

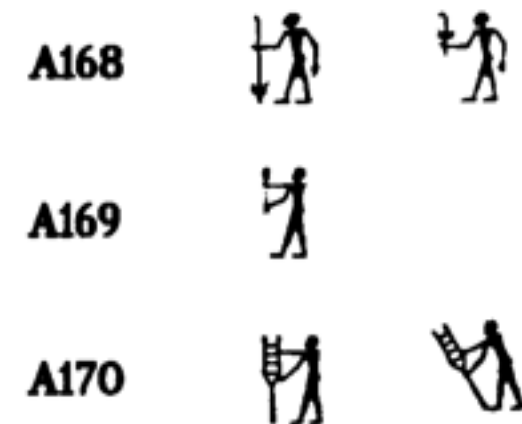
The Thot Sign List (TSL) & hieroglyphic encoding

St. Polis & S. Rosmorduc

A bit of history


- 1984-1988: the *manuel de codage*
 - both for printing and databases:
there is a strict distinction made between grapheme and graphic variant
- Evolution and uses: mainly printing (hieroglyphica)
- Basis: *Wb.* archive, but also existing fonts
- No published documentation

Hommes debout associés à un signe:

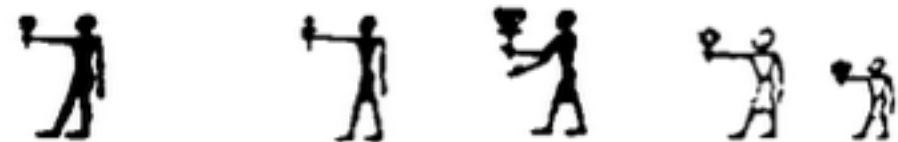


Problems for font designers

- What should I draw?

- Example: **C232**  at some point, various interpretations of the sign. Monkey, Hippo? (in fact, panther from a sign drawn by Chassinat)

- Lack of description **A239**



basically: god iḥy playing sistrum
child lock, naked or clothed ?

Is this really my sign?

136A0



EGYPTIAN HIEROGLYPH HG-A0340

- without description: is it the same as this sign from Abydos (word pšš, extend (arms)):



196

- Original MdC


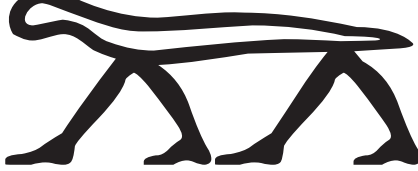
196



- Hieroglyphica

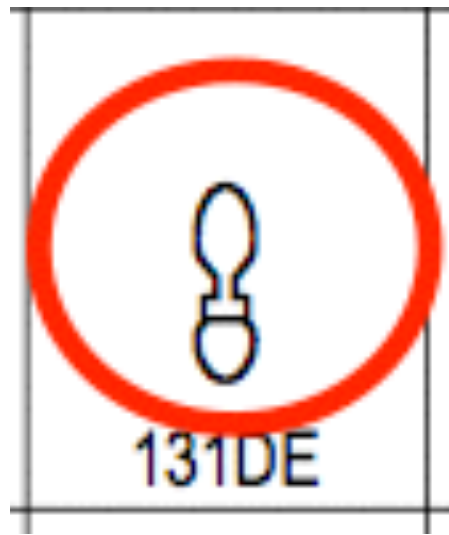


196

-  or 

- Value = *jnd*, so the snake is probably a cobra after all

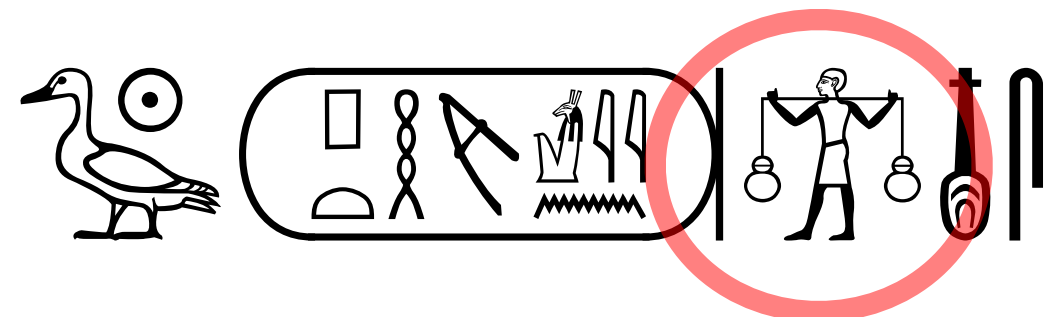
Which graphical features are important?



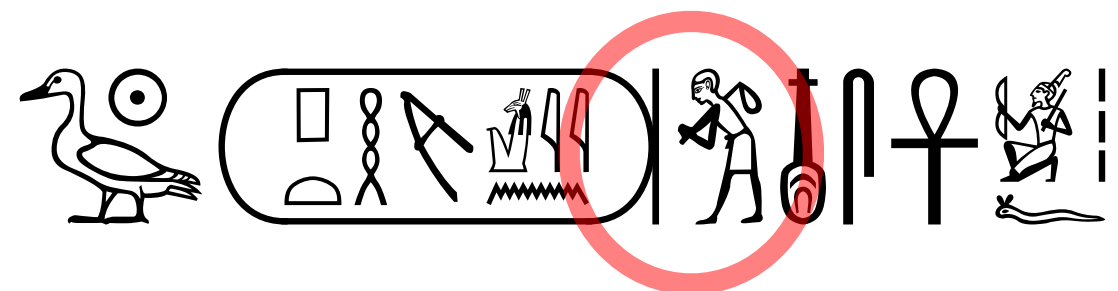
- loses the sign idea: tree growing out of a pot.

Problems for encoders

Choosing the right sign, or drawing a new one?

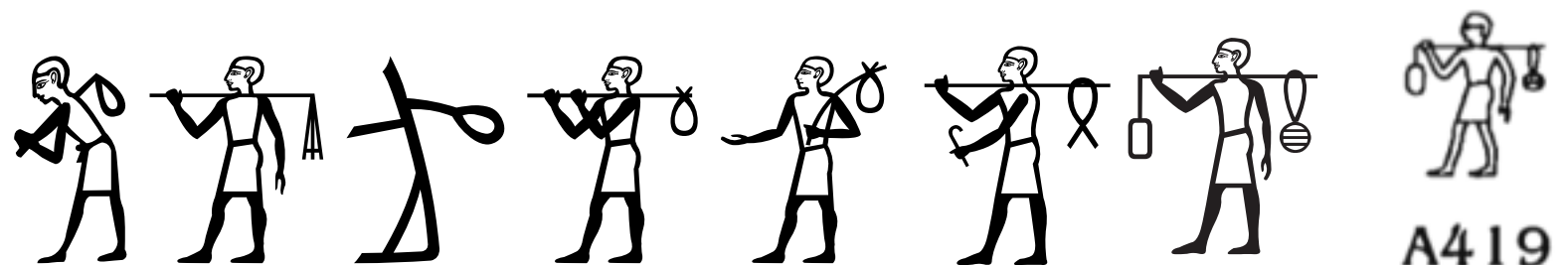


Porteur d'eau A344





Codage « normalisé »

