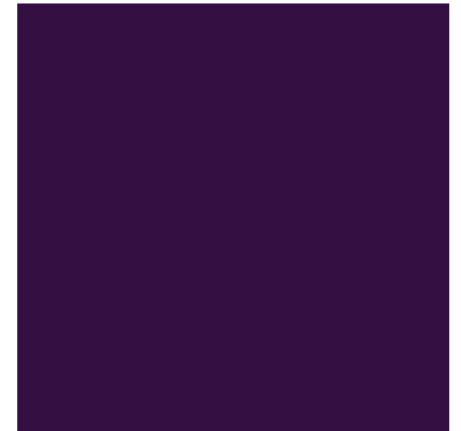
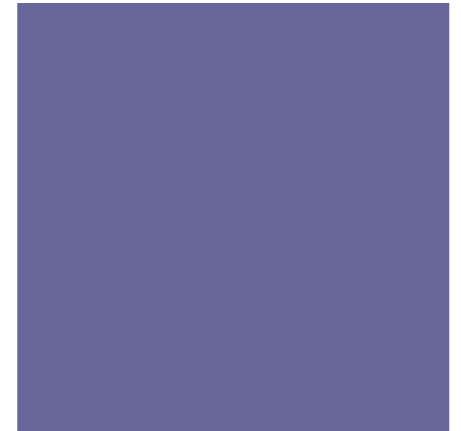




Jorke Grotenhuis (ULiège)



berlin-brandenburgische  
AKADEMIE DER WISSENSCHAFTEN

# De Toth Online Sign-list

Introductie van de nieuwe online tekenlijst

# + Introductie



- Tekenlijsten in de Egyptologie
- Het vormen van een datamodel
- De Thot Sign-list (TSL)



+ De geschiedenis van  
tekenlijsten in de  
Egyptologie

# + Tekenlijsten in de Egyptologie

- Jean-François Champollion

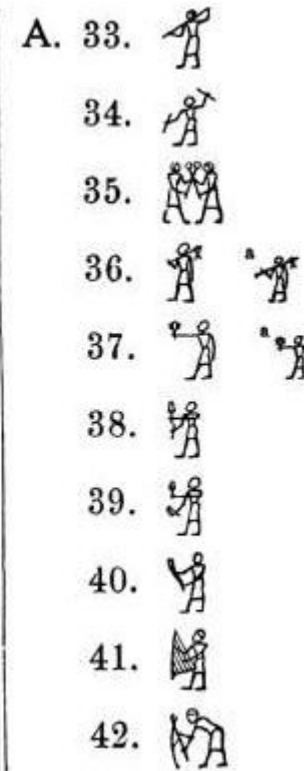
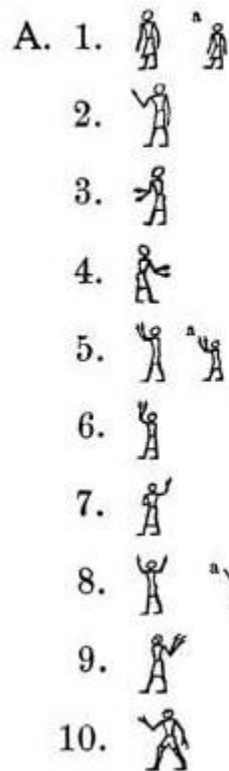


1790-1832

# + Tekenlijsten in de Egyptologie

■ Jean-François Champollion

■ Theinhardt font




# + Tekenlijsten in de Egyptologie














■ Jean-François Champollion

■ Theinhardt font


■ Gardiner




## Sect. A. Man and his Occupations


1  seated man








Ideo. in  *s* (*st*)<sup>0</sup> 'man'. Ideo. or det. 'I', 'me' in  *i*,  *wi*,  *ink*,  *kwi*. Det. man's relationships or occupations, exx.  *st* 'son';  *smr* 'courtier';  *hwrw* 'wretch';  *irr* 'doer'; also personal names, ex.  *nhw* 'Ankhu'. In personal names,  is abbrev. for  *rhw* 'men',<sup>1</sup> ex.  *Rhw-ꜥnh* 'Rehuꜥnkh'.

<sup>0</sup> Very rarely written as *st*, exx. *Urk.* v. 179; *Mett.* 18. <sup>1</sup> *Rec.* 9, 57, n. 2.

 seated man and woman  
with plural strokes

Det. people and their occupations, exx.  *rmꜥ* 'people';  *smw* 'Asiatics';  *mtrw* 'witnesses'.

2  man with hand to  
mouth

Det. eat,<sup>1</sup> exx.  *wꜥm* 'eat';  *hꜥr* 'hungry'; drink, ex.  *sw(r)i* 'drink'; speak, exx.  *sꜥd* 'relate';  *gr* 'be silent'; think, ex.  *ks* 'devise'; feel, ex.  *mri* 'love'.

<sup>1</sup> Old uses, *AZ.* 57, 73.

