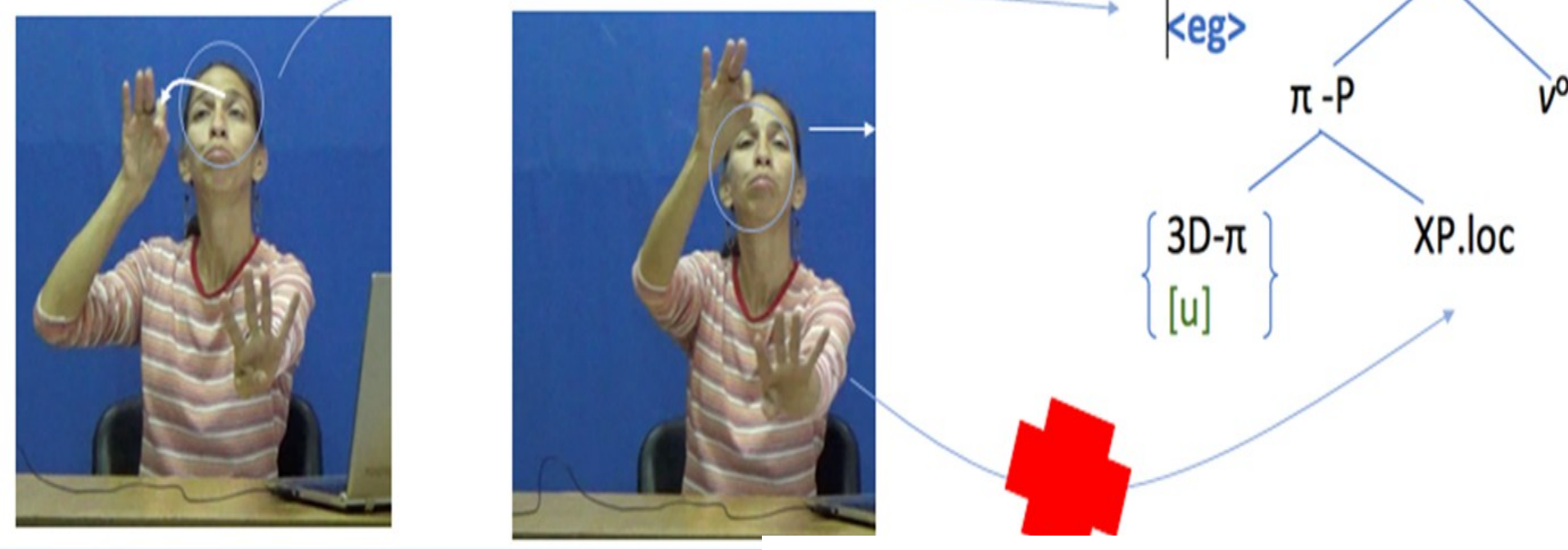
1. [EG] on Figure: the argument of v
2. [EG] on Goal: the argument of Telic Head (Reach) tau