Variantes du berger :
A33, A33A... et A383

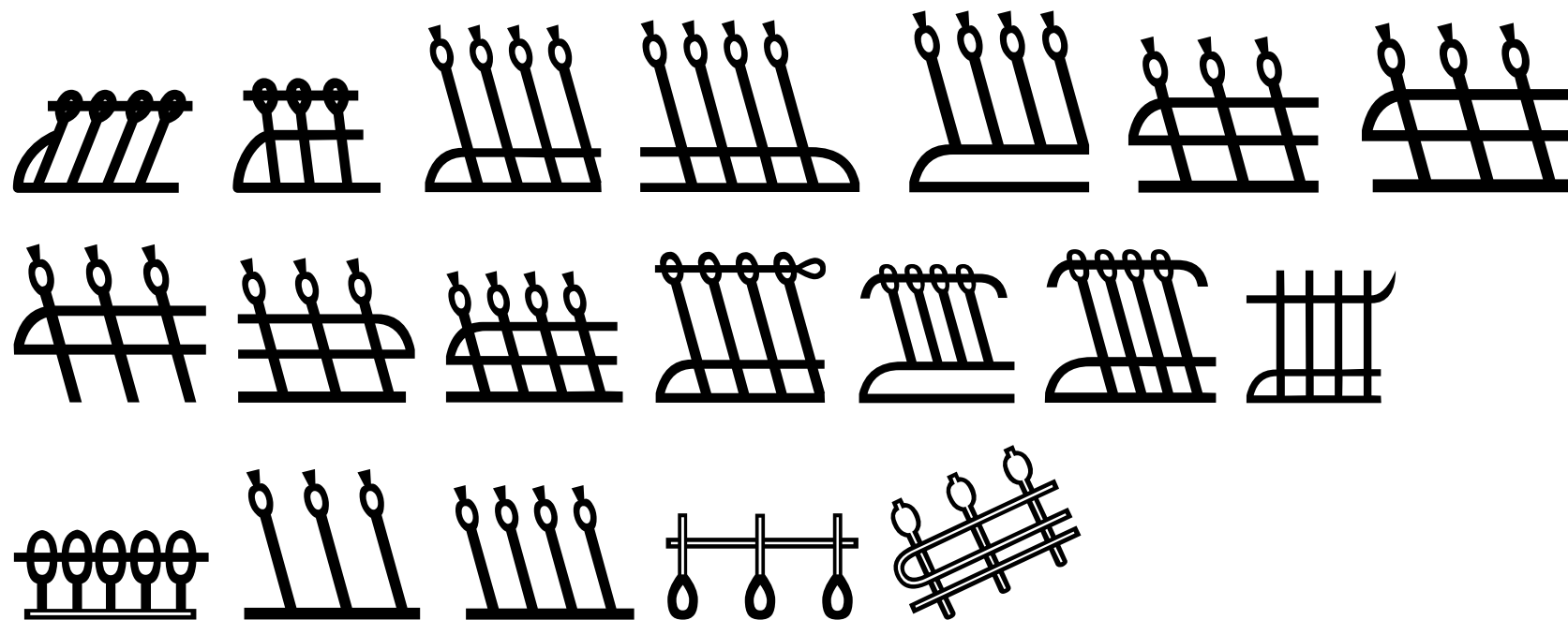


Dilemma

- Is  the same as 
A419

A very rich catalogue

- The šsp sign (O 42)
- many Mdc variants

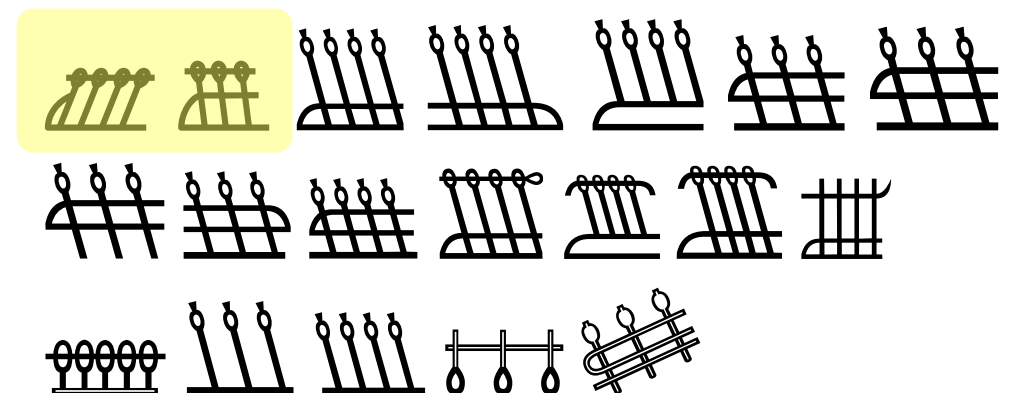
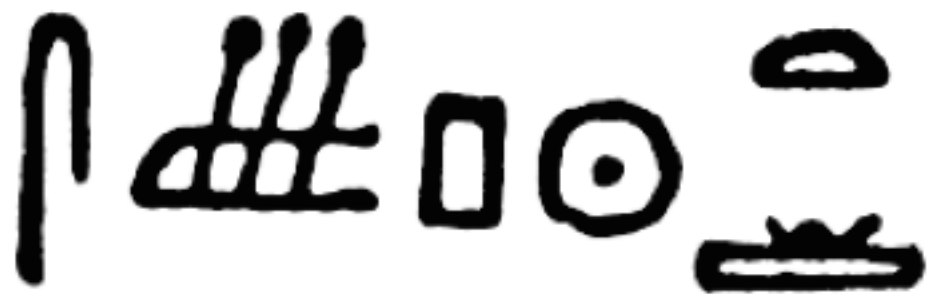


- Are they good enough ?

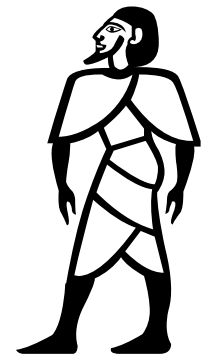
A structured catalogue?

The šsp sign (O 42)

- *P. Chester Beatty 1*, pl. XXII, l. 2



Chiefs and prisoners



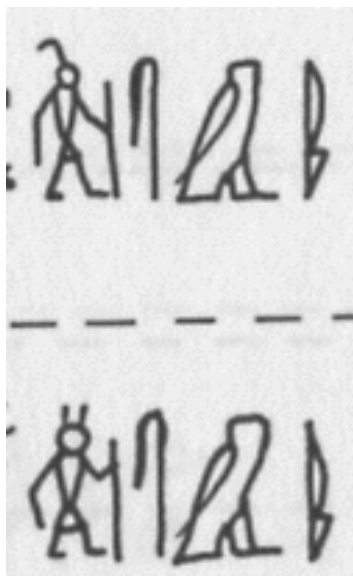
Medinet Habou I, 28,47

- What are the significant features ?

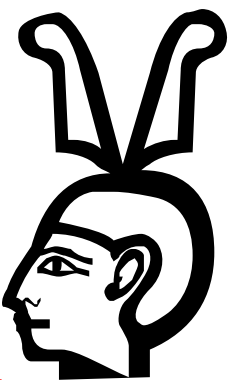
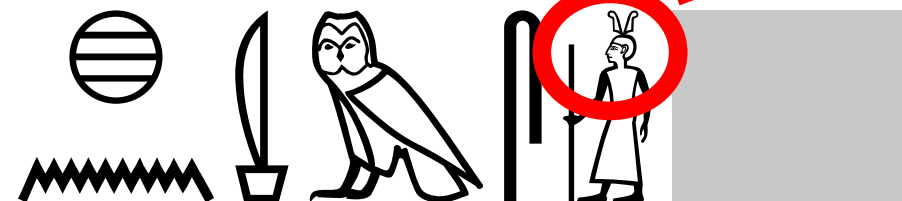


Encoding hieratic?

- *hnms* 'friend'



In the Ramsès corpus:



Interim conclusions

- We need a description
- We need more **structure**: separate essential points from trifles
- We need to specify more precisely what a variant is

Towards the Thot Sign-List (TSL)



**Document
numérique**

RSTI série DN • Volume 16 – n° 3/2013

Gestion informatisée des écritures anciennes

sous la direction de

Christine Bénévent

Rémi Jimenes

Guillaume Sarah

2013

Réviser le codage de l'égyptien ancien

Vers un répertoire partagé des signes hiéroglyphiques

Stéphane Polis¹, Serge Rosmorduc²

1. Fonds National de la Recherche Scientifique – Université de Liège
Département des Sciences l'Antiquité
Place du XX Août, 7
B-4000 Liège, Belgique
s.polis@ulg.ac.be

2. Cédric/ILJ/Conservatoire National des Arts et Métiers
Rue Conté, 2
75003 Paris, France
serge.rosmorduc@cnam.fr

RÉSUMÉ. Nous proposons de réviser le codage de l'égyptien ancien qui repose sur un standard nommé « manuel de codage » (1988) ne répondant pas aux besoins actuels dans la création de corpus hiéroglyphiques. Une analyse des 60 000 graphies du corpus Ramsès nous permet de faire deux propositions concrètes concernant, d'une part, les principes présidant à l'encodage des graphies hiéroglyphiques dans les corpus annotés et, d'autre part, la nécessaire refonte du répertoire des signes hiéroglyphiques.

ABSTRACT. Based on an analysis of the 60 000 spellings found in the Ramses corpus, we show that the encoding scheme that is used for hieroglyphic texts, known as the Manuel de Codage (1988), is problematic for the development of text corpora in general. We consequently (1) argue in favour of basic principles that should be followed when encoding hieroglyphic texts in the framework of corpus projects, and (2) suggest guidelines for a new encoding scheme, especially with respect to the structure of the sign-list.