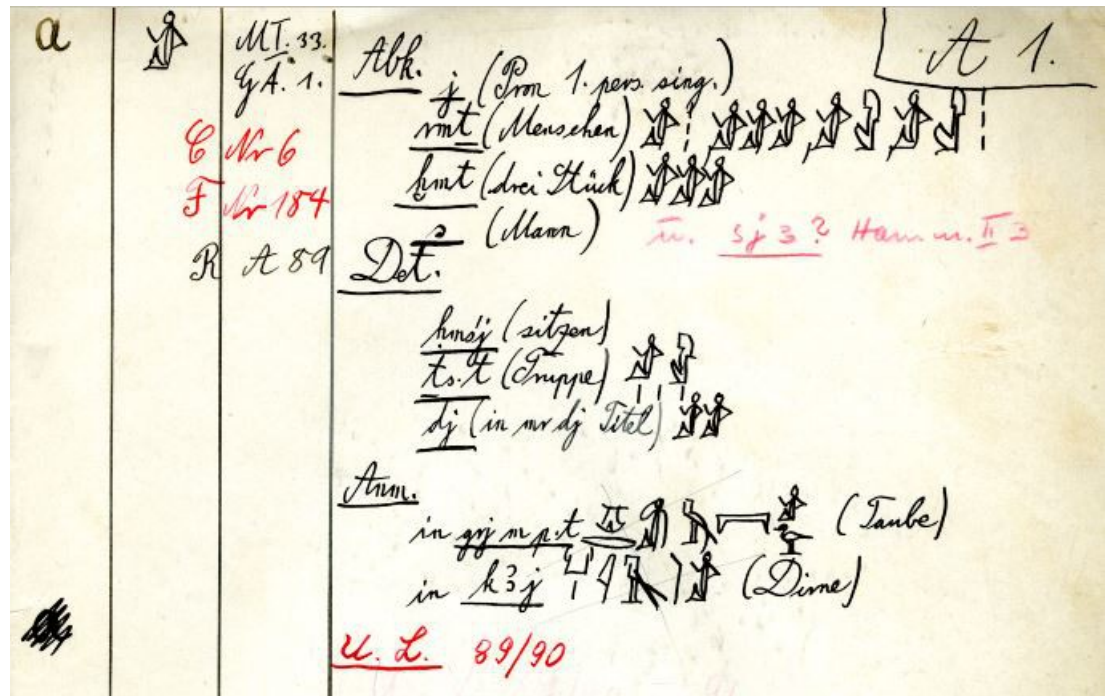
# + Tekenlijsten in de Egyptologie

■ Jean-François Champollion

■ Theinhardt font

■ Gardiner

■ Berliner Zeichenliste



# + Tekenlijsten in de Egyptologie

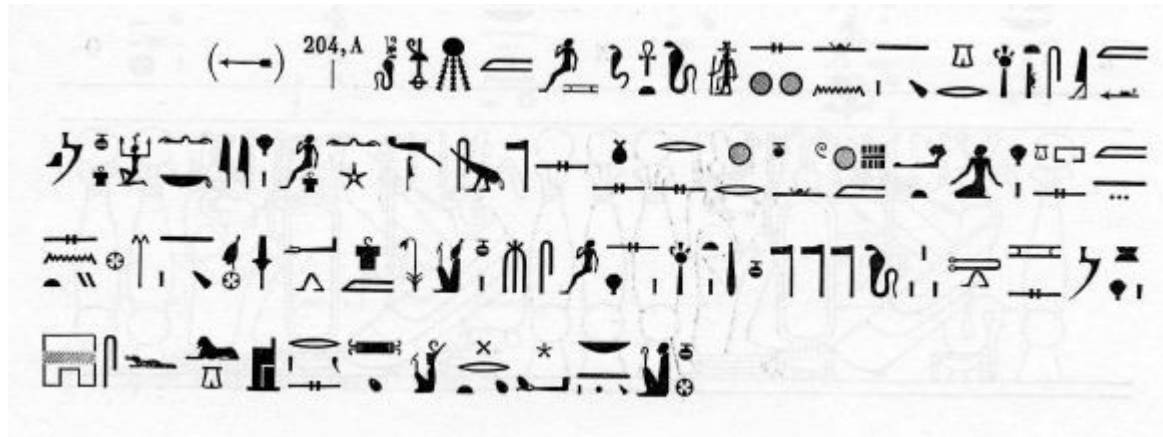
- Jean-François Champollion

- Theinhardt font

- Gardiner

- Berliner Zeichenliste

- IFAO font





# + Tekenlijsten in de Egyptologie

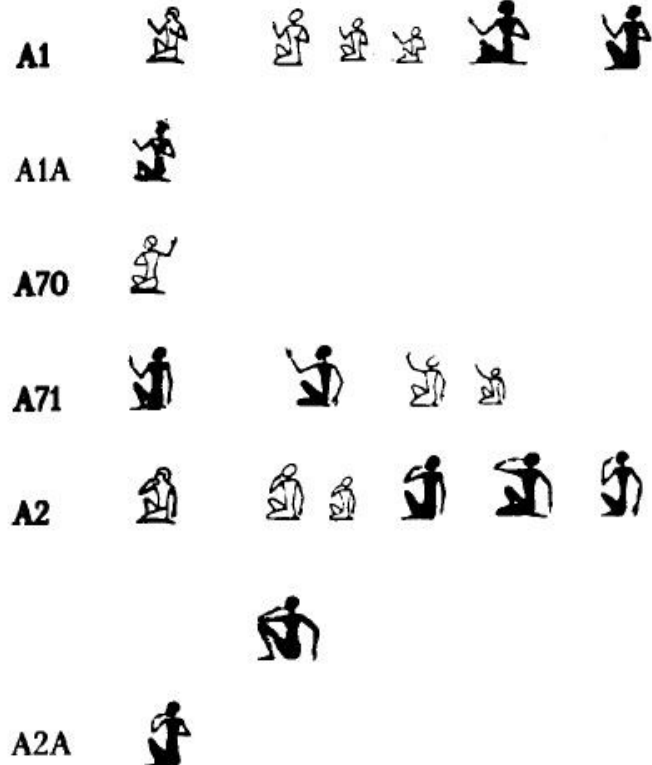
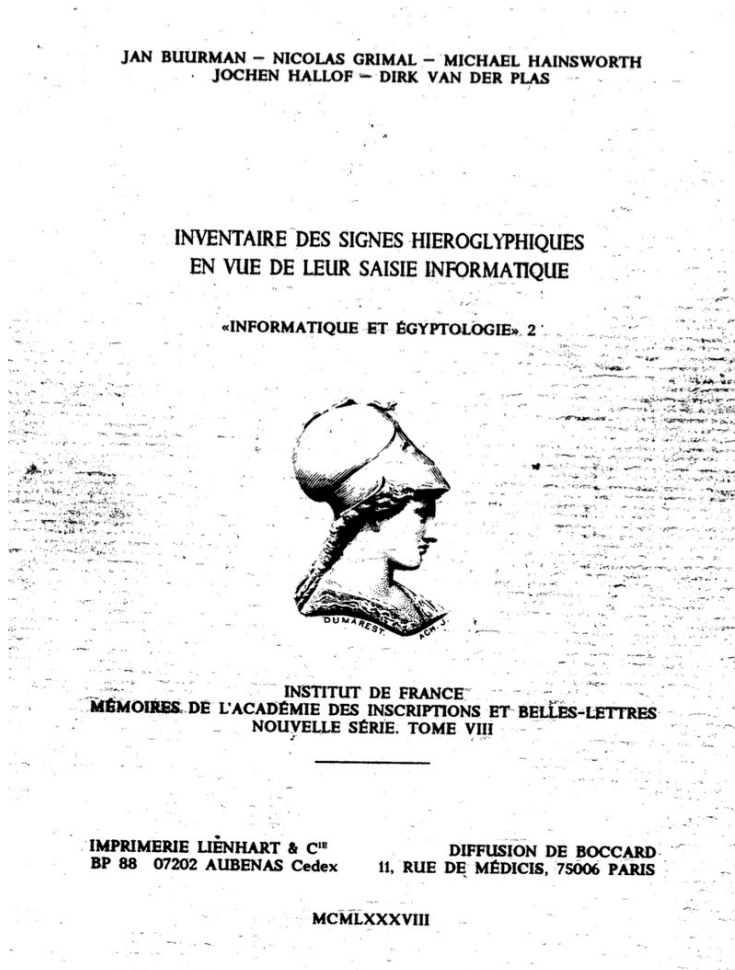
## ■ En vele andere

- Als onderdeel van grammatica's : Allen, Borghouts, Mailaise & Winand, Schenkel, Kurth, Leitz
- Als onderdeel van woordenboeken : Hannig, van der Molen
- Paleografische werken : Paléographie Hiéroglyphique I-VII, Hibis temple project, enz
- Toevoegingen aan series : Daumas, Cauville
- Ongepubliceerd : Hornung & Schenkel



# + Tekenlijsten in de Egyptologie

## ■ Digitale tekenlijsten : Manuel de Codage



# + Tekeningenlijsten in de Egyptologie

## ■ Digitale tekenlijsten : Manuel de Codage

- Glyph
