

typannot,

A GLYPHIC EMBODIMENT FOR SL

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A TEST OF DECODING

...



THE RESULTS



TYPANNOT: THE GOALS

ELABORATE A GLYPHIC SYSTEM FOR THE TRANSCRIPTION OF THE SL'S

Respectful of good

- readability
- writability
- searchability
- modularity

for researchers, practionners, speakers...
and designers.

I- GROUNDED CODING SYSTEM SUCH A GLYPHIC SYSTEM

EMBODIMENT

- *Set up a glyphic system for the body expression: does it mean disembodiment?*
- *Can a glyphic system be a re-embodiment?*
- *A writing system for the body: which consequences for the meaning? translation, transcription*

II- GROUNDED CODING SYSTEM SUCH A GLYPHIC SYSTEM

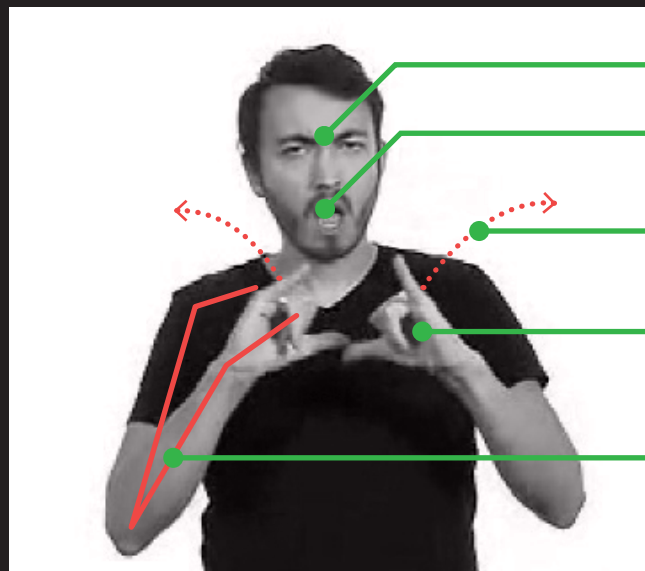
MODALITIES

- *Writing, coding, transcribing in regard of the oral, the unavoidable split in modality?*
- *What's about SL?*

III- GROUNDED CODING SYSTEM SUCH A GLYPHIC SYSTEM

SYSTEM

- a glyphic system using modular compounds,
(meta data and UNICODE input device:
a virtual keyboard, trackpad drawing)



facial expression

mouth
+ mouth gestures
movement

handshape

initial location
(starting position of the upper limbs)
+ palm orientation

STATE OF THE ART





SIGNWRITING (Sutton, 1974)

Based on visual perception of signs, it has high readability, medium writability, but low searchability.

STOKOE NOTATION (Stokoe, 1960)

& HAMNOSYS (Prillwitz *et al.*, 1990)

Based on phonetic features of signs, they have low readability, medium writability, but high searchability.

<p>4 bears</p> 	<p>SignWriting</p> 	<p>Stokoe</p> <p>□ J C † J C V x .</p>	<p>HamNoSys</p> <p>.. 𐀮 r 0 × . 𐀮 > ([𐀮 𐀮] +</p>
<p>5 Goldilocks</p> 		<p>3 Y 𐀮</p>	<p>𐀮 2 5 r 𐀮 𐀮 > ([𐀮 > 3 [X 𐀮 2]] [𐀮 𐀮] 𐀮 𐀮] [𐀮 𐀮]</p>

TRANSCRIPTION FOR THE RESEARCHERS: ELAN

- Transcription: **gloses or forms?**
- Entering the annotations: **Keyboard**
- Searchability: **Typefonts**

Elan - NGT_AH_fab5.eaf

File Edit Search View Options Help

CAM 3

Grid Text Subtitles Controls

Translation Dutch
Hij keek voorzichtig rond, niemand te zien.

Translation English
He looked around carefully, nobody there.