MOTS-CLÉS : hiéroglyphes, encodage, Unicode, liste de signe, égyptien ancien.

KEYWORDS: hieroglyphs, encoding, Unicode, sign-list, Ancient Egyptian.

Towards the Thot Sign-List (TSL)

- PhD fellowship of 4 years (Anneliese Maier - Jean Winand)
- Collaboration between the TLA team(s) and Ramses
- Outcome: a structured hieroglyphic sign-list for annotated corpora

Towards the Thot Sign-List (TSL)

L2/16-079

Date:2016-04-11

Title: Preliminary draft for the encoding of an extended Egyptian Hieroglyphs repertoire

Source: Michel Suignard

Database design

Along with this document, a new database is being created to associate each hieroglyph with ancillary data. The goal is to offer an online tool similar to the UniHan database already available on the Unicode web site. Each Egyptian Hieroglyph will have an entry with a number of fields listed in two groups:

1) Catalog Information with the following fields:

- Primary catalog number – This is the reference used in the character names in the extended blocks in the HG-zzzzz
- IFAO – in the form of page number, number in page
- Cauville – in the form of page number, order in page
- Gardiner – original Gardiner catalog identifier
- Kurth – in the form of group number, page number, number in group,
- Val Phon -
- Hieroglyphica – catalog identifier
- Hieroglyphica extended – catalog identifier
- Unikemet – catalog identifier
- Douros – catalog identifier

2) Other Data

- Description – free form description of the glyph
- Components – list of all glyph components
- Determinative – typically indicates end of word and meaning
- Logograph (or logogram) – indicates word
- Phoneme (or phonogram) – indicates one or more sound
- Variants – similar entries

Towards the Thot Sign-List (TSL)

L2/16-079

Date:2016-04-11

Title: Preliminary draft for the encoding of an extended Egyptian Hieroglyphs repertoire

Source: Michel Suignard

Database design

Along with this document, a new database is being created to associate each hieroglyph with ancillary data. The goal is to offer an online tool similar to the UniHan database already available on the Unicode web site. Each Egyptian Hieroglyph will have an entry with a number of fields listed in two groups:

1) Catalog Information with the following fields:

- Primary catalog number – This is the reference used in the character names in the extended blocks in the HG-zzzzz
- IFAO – in the form of page number, number in page
- Cauville – in the form of page number, order in page
- Gardiner – original Gardiner catalog identifier
- Kurth – in the form of group number, page number, number in group,
- Val Phon -
- Hieroglyphica – catalog identifier
- Hieroglyphica extended – catalog identifier
- Unikemet – catalog identifier
- Douros – catalog identifier

2) Other Data

- Description – free form description of the glyph
- Components – list of all glyph components
- Determinative – typically indicates end of word and meaning
- Logograph (or logogram) – indicates word
- Phoneme (or phonogram) – indicates one or more sound
- Variants – similar entries

Towards the Thot Sign-List (TSL)

L2/16-079

Date:2016-04-11

Title: Preliminary draft for the encoding of an extended Egyptian Hieroglyphs repertoire

Source: Michel Suignard

Database design

Along with this document, a new database is being created to associate each hieroglyph with ancillary data. The goal is to offer an online tool similar to the UniHan database already available on the Unicode web site. Each Egyptian Hieroglyph will have an entry with a number of fields listed in two groups:

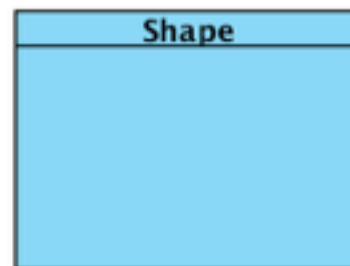
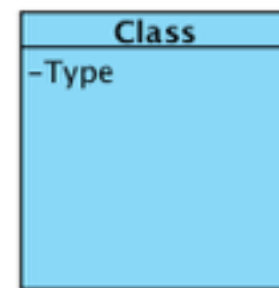
1) Catalog Information with the following fields:

- Primary catalog number – This is the reference used in the character names in the extended blocks in the HG-zzzzz
- IFAO – in the form of page number, number in page
- Cauville – in the form of page number, order in page
- Gardiner – original Gardiner catalog identifier
- Kurth – in the form of group number, page number, number in group,
- Val Phon -
- Hieroglyphica – catalog identifier
- Hieroglyphica extended – catalog identifier
- Unikemet – catalog identifier
- Douros – catalog identifier

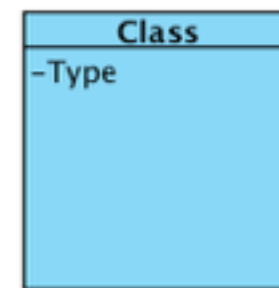
2) Other Data

- Description – free form description of the glyph
- Components – list of all glyph components
- Determinative – typically indicates end of word and meaning
- Logograph (or logogram) – indicates word
- Phoneme (or phonogram) – indicates one or more sound
- Variants – similar entries

Thot Sign-List (TSL) Data Model



Thot Sign-List (TSL) Data Model

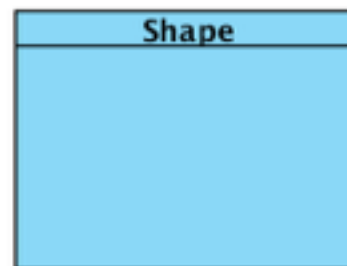


**Dictionnaire hiéroglyphique, inventaire
des hiéroglyphes et Unicode**

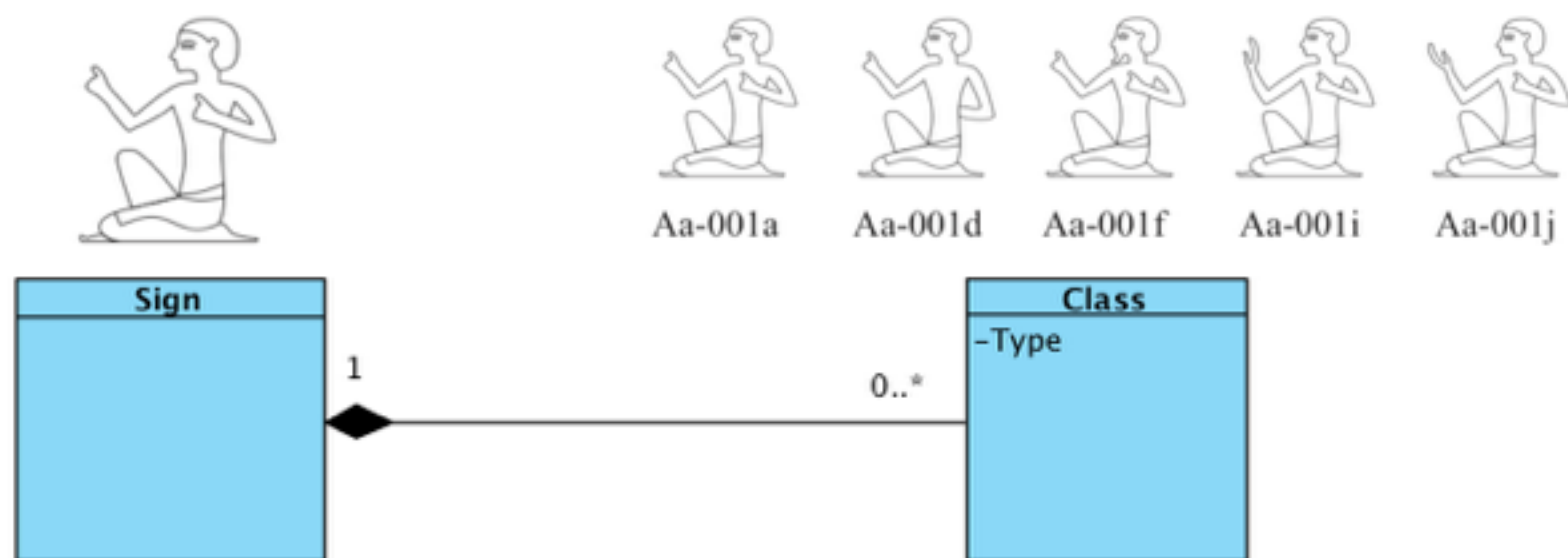
Dimitri Meeks

*CNRS. Directeur de recherche honoraire
19 rue Gamay, 34980 Saint-Clément-de-Rivière, France
dimitri.meeks@wanadoo.fr*