- MacScribe
- Winglyph
- Jshesh, Hieroglyphica, Perfectglyph, enz



# + Tekeningenlijsten in de Egyptologie

## ■ Functies van tekenlijsten

- Becommentarieerd vs. font
- Ondersteunend materiaal
- Paleografisch



# + Op weg naar de Toth Sign-list

## ■ Positieve ontwikkelingen

- De groepering van tekens in categorieën
- Groepering van verschillende vormen
- Standardisatie van tekens
- Beschrijvingen van de functies
- Referenties



# + Op weg naar de Toth Sign-list

## ■ Beperkingen van huidige tekenlijsten

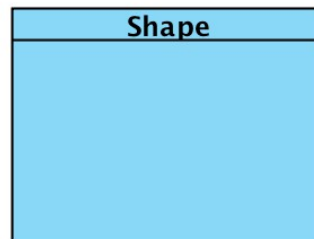
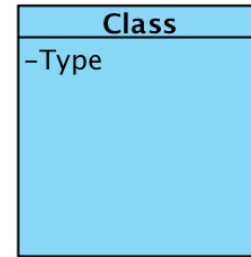
- Moeilijk om bij te werken
- Beperkte bereikbaarheid
- Geografische of temporele begrenzingen





+ Het vormen van een datamodel

# + Het vormen van een datamodel



**Réviser le codage de l'égyptien ancien**

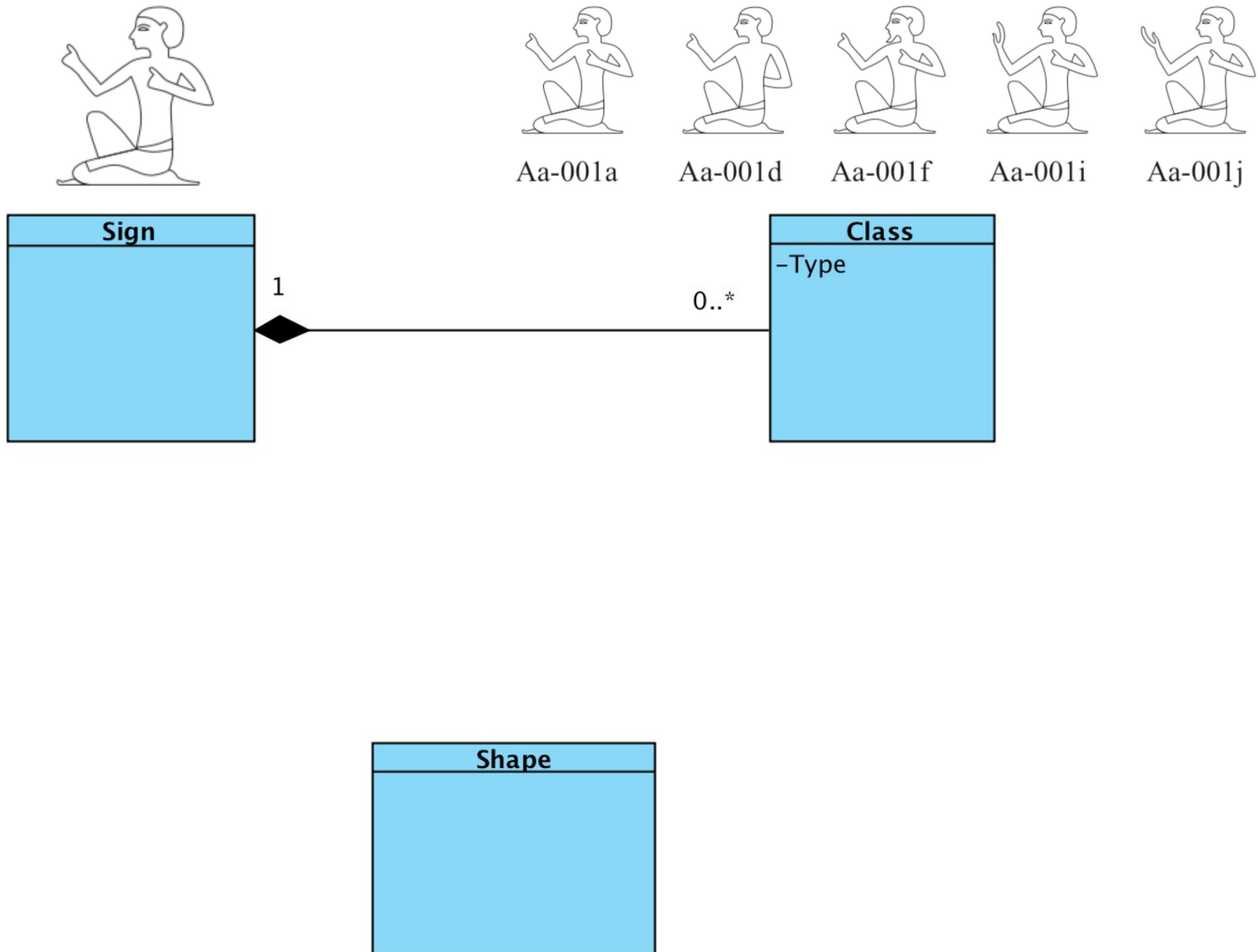
**Vers un répertoire partagé des signes hiéroglyphiques**