Gloss RH
NIETS

Mouth
bialabial

00:00:13.640 Selection: 00:00:13.640 - 00:00:15.650 2010

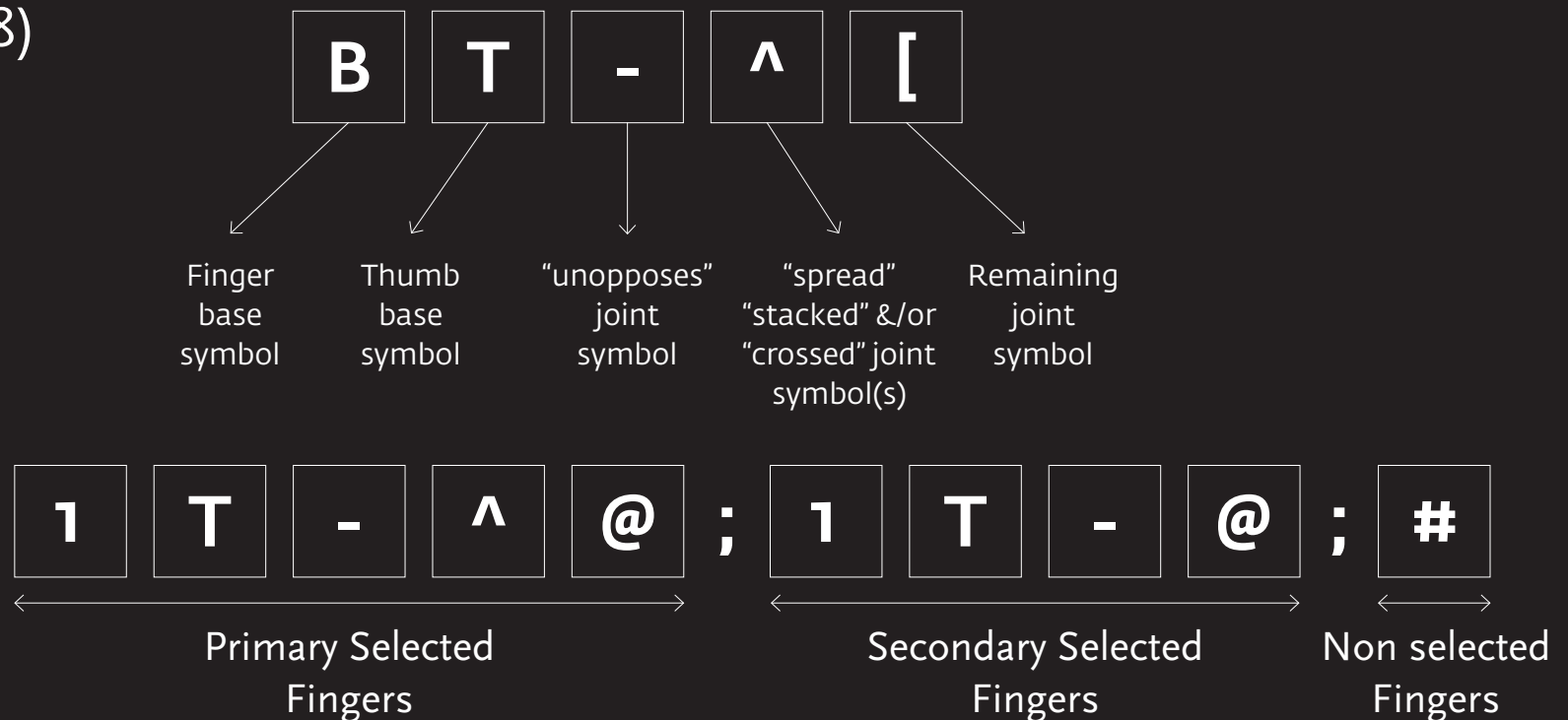
00:00:14.000 00:00:15.000 00:00:16.000 00:00:17.000 00:00:18.000 00:00:19.000 00:00:20.000 00:00:21.000 00:00:22.000

Translation Dutch	emand te zien.	Hij rende snel de winkel in, pakte het bot en rende er zo snel als hij kon mee weg. Hij rende ver weg tot aan de br					
Translation English	nobody there.	He ran into the shop, took the bone and took off as fast as he could. He ran far away up to the bridge.					
Gloss RH English	NOTHING	(p-) running dog	CATCH	(p-) running d	(p-) dog disappears	BRIDGE	(p-) run
Gloss LH English	NOTHING	(p-) running dog		(p-) running d		BRIDGE	
Gloss RH	NIETS	(p-) rennen hond	GRUPEN	(p-) rennen ho	(p-) hondje verdwijnen in d	BRUG	(p-) ren

I- WHAT IS RELEVANT IN SL FOR ITS NOTATION?