2013



Thot Sign-List (TSL) Data Model

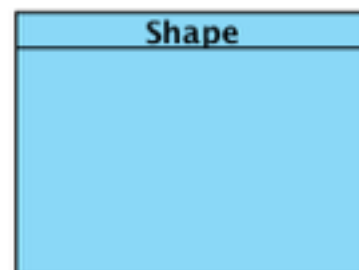


**Dictionnaire hiéroglyphique, inventaire
des hiéroglyphes et Unicode**

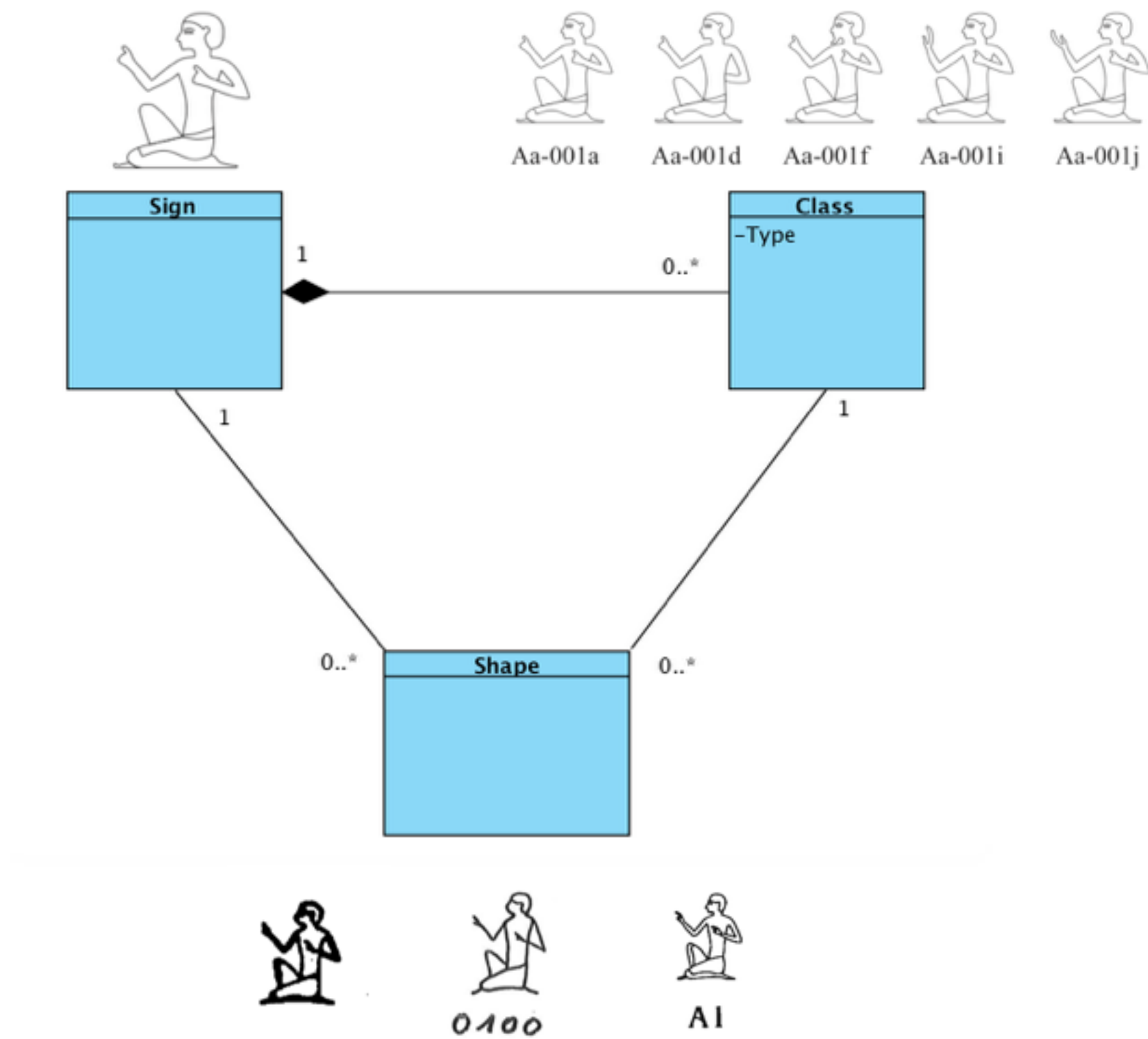
Dimitri Meeks

*CNRS. Directeur de recherche honoraire
19 rue Gamay, 34980 Saint-Clément-de-Rivière, France
dimitri.meeks@wanadoo.fr*