**Stéphane Polis<sup>1</sup>, Serge Rosmorduc<sup>2</sup>**

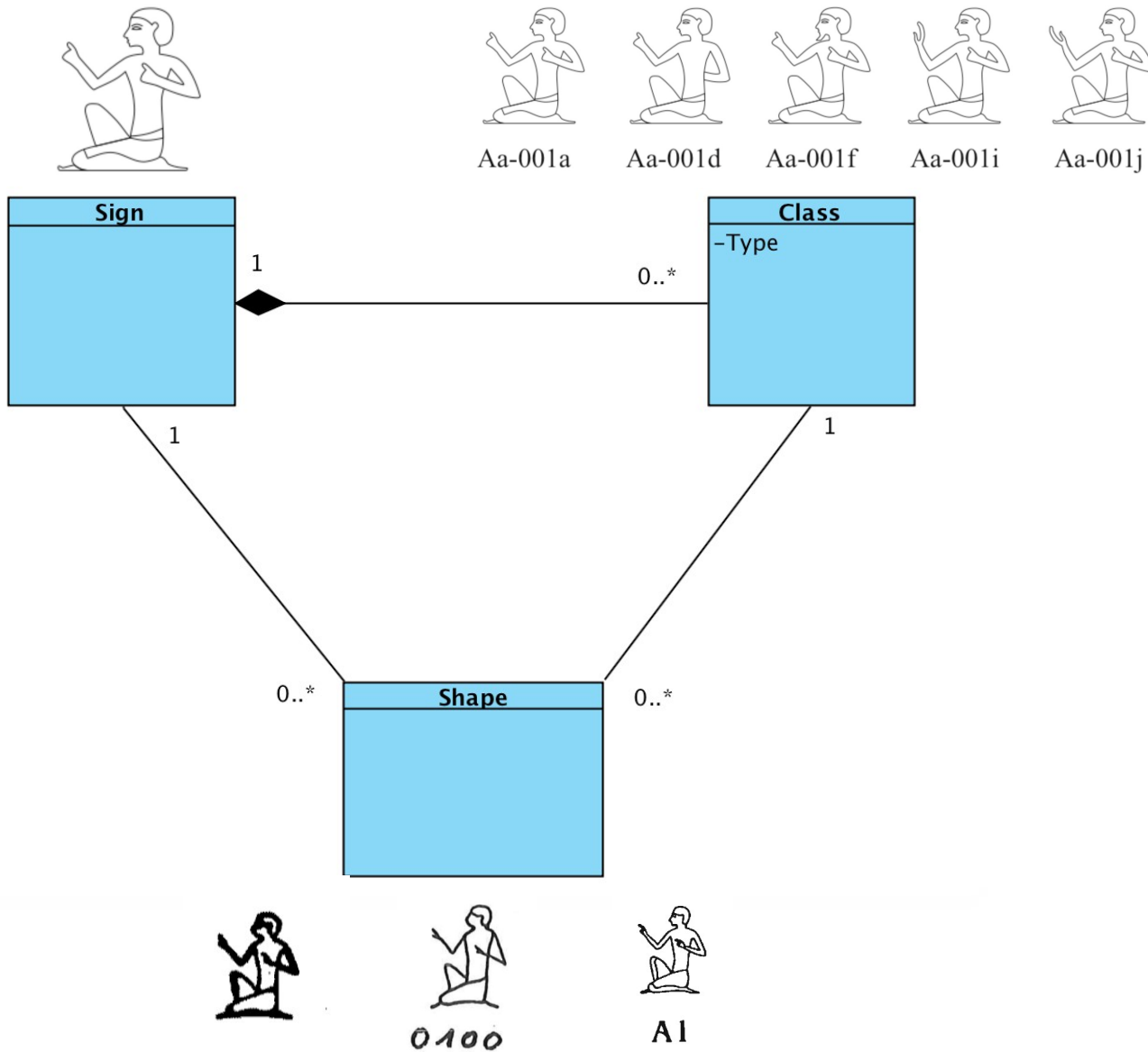
**Dictionnaire hiéroglyphique, inventaire  
des hiéroglyphes et Unicode**



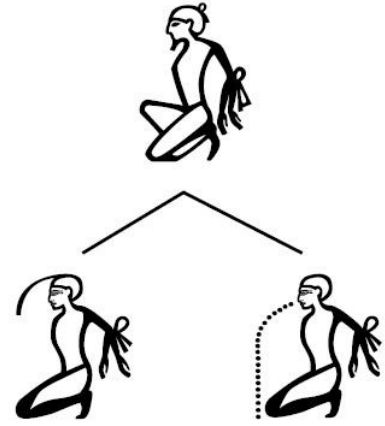
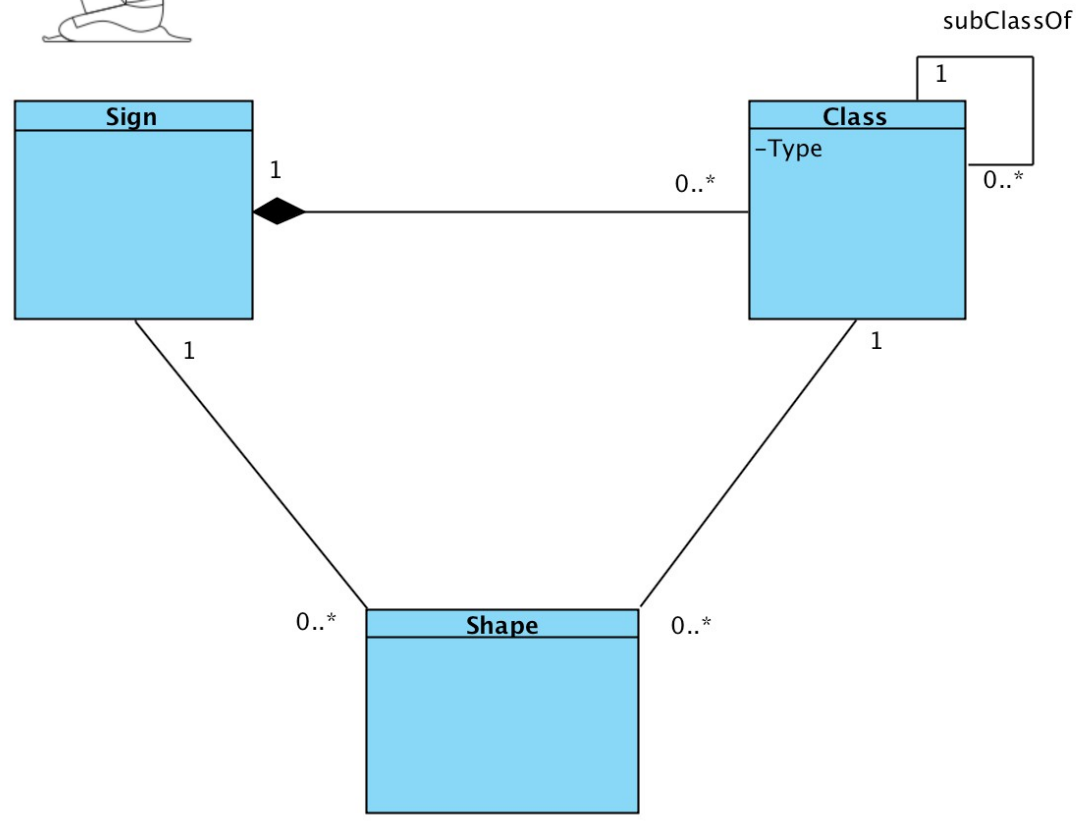
# + Het vormen van een datamodel