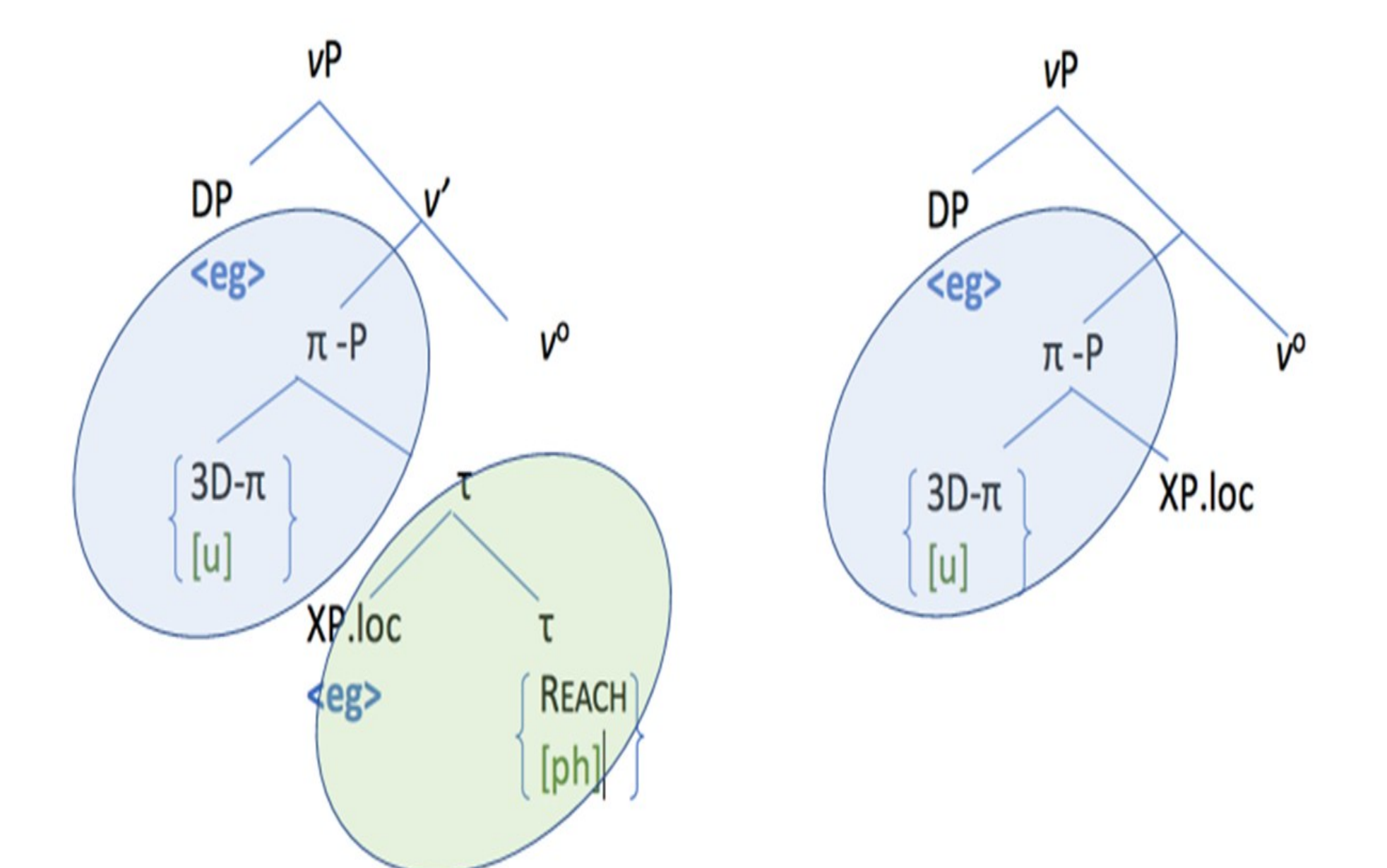
In non-Telic productions

- 1 sub-eventive structure: Process / Undergoer (Figure)

1. [EG] on Figure: the argument of v
2. NO [EG] on Goal: no Telic Head (Reach) tau