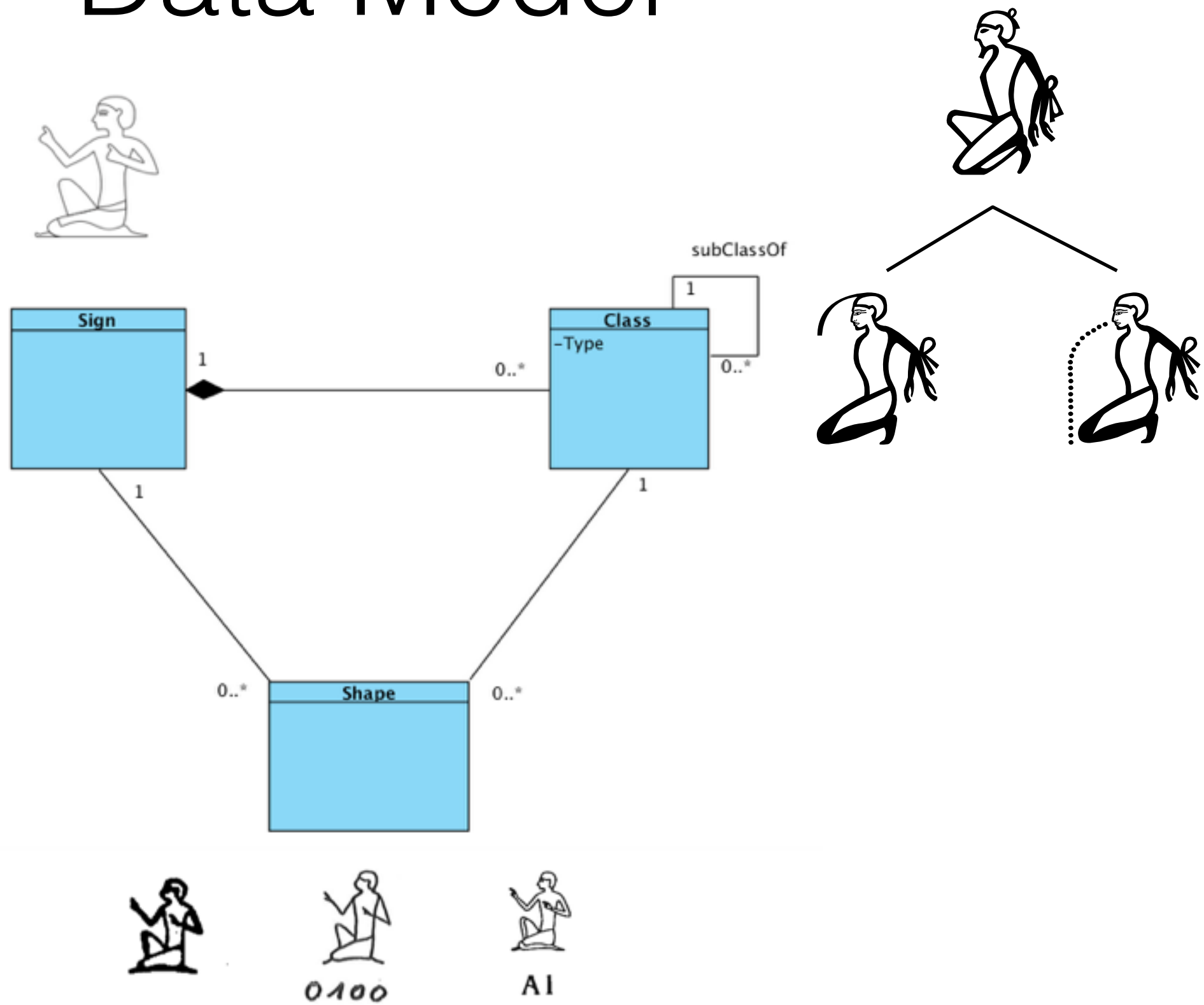
2013



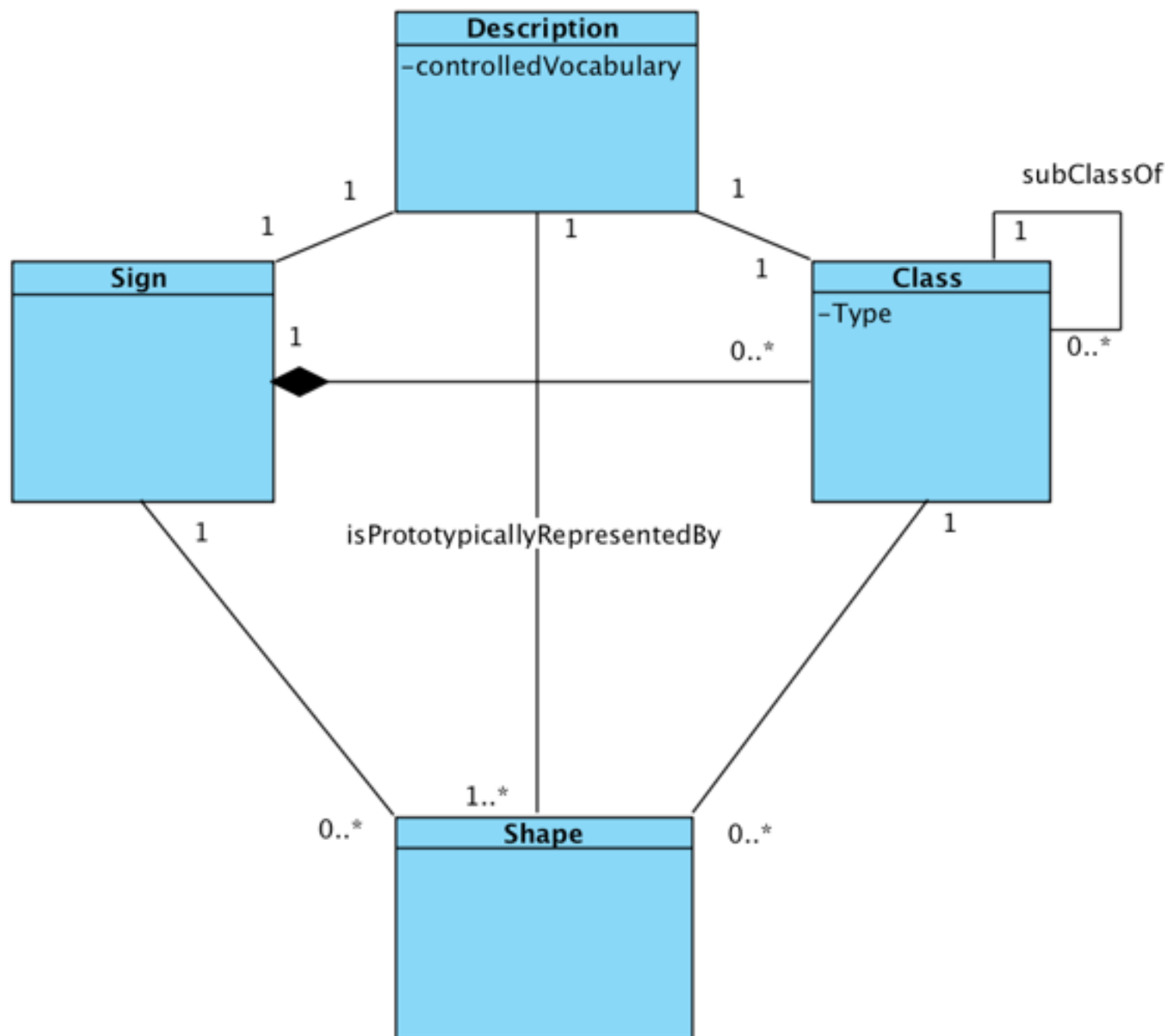
Thot Sign-List (TSL) Data Model



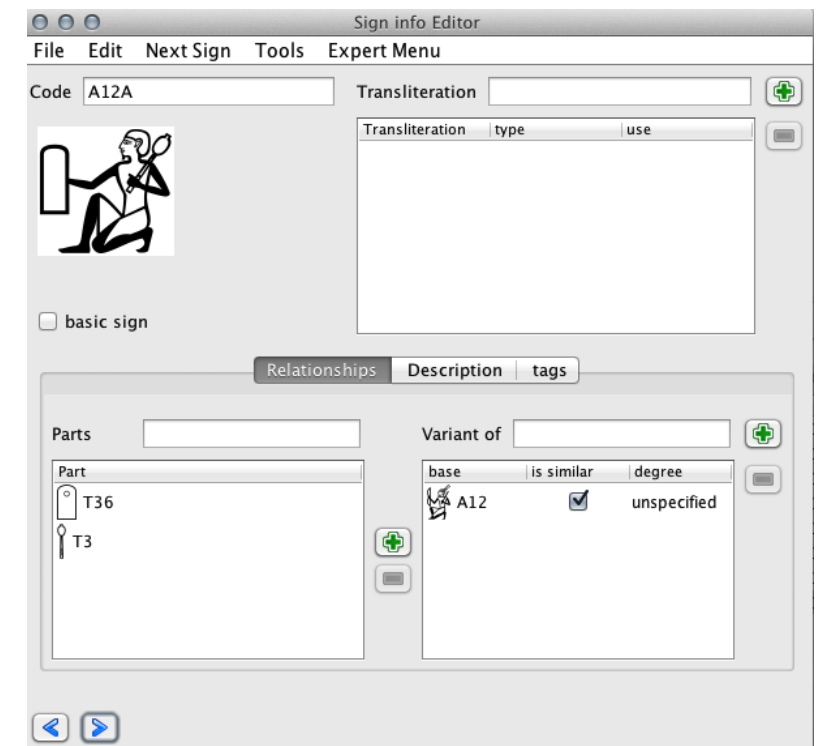
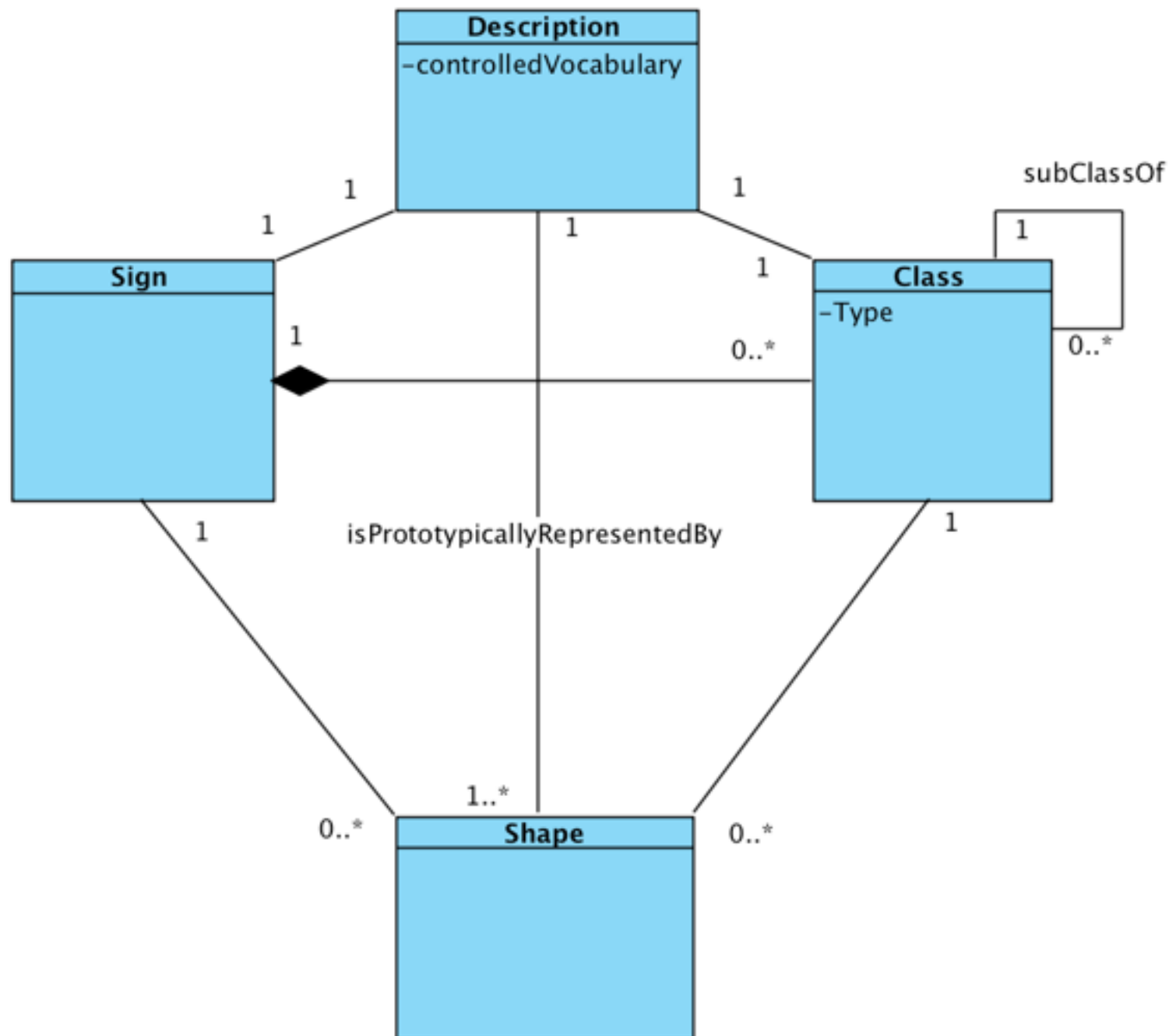
Thot Sign-List (TSL) Data Model