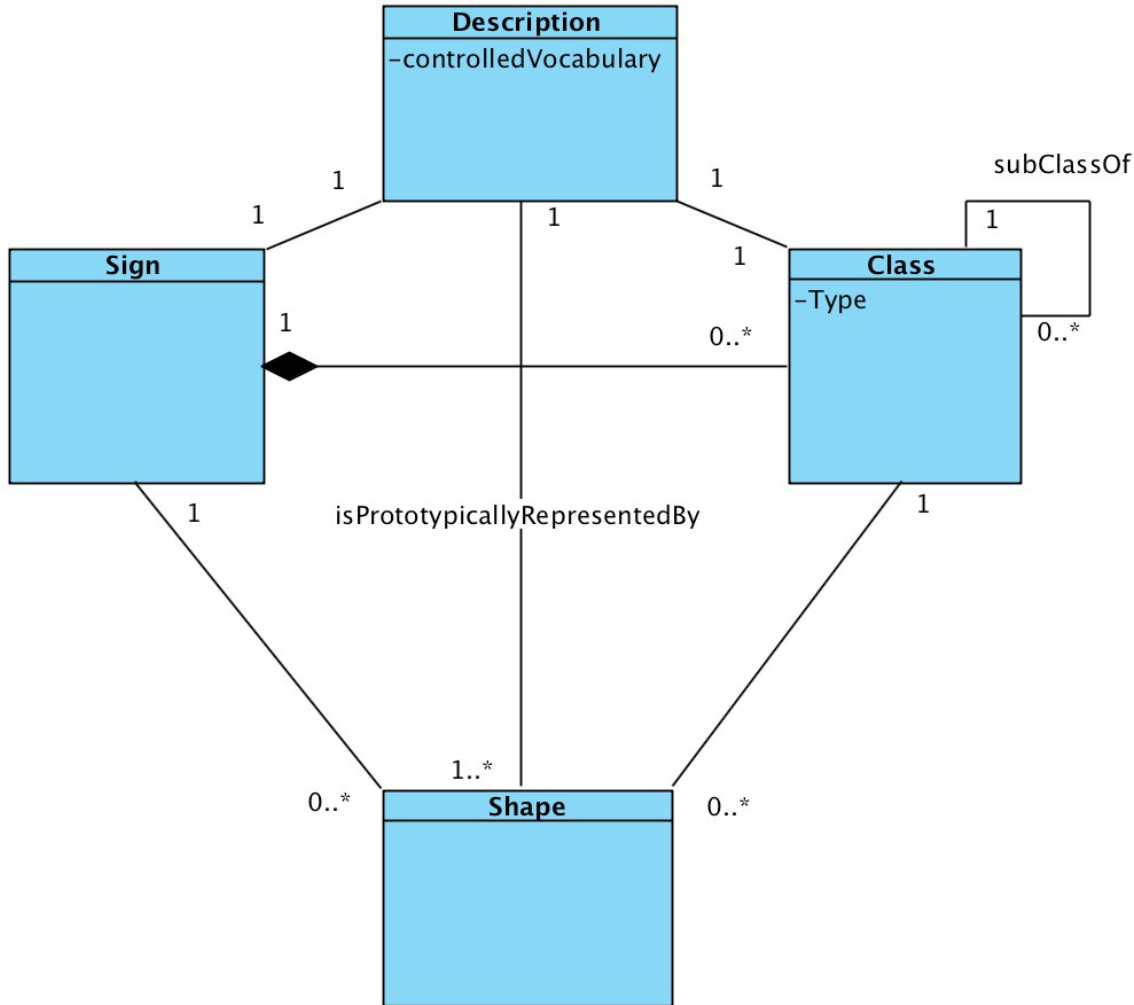
# + Het vormen van een datamodel



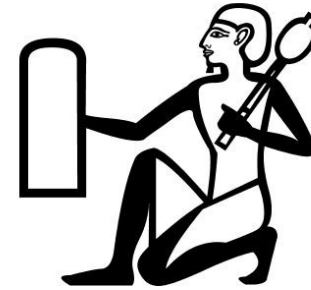
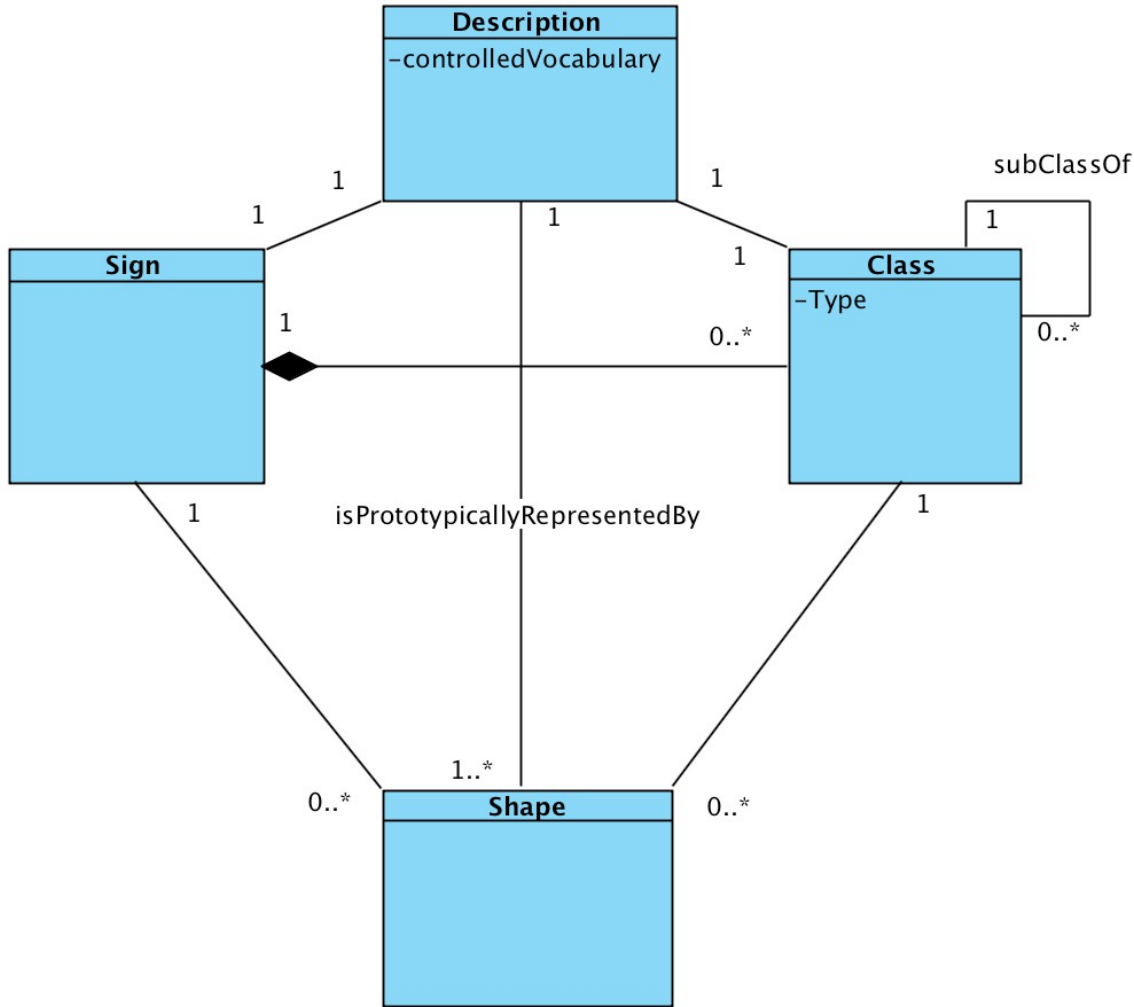
# + Het vormen van een datamodel



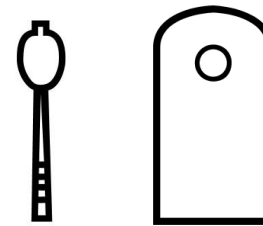
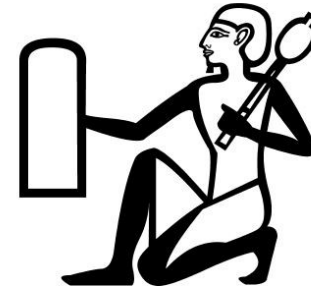
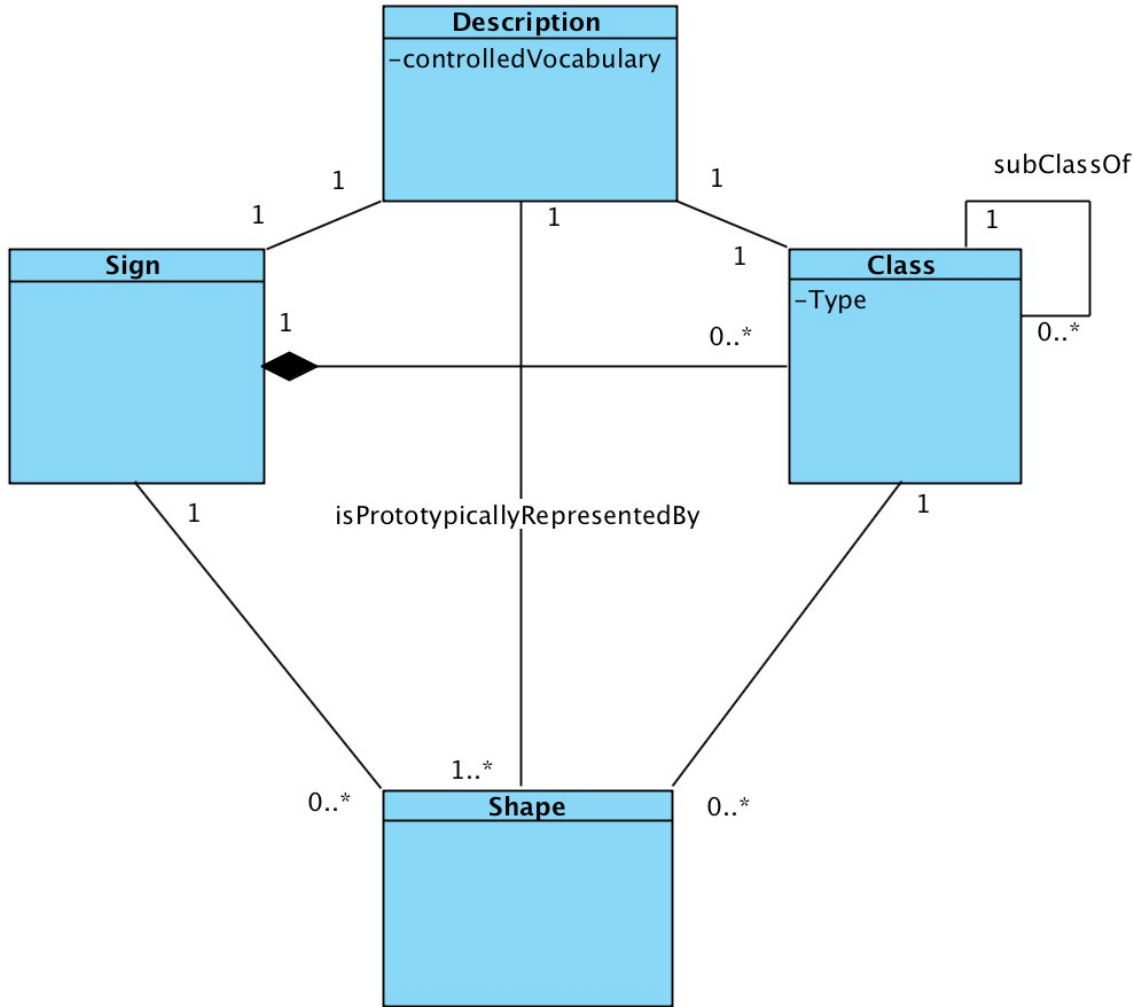
# + Het vormen van een datamodel