7. Patterns and Structures



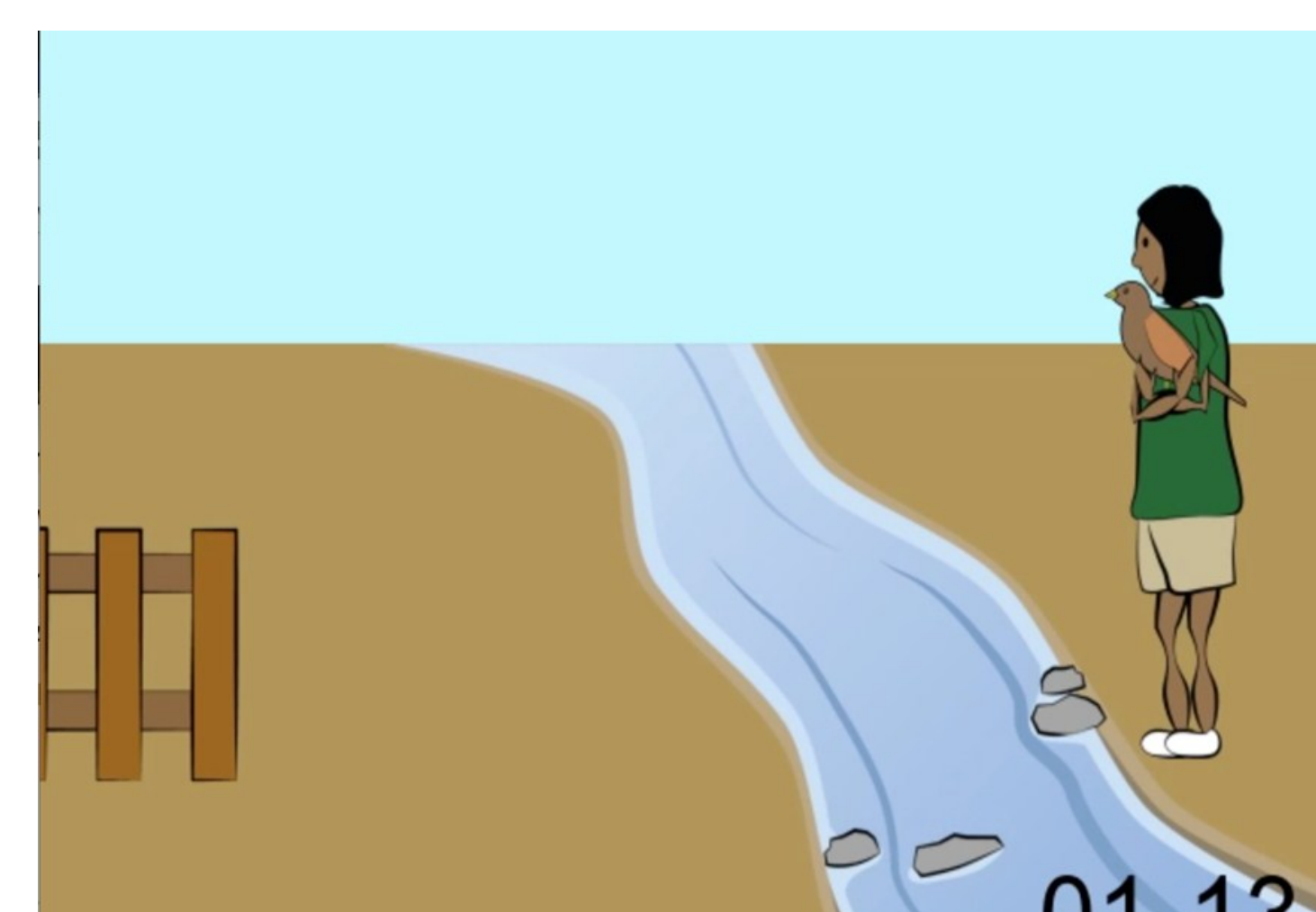
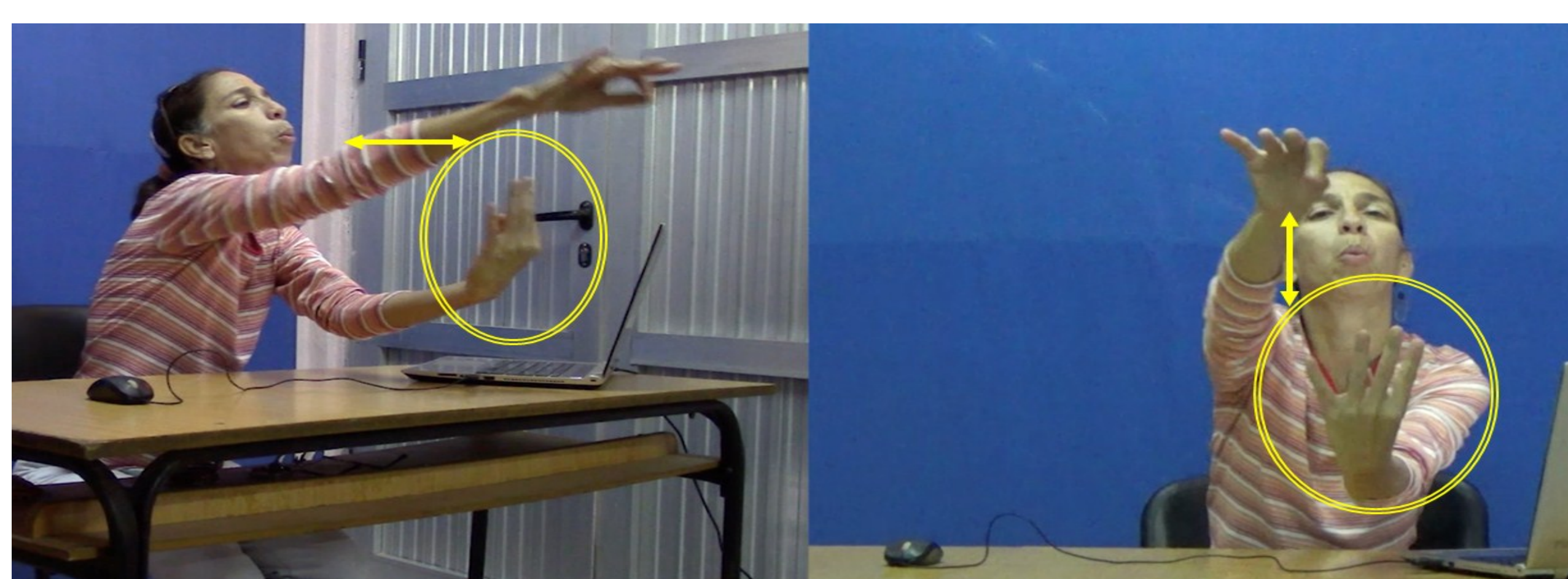
[eg]	[m]	[x]	[uuu]	[x]	[ph]
H1. PÁJARO.b	ÁRBOLI.ÁRBOL.r	RIO.c	PÁJARO.b	F.b+IR-VOLAR	F.b+LLEGAR.l
H2. ÁRBOLI.ÁRBOL.r	5.r+ESTAR	5.l+ESTAR			
Bird.b	tree.l tree.r	river.c	bird.b / CL.r+be_at.r	CL.b+go-fly	CL.l+be_at

'There is a bird, a tree (on the left), a tree (on the right), a river, the bird flies from the tree (on the right) all the way to the tree (on the left)'

[eg]	[m]	[x]	[x]	[uuu]	[ph]
H1. NIÑA.a	PÁJARO.b	SOLTAR	F.b+IR-VOLAR	F.b+IR-VOLAR	
H2. SOLTAR	RIO.c	CERCA.d	4.d+ESTAR		
Girl	bird.b	release	CL.b+go-fly	river	fence
				CL.b+go-fly / CL.d+be_at	

'The girl releases the bird; (it) flies across the river in the direction of the fence'

Other Issues: Iconicity Mismatch



9. Conclusions

- We have:
- Identified NMM associated with syntactic sub-eventive heads
 - Shown the existence of syntactic sub-eventive structure
 - Provide further evidence that Aktionsart is encoded in the predicate structure and not on the lexical verb

References

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