Thot Sign-List (TSL) Data Model

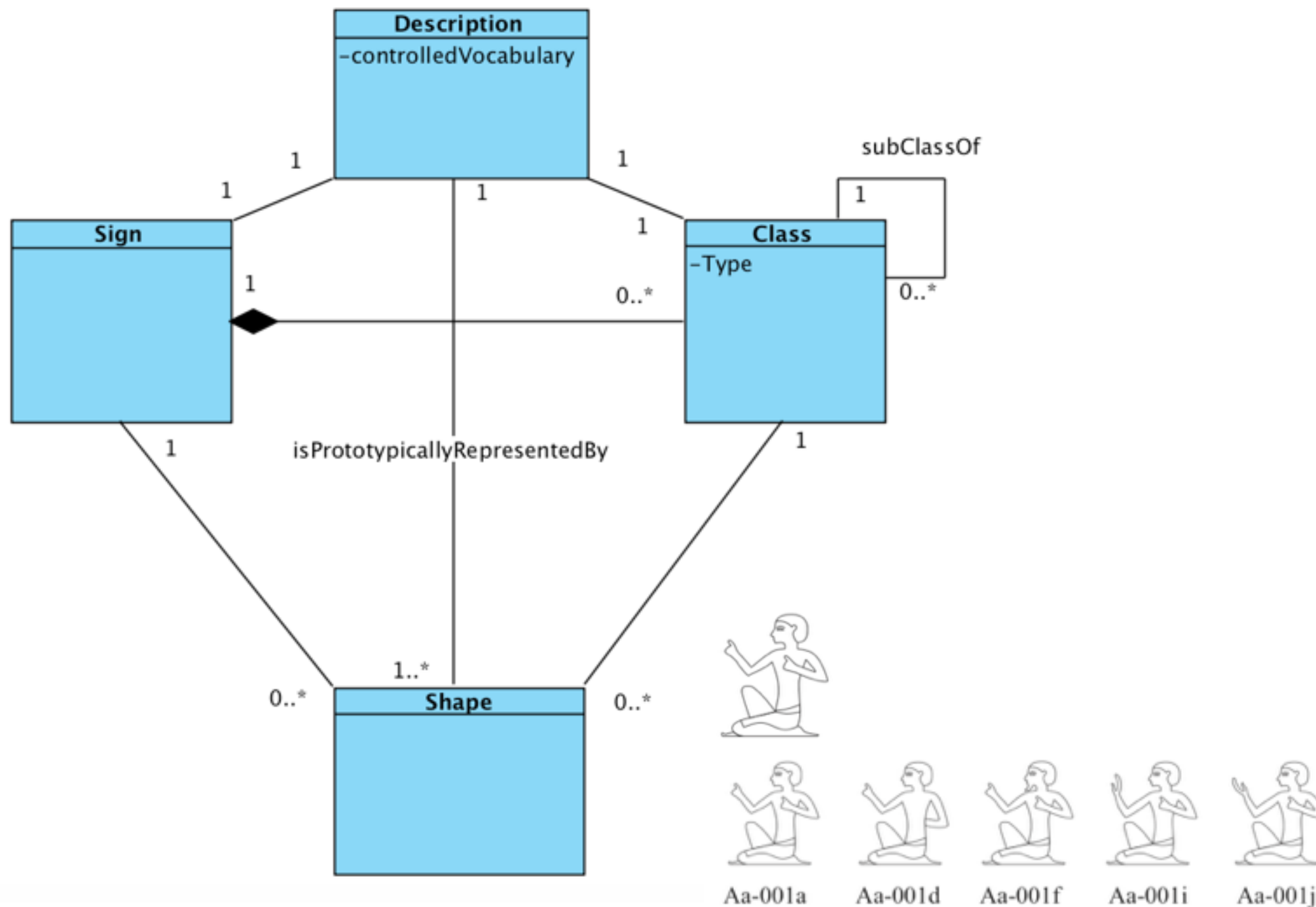


Thot Sign-List (TSL) Data Model

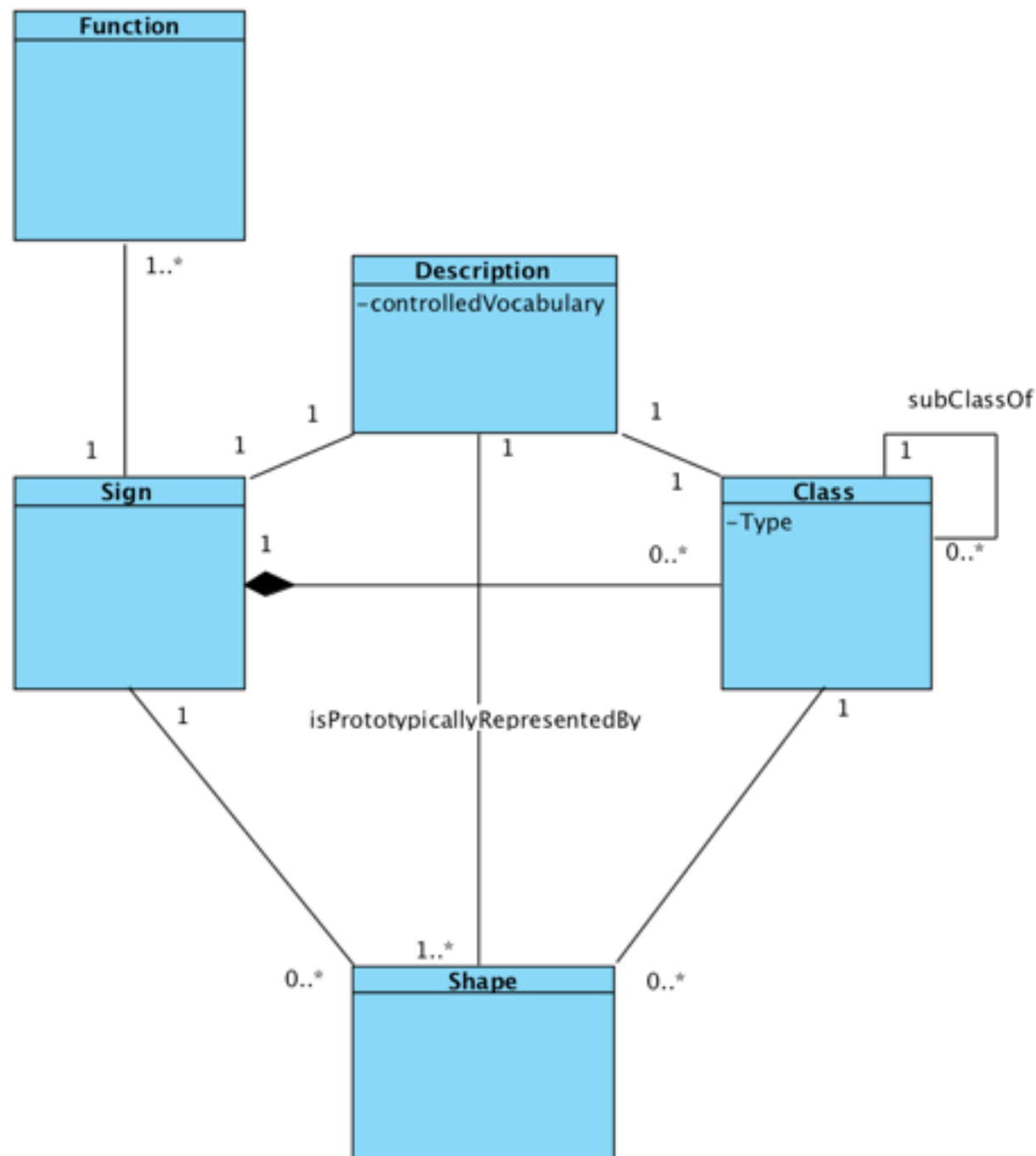


+ Vergnieux' Unicos

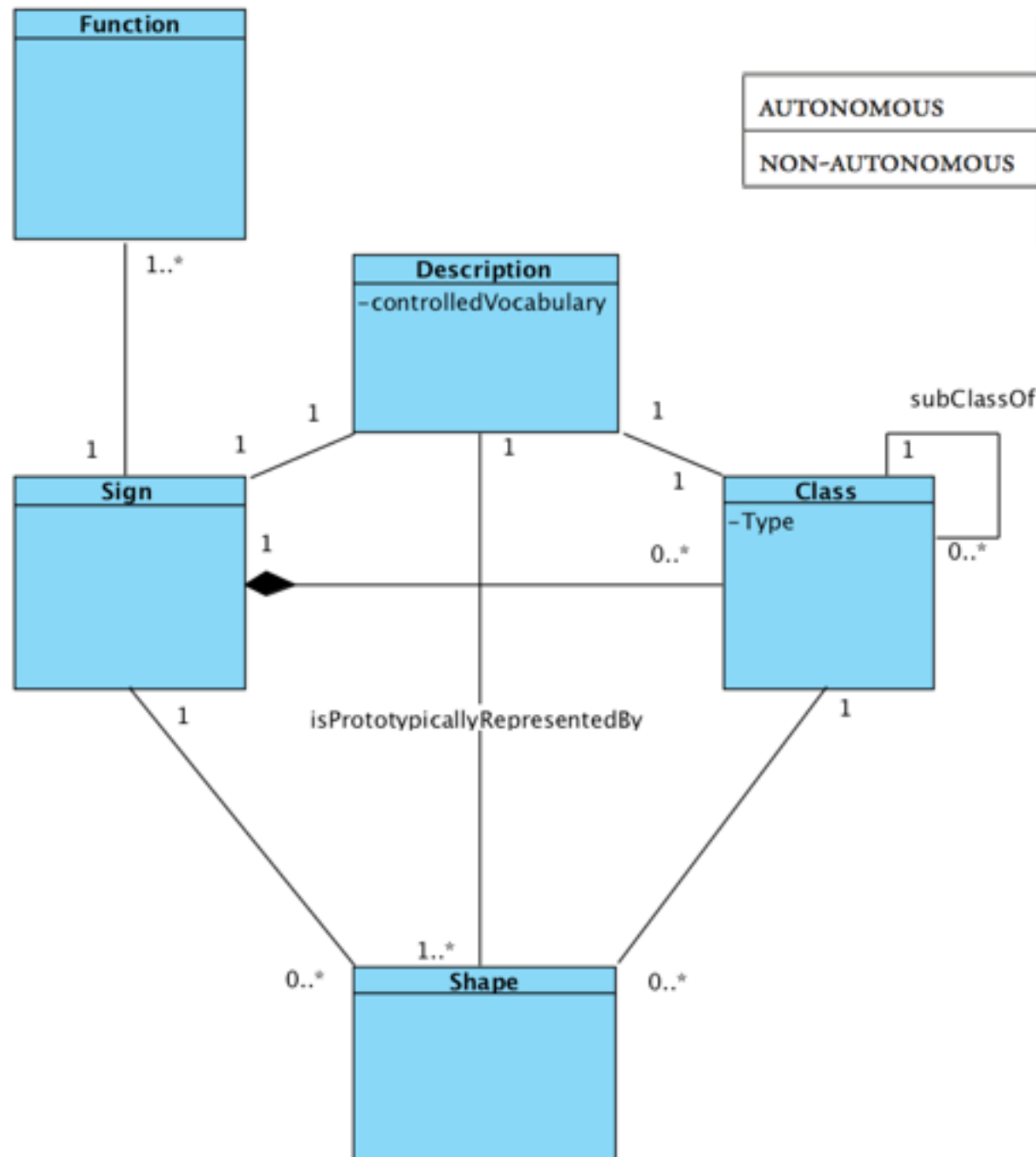
Thot Sign-List (TSL) Data Model



Thot Sign-List (TSL) Data Model