Based on phonological
analysis (Eccarius
& Brentari, 2008)

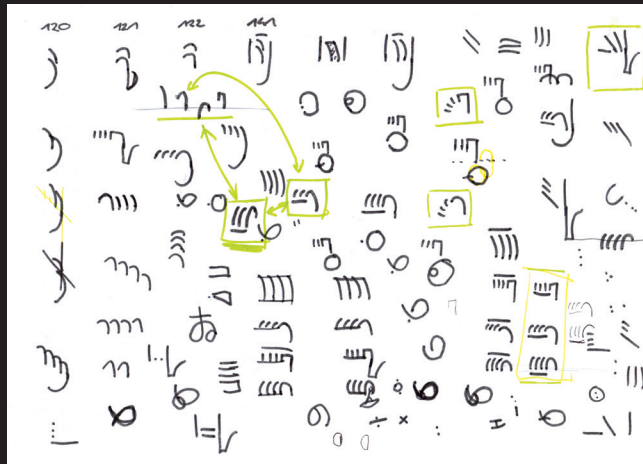
GRAPHEMATIC FORMULA: STRUCTURAL DISEMBODIMENT



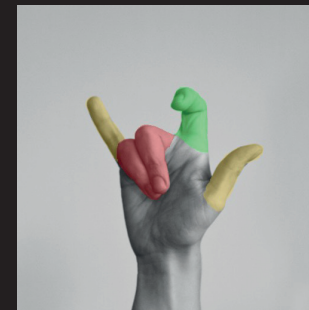
II- WHAT IS RELEVANT IN SL FOR ITS NOTATION?

Based on phonological
analysis (Eccarius
& Brentari, 2008)

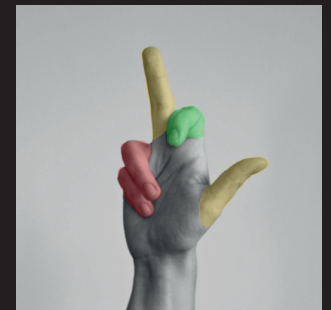
GLYPHIC FORMULA: REIMBODIMENT IN A CHARACTER



1[;]T-;#



1[;8T-;#

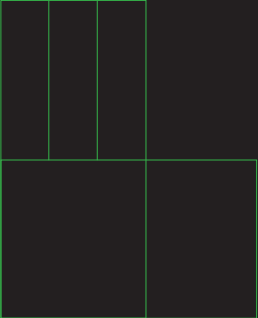


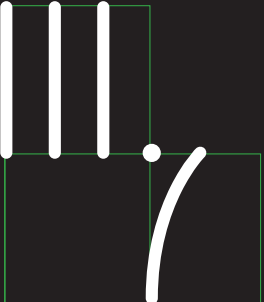






FEATURES OF THIS REIMBODIMENT

PRINCIPLES AND RULES

- I Phonologics decomposition by features (4 rules)
- II Point of view for the hand (2 rules)
- III Representation (5 rules)