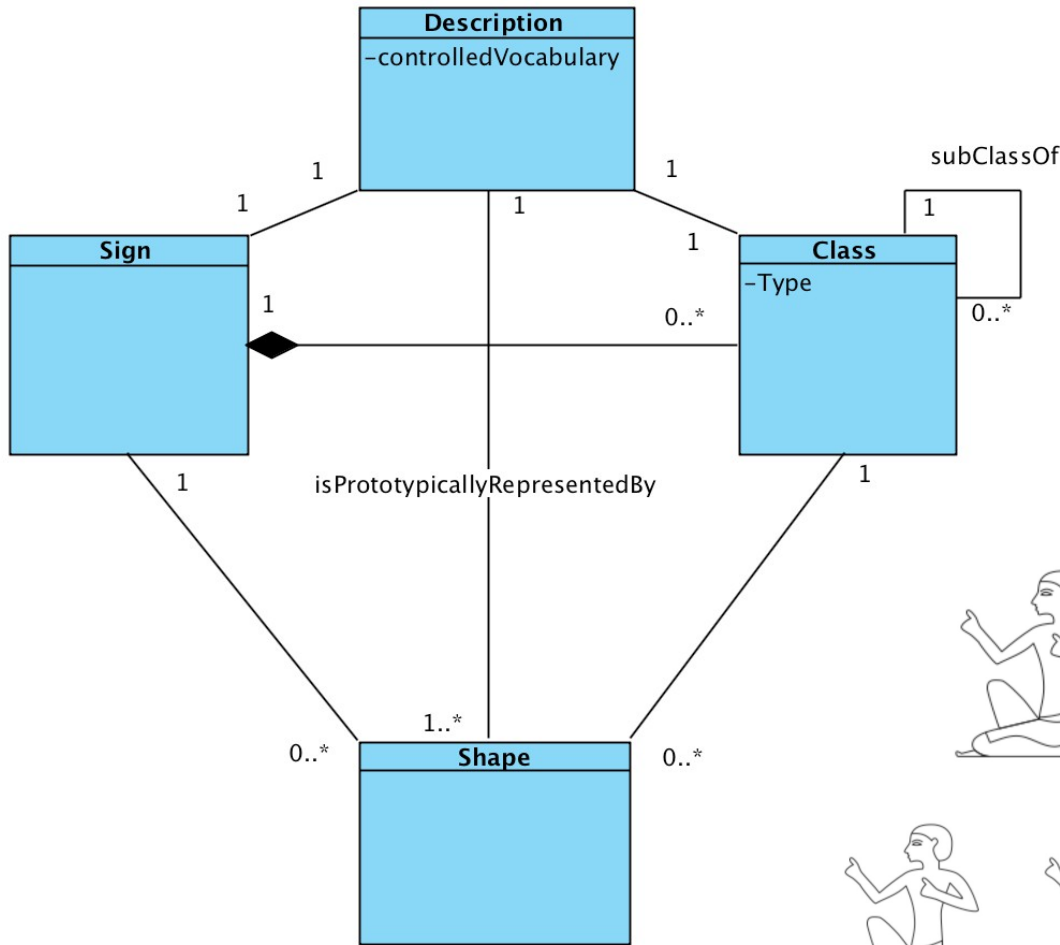
# + Het vormen van een datamodel



# + Het vormen van een datamodel



# + Het vormen van een datamodel



Aa-001a



Aa-001d



Aa-001f

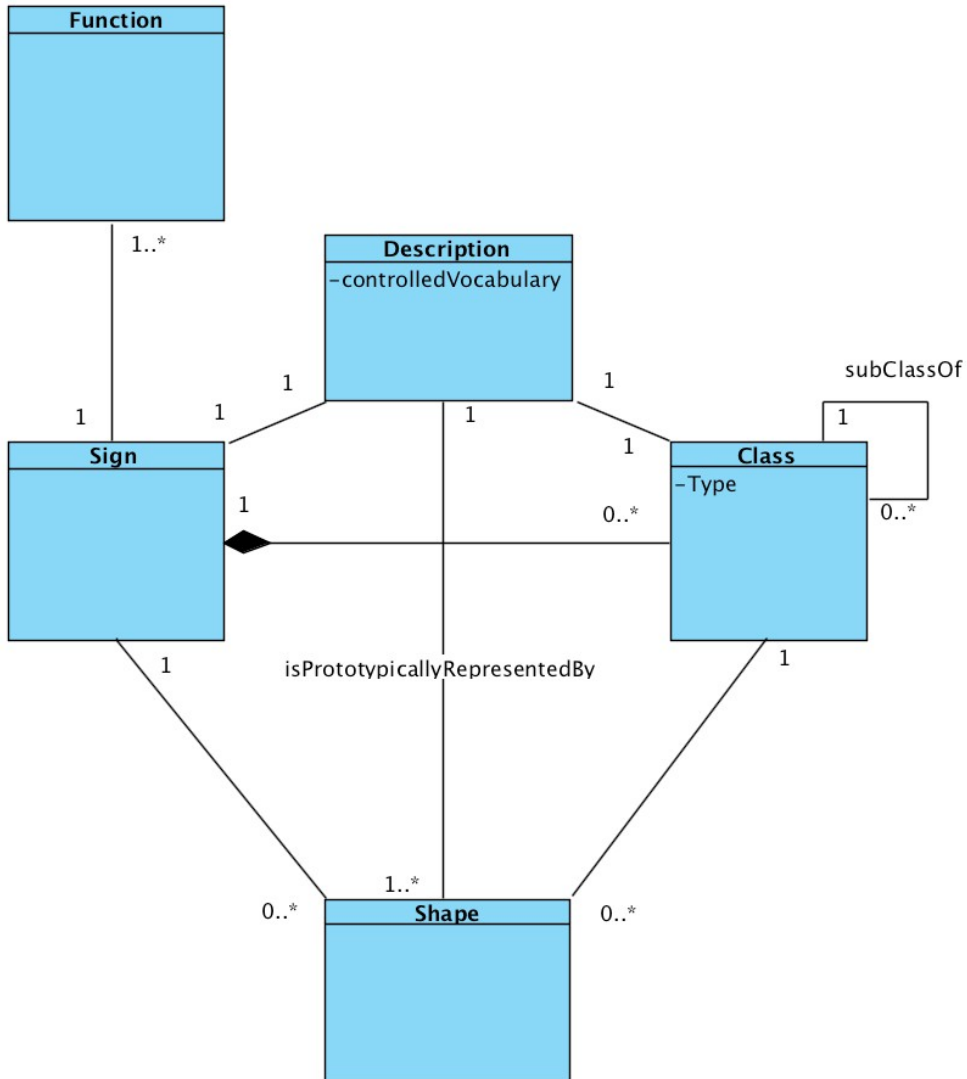


Aa-001i



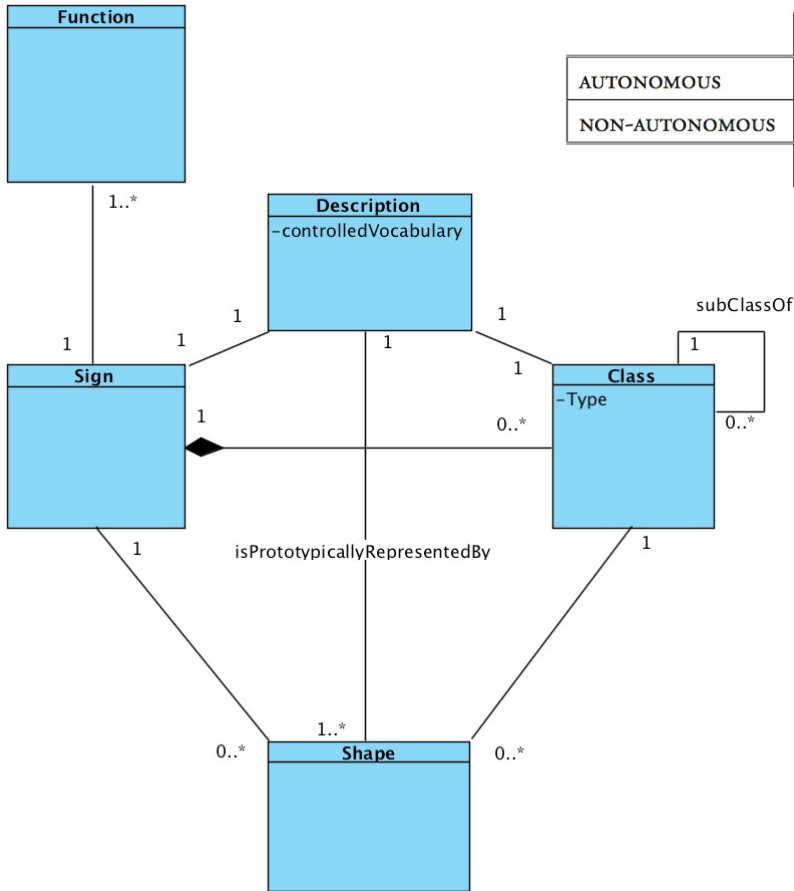
Aa-001j

# + Het vormen van een datamodel





# + Het vormen van een datamodel



	+ SEMOGRAM		- SEMOGRAM
AUTONOMOUS	Pictogram	Logogram	Phonogram
NON-AUTONOMOUS	Classifier	Radicogram	Interpretant
	- PHONEMOGRAM		+ PHONEMOGRAM

Fig. 10 A taxonomy of the hieroglyphic sign functions

## The Hieroglyphic Sign Functions<sup>1</sup>

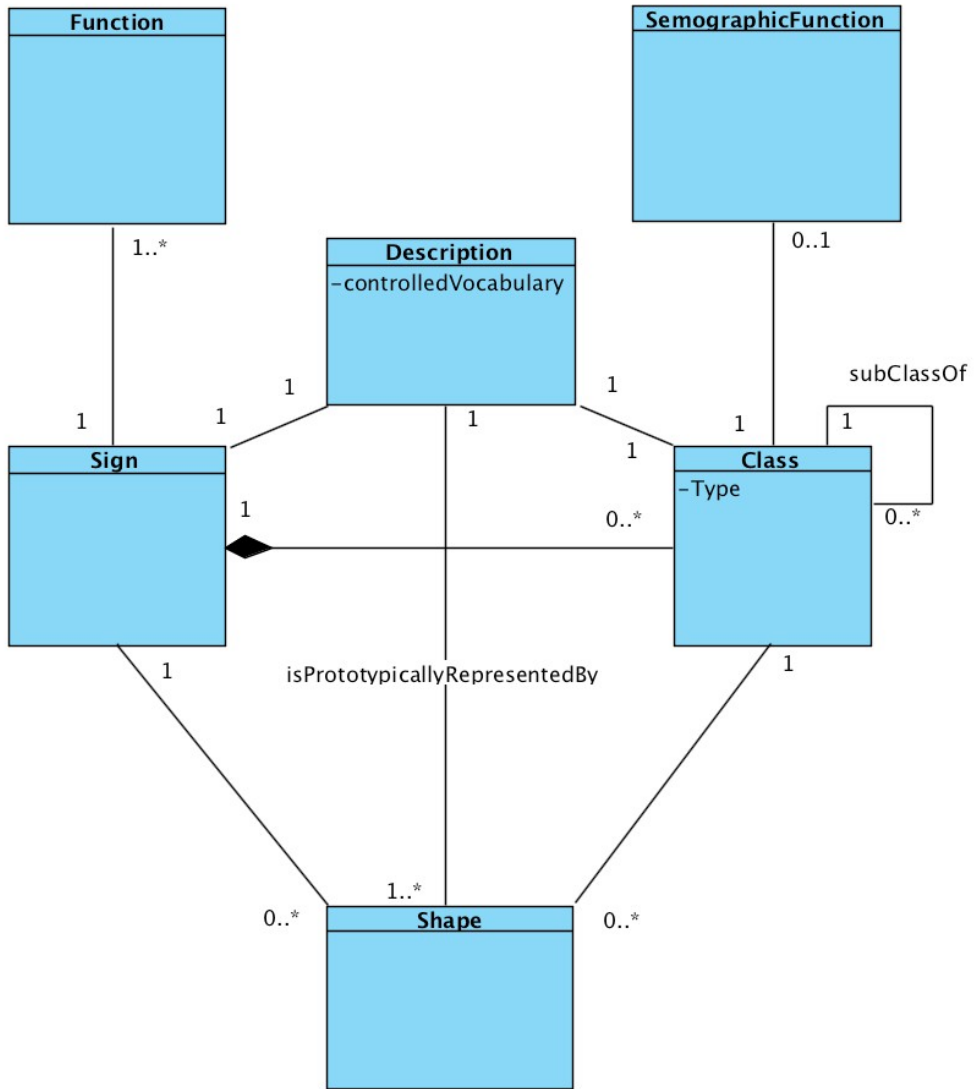
Suggestions for a Revised Taxonomy

Stéphane Polis/Serge Rosmorduc

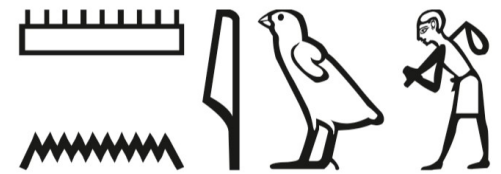
### Abstract

*The aim of this paper is to suggest a taxonomy that allows for a systematic description of the functions that can be fulfilled by hieroglyphic signs. Taking as a point of departure the insights of several studies that have been published on the topic since Champollion, we suggest that three key-features – namely, semography, phonemography and autonomy – are needed in order to provide a description of the glottic functions of the ancient Egyptian graphemes. Combining these paradigmatic and syntagmatic features, six core functions can be identified for the hieroglyphic signs: they may behave as pictograms, logograms, phonograms, classifiers, radicograms or interpretants. In a second step, we provide a definition for each function and discuss examples that illustrate the fuzziness between these core semiotic categories.*