Thot Sign-List (TSL) Data Model



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

Fig. 10 A taxonomy of the hieroglyphic sign functions

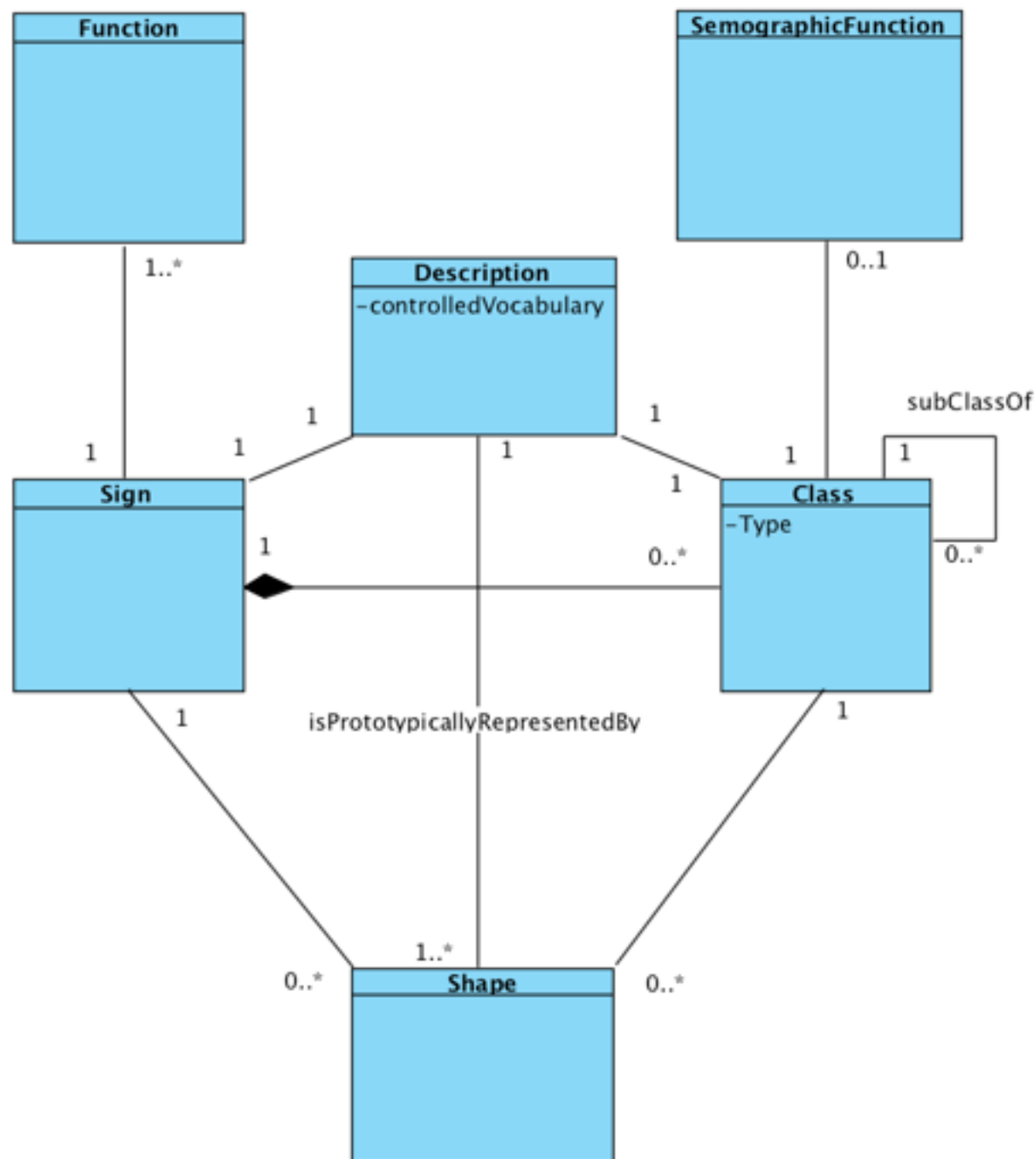
The Hieroglyphic Sign Functions¹ Suggestions for a Revised Taxonomy

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.