I- COMPOSITIONNNALITY / FEATURES

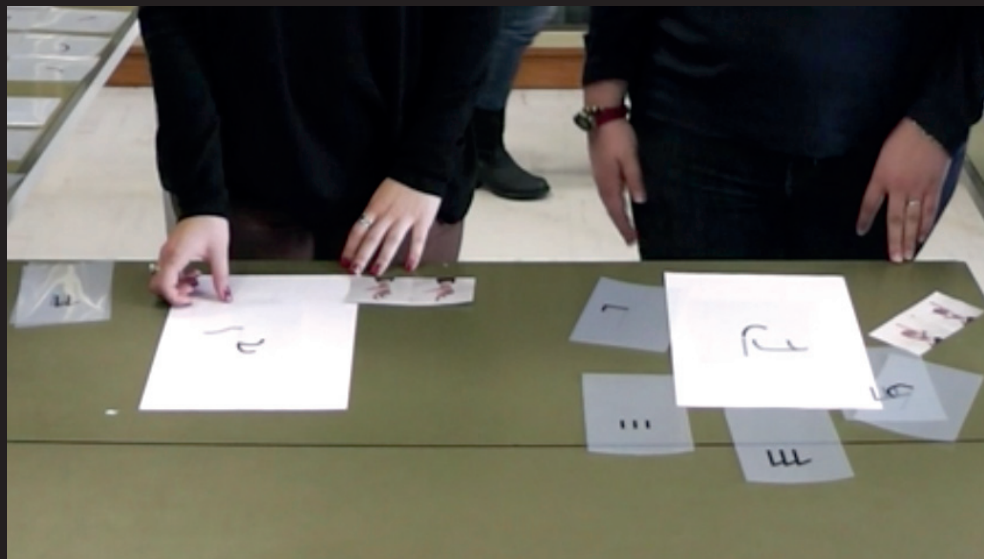
Handshape organisation	Finger position & selection	Finger contact
		
		
		
		Viewing angle

II- COMPOSITIONNALITY/ FEATURES

multi-lingual sign language graphematic system table

ECCARIUS & BRENTARI CONFIGURATIONS		FINGERS												THUMBS				
		^ Spread				Unspread			k Stacked			x Crossed			T Opposed	T- Unopposed		
		1	2	3	4	2	3	4	2	3	4	2	3	4				
/	Extended	|	||	|||	||||	||	|||	||||	\	\\	\\\	X	W	—		└		
<	Flat opened	i	ii	iii	iiii	ii	iii	iiii	—			—			⋈	—	—	
>	Flat closed	.	—			..	...	....	—			—			⋈	—	—
(	Curved open wide	\	\\	|||	||||	||	|||	||||	—			—			—	—	—	
c	Curved open narrow	ʌ	ʌʌ	ʌʌʌ	ʌʌʌʌ	ʌʌ	ʌʌʌ	ʌʌʌʌ	ʌ	ʌʌ	ʌʌʌ	—			—	—	—	
[	Bent	ʌ	ʌʌ	ʌʌʌ	ʌʌʌʌ	ʌʌ	ʌʌʌ	ʌʌʌʌ	ʌ	ʌʌ	ʌʌʌ	—			—	—	—
o	Curved closed	o	—			o	oo	ooo	—			—			—	—	—	
@	Closed	o	—			o	oo	ooo	—			o	—			o	o	o

II- POITIERS, TEST OF COMPOSITION



UNICODE

COMPUTING INDUSTRY STANDARD













The standard consists of:

- a set of code charts for visual reference
- an encoding method and set of standard character encodings
- a set of reference data files
- a number of related items, such as **character properties**, rules for normalization, decomposition, collation, rendering, and bidirectional display order

SignWriting has integrate Unicode 8
in 2015

1D8F0

Sutto

	1D8F	1D90	1D91	1D92	1D93	1D94
0	 1D8F0	 1D900	 1D910	 1D920	 1D930	 1D940
1	 1D8F1	 1D901	 1D911	 1D921	 1D931	 1D941

1D800

Sutto

Handshapes with index finger

1D800		SIGNWRITING HAND-FIST INDEX
1D801		SIGNWRITING HAND-CIRCLE INDEX
1D802		SIGNWRITING HAND-CUP INDEX
1D803		SIGNWRITING HAND-OVAL INDEX
1D804		SIGNWRITING HAND-HINGE INDEX
1D805		SIGNWRITING HAND-ANGLE INDEX
1D806		SIGNWRITING HAND-FIST INDEX BENT
1D807		SIGNWRITING HAND-CIRCLE INDEX BENT
1D808		SIGNWRITING HAND-FIST THUMB UNDER

CONCLUSION AND FUTURE WORK

- *Writing expressive forms of the body can not be done without the body.*
- *The typefonts are before all shapes which embodied graphematics rules in a dynamic way.*
- *The relationships between the graphematics formulas and the glyphics ones could change.*