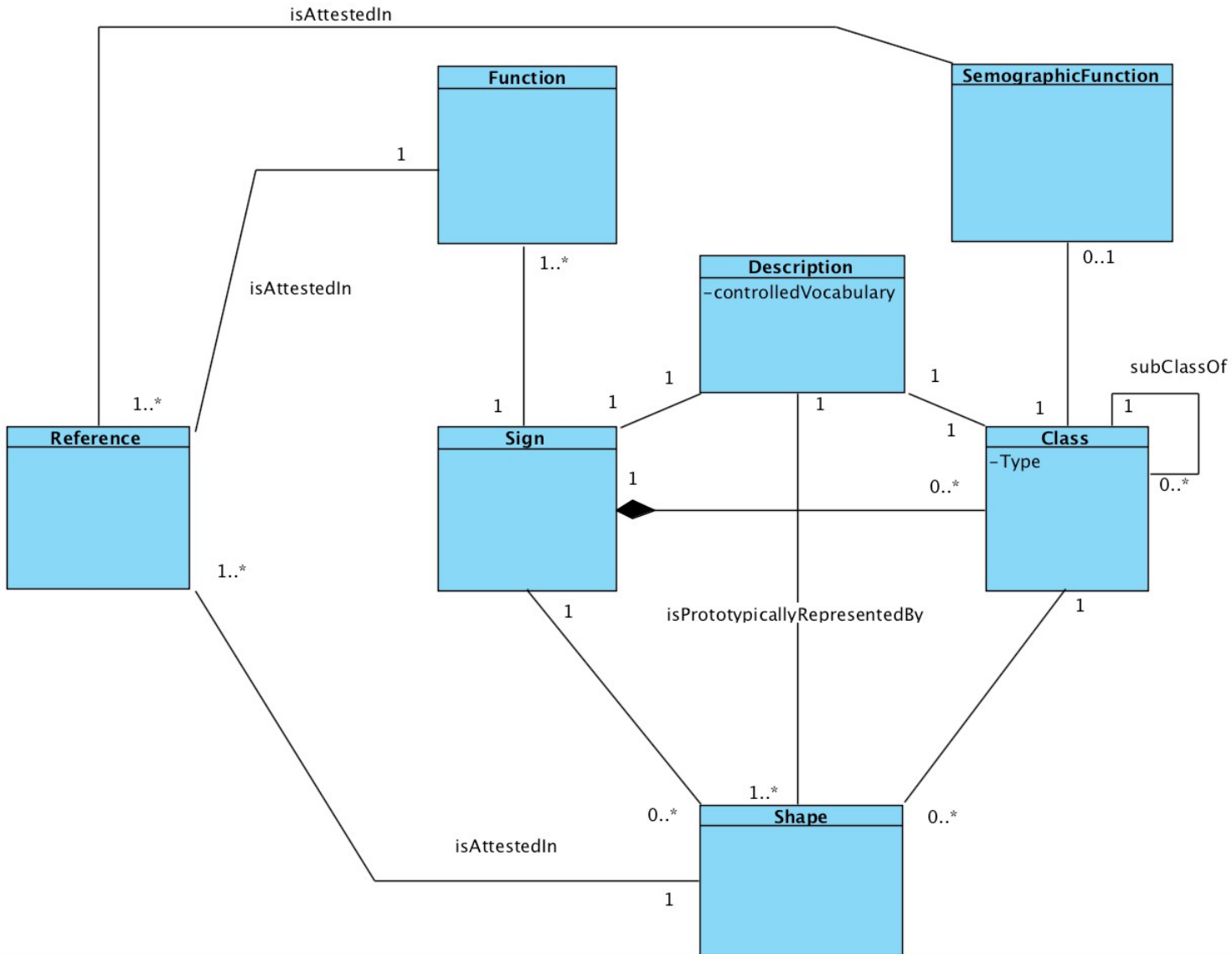
# + Het vormen van een datamodel



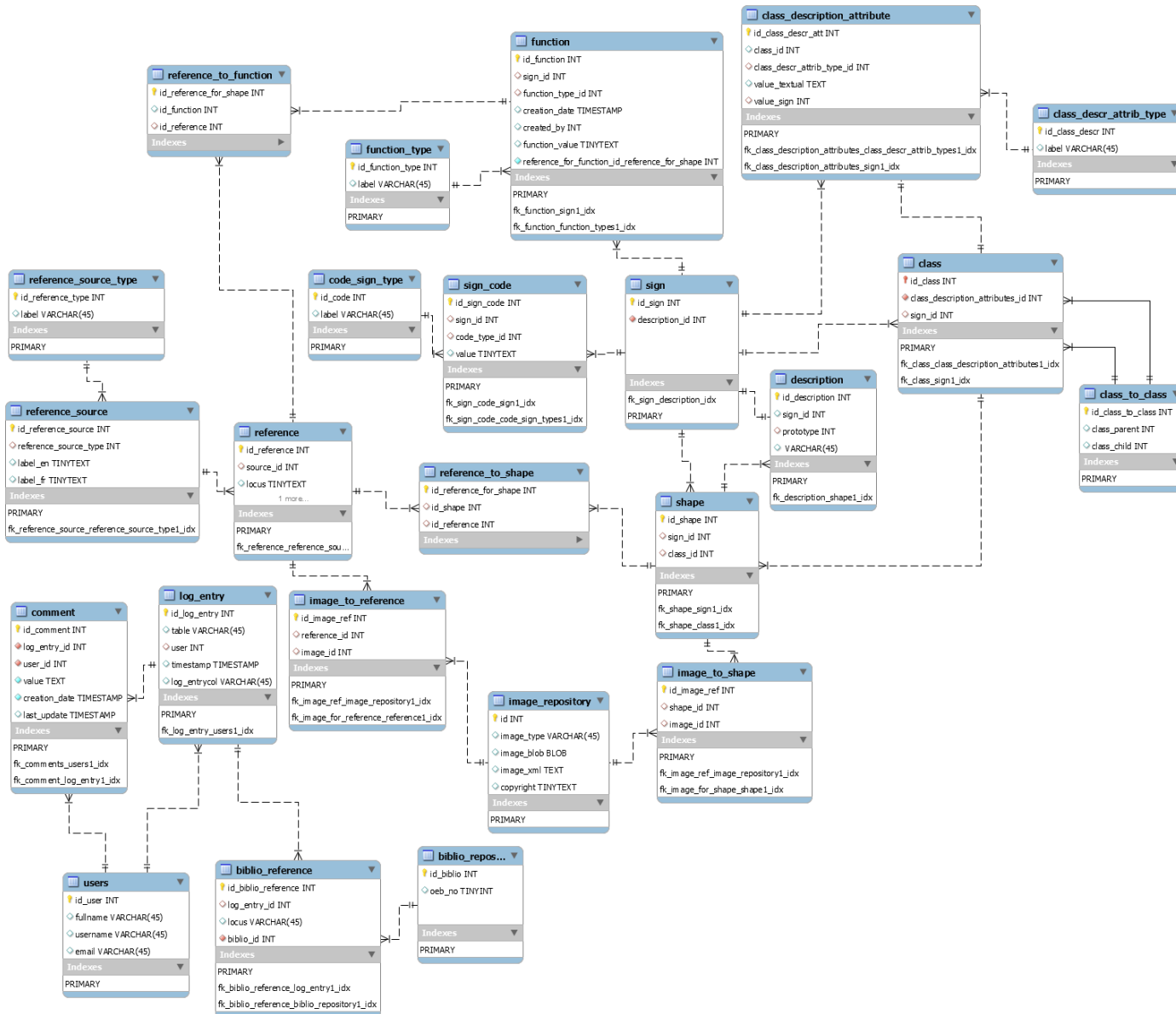
“herdsman”



# + Het vormen van een datamodel



# + Het vormen van een datamodel



# + Het vormen van een datamodel

## ■ Robuuste structuur

### – Interactie met andere databases

- Hieratic Palaeography (Mainz)
- TLA





## + De Thoth Sign List (TSL)

# + De Toth Sign List (TSL)

## Signs

Meeks Category

<input type="button" value="Delete"/>	Sign Id : 64 Shape Id : 7442		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 63 Shape Id : 7434		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 62 Shape Id : 7432		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 61 Shape Id : 7425		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 60 Shape Id : 7423		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 59 Shape Id : 7421		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 58 Shape Id : 7413		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 57 Shape Id : 7382		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 56 Shape Id : 7363		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 55 Shape Id : 7346		Meeks Category : J
<input type="button" value="Delete"/>	Sign Id : 54 Shape Id : 7328		Meeks Category : J

# + De Toth Sign List (TSL)

Sign Id : 16 Shape Id : 6925 L2.svg Meeks category : L Creator : jgrotenhuis



Edit

Description Functions Shapes

New									
Sign ID	Function ID	Function Type	Phonetic Value	Semantic Value	Comment				
16	52	phonogram	bit		Comment				
					Sign ID	Function ID	Source ID	mdc	*
16	52	67		-					
16	51	radicogram	bi.tyt	queen (of lower Egypt)	Comment litt. She of the Bee				
					Sign ID	Function ID	Source ID	mdc	+
16	51	66		-					
16	50	radicogram	bi.ty	king (of lower Egypt)	Comment litt. He of the bee				
					Sign ID	Function ID	Source ID	mdc	+
					16	50	63		-
					16	50	64		-
16	50	65		-					
16	48	radicogram	bi.t	the crown of Lower Egypt	Comment				
					Sign ID	Function ID	Source ID	mdc	*
16	48	62		-					
16	47	radicogram	bi.t	beekeeper	Comment				
					Sign ID	Function ID	Source ID	mdc	+
16	47	61		-					
16	46	radicogram	bi.t	honey	Comment				
					Sign ID	Function ID	Source ID	mdc	+
					16	46	59		-
16	46	60		-					
16	45	logogram	k3.t	work	Comment				
					Sign ID	Function ID	Source ID	mdc	+
					16	45	57		-
16	45	58		-					
16	44	logogram	bi.t	bee	Comment				
					Sign ID	Function ID	Source ID	mdc	+
					16	44	54		-
16	44	55		-					
16	43	classifier		insect	Comment				
					Sign ID	Function ID	Source ID	mdc	+
					16	43	51		-
					16	43	52		-
16	43	53		-					



# + De Toth Sign List (TSL)

Sign Id : 16 Shape Id : 6925 L2.svg  Meeks category : L Creator : **kgrotenhuis**

[Edit](#)

Description Functions Shapes

Detail Class

Shape Id **7359** [Edit](#) [Delete](#)

shape\_img\_path : L2-LPalHier7.JPG  
bibliographic reference : 64  
position reference : page 72  
biblio comment :  
code type : Paléographie Hiéroglyphique 7  
code value : § 164  
Creator : kgrotenhuis Editor : kgrotenhuis


Source ID <sup>+</sup>

Sign ID : 16 Shape Id : 6939 

Sign ID : 16 Shape Id : 6938 

Sign ID : 16 Shape Id : 6937 

Sign ID : 16 Shape Id : 6936 

Sign ID : 16 Shape Id : 6935 

# + De Toth Sign List (TSL)



## Shapes

Gardiner Category

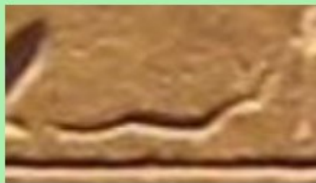
Shape Id : 7463



Shape Id : 7462



Shape Id : **7461**  
Creator : **jpgrotenhuis**



Shape Id : 7460

Close

Detail Description Class

Shape Id **7461** Edit Delete

shape\_img\_path : I9-Berlin-1157-line4.JPG  
bibliographic reference : 0  
position reference :  
biblio comment :  
code type : No Code  
code value :  
Creator : jpgrotenhuis Editor : jpgrotenhuis

shape_id	Source ID	mdc	
7461	292		-

# + De Toth Sign List (TSL)

Edit

Id\_source **204**

picture\_path HSoH-Sarenput1-stela9-line25-plate24.JPG



picture2\_path

MDC M17-A1-D21:I9-G17-I3:D2\*Z1-N35A-G17-V28-I9:I14:D2\*Z1-N16:G17-A14-G17-R50



Transliteration *iw=i r=f m msh hr mw m hf3. w hr t3 hft. y m hr. t-ntr*

Translation I am against him like a crocodile in the water, as a snake upon the land, an enemy in the necropolis.