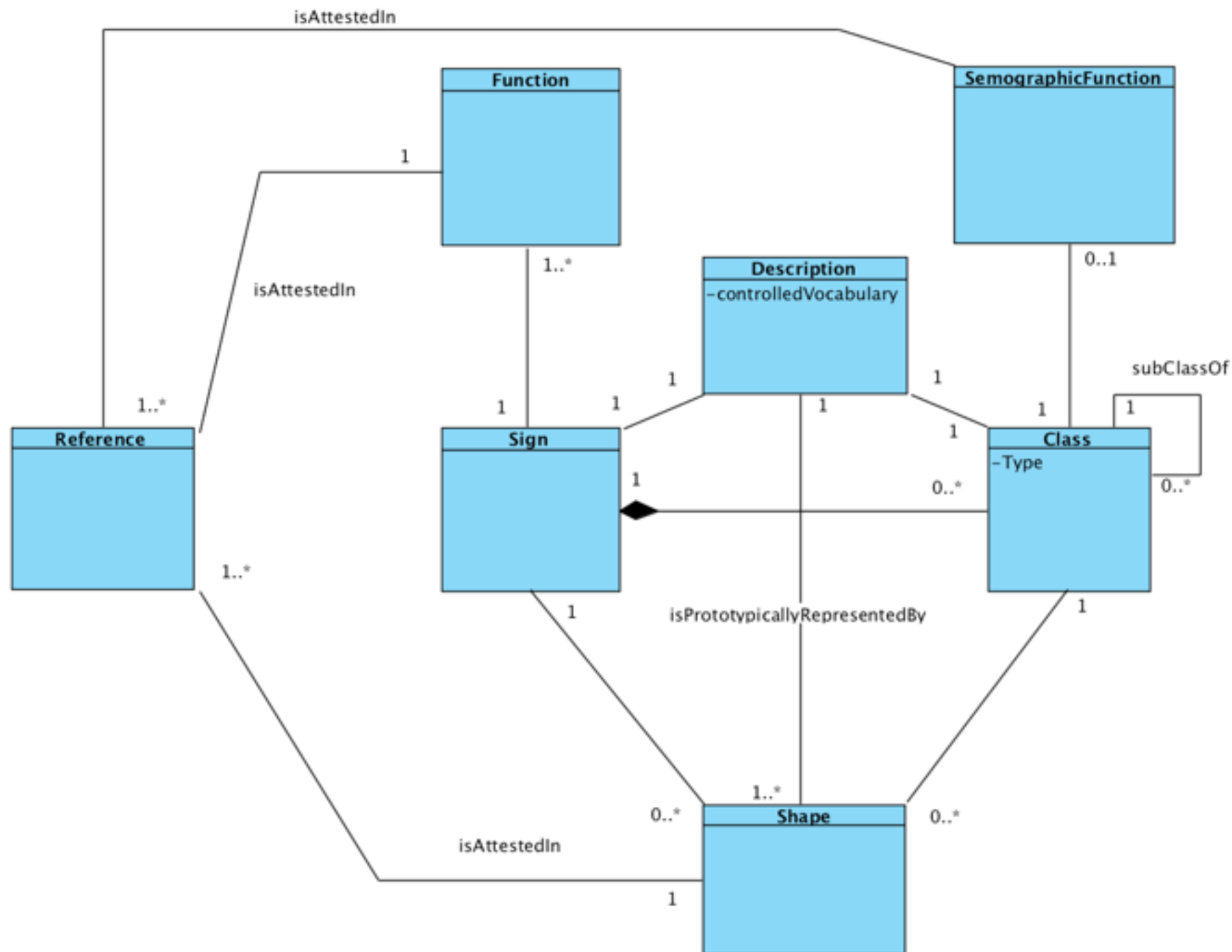
Thot Sign-List (TSL) Data Model



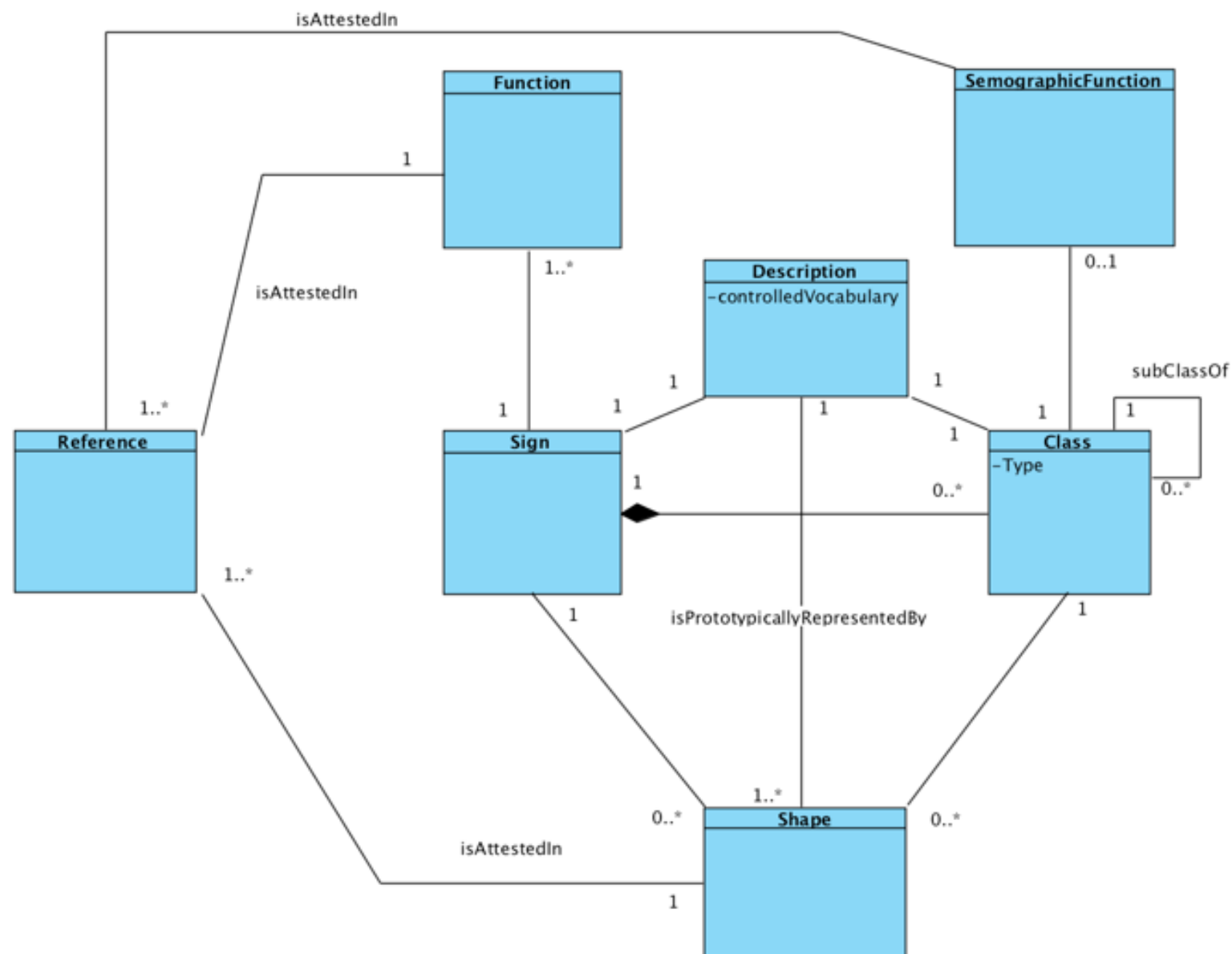
“herdsman”



Thot Sign-List (TSL) Data Model



Thot Sign-List (TSL) Data Model



TSL features

- Structured
- Referenced

Forthcoming

- Linked data
 - Corpora
 - Hieratic Palaeography (Mainz)
- Collaborative website

Unicode

- Shapes, just as other ones