Source Comment

Date-start thot-225 -> [Senwosret I\\_Sesostris I Kheperkare](#)  
 Date-end thot-225 -> [Senwosret I\\_Sesostris I Kheperkare](#)  
 Year of 0  
 Modern-places topbib-507-020 -> [Elephantine](#)  
 Specific Place Elephantine, sanctuary of Heqaib, large stelae of Sarenput I, number 9, line 25. (in situ)  
 Scripts thot-83 -> [Hieroglyphs](#)  
 Material thot-6221 -> [sandstone](#)  
 Technique of inscription thot-19254 -> [sunk relief](#)  
 Colour no  
 Text Content thot-18685 -> [Unspecified religious text](#)  
 Metadata comment  
 Languages thot-11 -> [Middle Egyptian](#)  
 Object Type

## Encoding

Created by [jgrotenhuis](#) Edited by [jgrotenhuis](#)

## Bibliography

New

source_id	reference_id	reference_meta	ref_position	ref_picture	ref_facsimile	ref_transcription	ref_transliteration	ref_translation	ref_comment
204	189	189,Habachi, Labib,1985,Elephantine IV: the Sanctuary of Heqaib vol. 1,29706	page 36	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<a href="#">Edit</a> <a href="#">Delete</a>
204	190	190,Habachi, Labib,1985,Elephantine IV: the Sanctuary of Heqaib vol. 2,29706	plate 24	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<a href="#">Edit</a> <a href="#">Delete</a>

# + De Toth Sign List (TSL)

Id\_source 204

picture\_path HSoH-Sarenput1-stela9-line

Bladeren... Geen bestand geselecteerd.

Upload



picture2\_path

MDC

M17-A1-D21:19-G17-I3-D2\*Z1-N35A-G17-V28-I9:114:D2\*Z1-N16:G17-A14-G17-R50



Transliteration

iw=i r=f m msh hr mw m hE.w hr t3 hft.y m hr.t-ntr

Translation

I am against him like a crocodile in the water, as a snake upon the land, an enemy in the necropolis.

Source Comment

date\_start:

thot-225

date\_end:

thot-225

year of:

0

Modern-places:

topbib-507-020

Location compl

Elephantine, sanctuary of Heqaib, large stelae of Sarenput I, number 9, line 25. (in situ)

Scripts:

thot-83

Material:

thot-6221

Technique of inscription:

thot-19254

Colour

no

Text-Content:

thot-18685

Languages:

thot-11

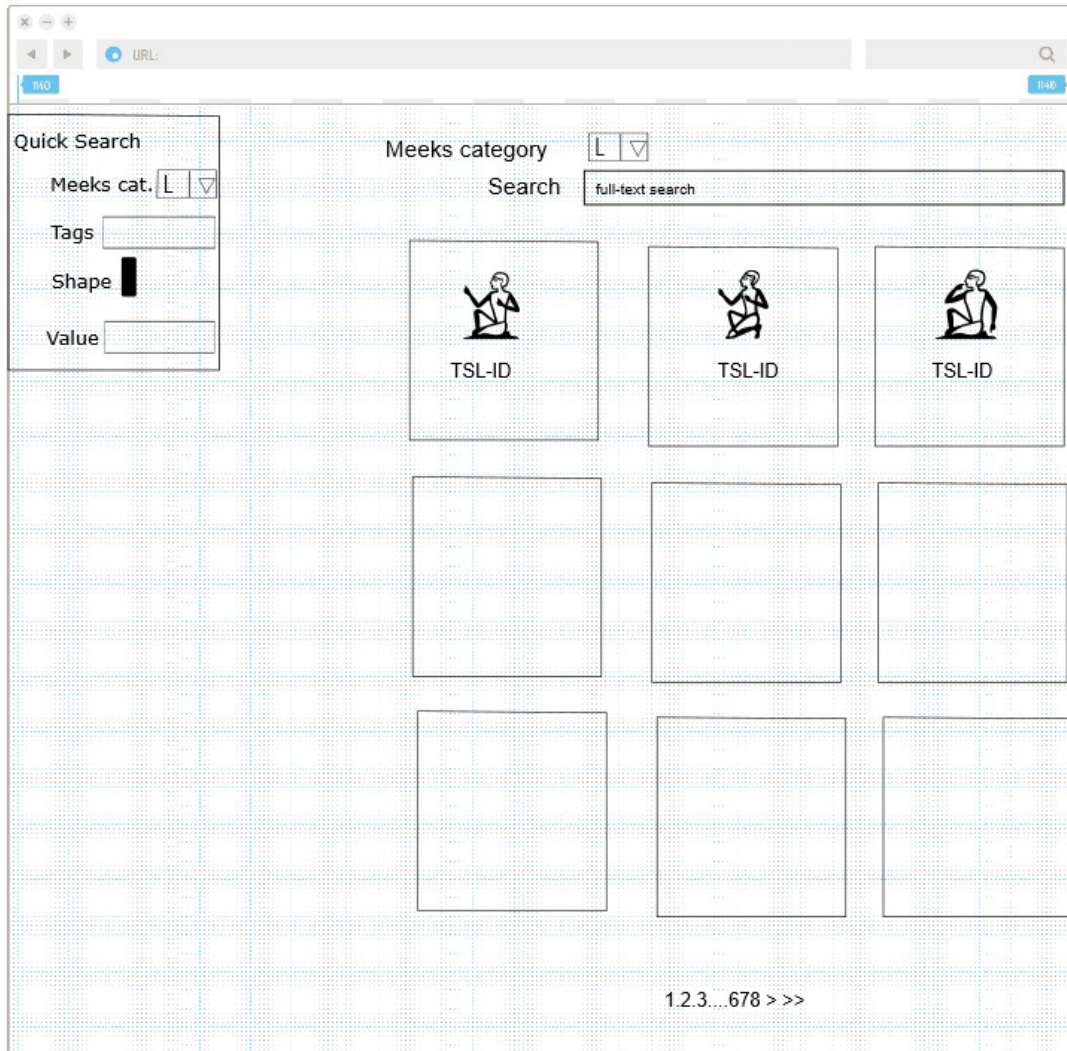
Object-Type:

## THOT - THESAURI & ONTOLOGY

- Thot Collections
  - Dates and dating systems
    - Periods
      - Prehistoric and predynastic Periods
      - Pharaonic Period
        - Early Dynastic Period\_Thinite Period
        - Old Kingdom
        - 1st Intermediate Period
        - Middle Kingdom
          - 11th Dynasty \_parenthesis-opening\_after reunification\_parenthesis-closin
          - 12th Dynasty
            - Amenemhat I Sehetepibre
            - Senwosret I\_Sesostris I Kheperkare
            - Amenemhat II Nebukaure
            - Senwosret II\_Sesostris II Khakheperre

# + De Toth Sign List (TSL)

- De interface is nog in ontwikkeling, nog niet bruikbaar



# + De Toth Sign List (TSL)


Quick Search

Meeks cat.

Tags

Shape

Value

TSL-ID 

Free-text description

DESCRIPTION FUNCTIONS

TAGS

UNICODE



# + De Toth Sign List (TSL)

The screenshot shows a web browser window displaying the De Toth Sign List (TSL) interface. The browser's address bar shows a URL starting with "LIRL". The page features a sidebar on the left with a "Quick Search" section containing input fields for "Meeks cat.", "Tags", "Shape", and "Value". The main content area is titled "TSL-ID" and includes a beetle icon. Below the title is a "Free-text description" input field. Two buttons, "DESCRIPTION" and "FUNCTIONS", are positioned below the description field. The "FUNCTIONS" button is highlighted in blue. Below these buttons is a large rectangular area containing the text "Phonogram type" and "Example". To the right of this area is a small graph showing a waveform, with the text "DEBBIKLPGR" underneath it.



# + De Toth Sign List (TSL)

Quick Search


Meeks cat.

Tags

Shape

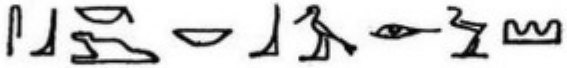
Value

NAME of source



*sbk nb b3xw*

Sobek, lord of Bachou



Metadata

Bibliography





+ Conclusie en toekomst

# + Conclusie

- Interactief en goed onderbouwd
- Systematische, gestructureerde beschrijvingen
- Vele toepassingsmogelijkheden
- Makkelijk om bij te werken en te corrigeren



# + Toekomst

- Uitgave van de eerste sectie (L, insecten), daarna opeenvolgende uitgave van de overige secties
- Intergratie met de Hieratic palaeography (Mainz) and the TLA (Berlin)



# + Mogelijk gemaakt door

- The Anneliese Maier Research Award

## In samenwerking met

- Thot Thesauri & Ontology
- TLA
- Digital Topographical Bibliography



# + Medewerkers

Luc Desert (ULiège)

Jorke Grotenhuis (ULiège)

Ingelore Hafemann (Akademie – Berlin)

Stéphane Polis (F.R.S.-FNRS/ULiège)

Vincent Razanajao (ULiège)

Tonio Sebastian Richter (Akademie – Berlin)

Serge Rosmorduc (CNAM – Paris)

Simon Schweitzer (Akademie – Berlin)





[jorke.grotenhuis@ulg.ac.be](mailto:jorke.grotenhuis@ulg.ac.be)

