

POGO

Philology-Oriented Graphematics Ontology

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GRTP 2023: Pour une modélisation de l'écriture

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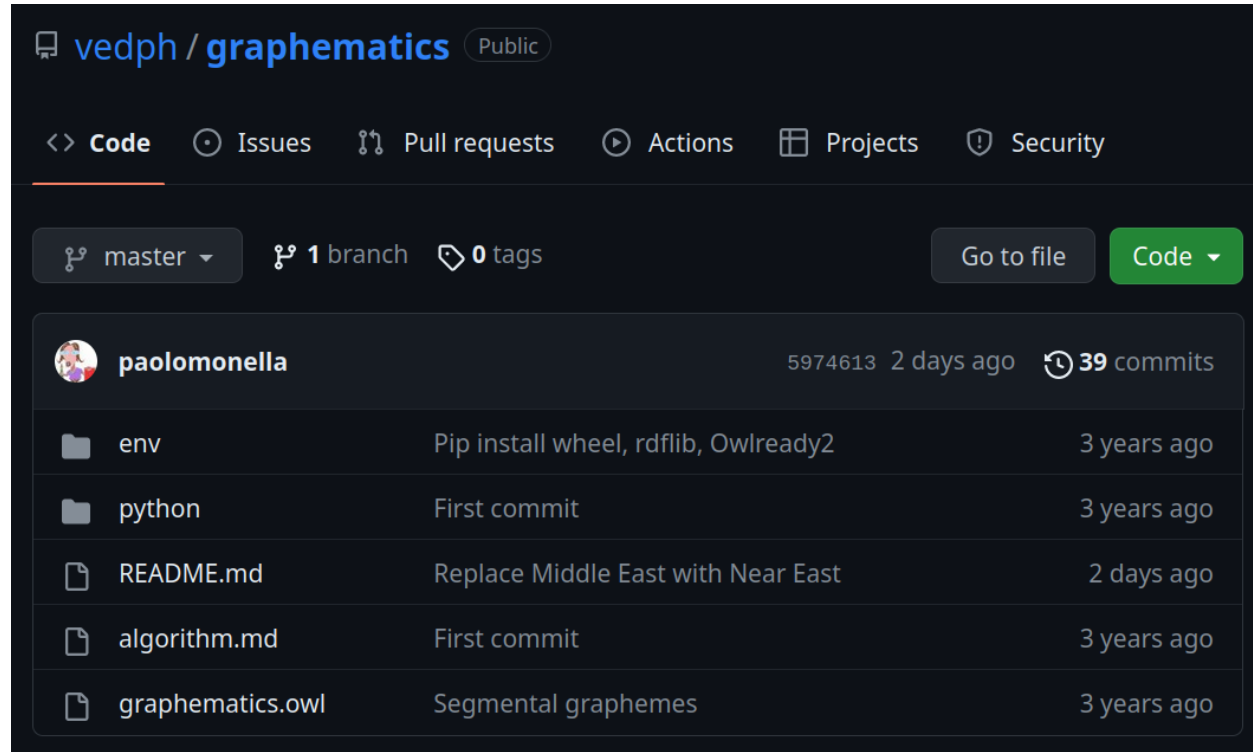
POGO: Philology-oriented Graphematics Ontology

What: The concepts/objects a digital philologist needs to transcribe a textual document

- Digital diplomatic transcription (or HTR)
- Focus: medieval manuscripts

POGO: Philology-oriented Graphematics Ontology

Where: github.com/vedph/graphematics



The screenshot shows the GitHub repository page for `vedph/graphematics`. The repository is public and has a `master` branch with 1 branch and 0 tags. The repository was created by `paolomonella` 2 days ago, with 5974613 commits. The repository contains the following files and folders:

File/Folder	Description	Last Commit
<code>env</code>	Pip install wheel, rdflib, Owlready2	3 years ago
<code>python</code>	First commit	3 years ago
<code>README.md</code>	Replace Middle East with Near East	2 days ago
<code>algorithm.md</code>	First commit	3 years ago
<code>graphematics.owl</code>	Segmental graphemes	3 years ago

POGO: Philology-oriented Graphematics Ontology

Why:

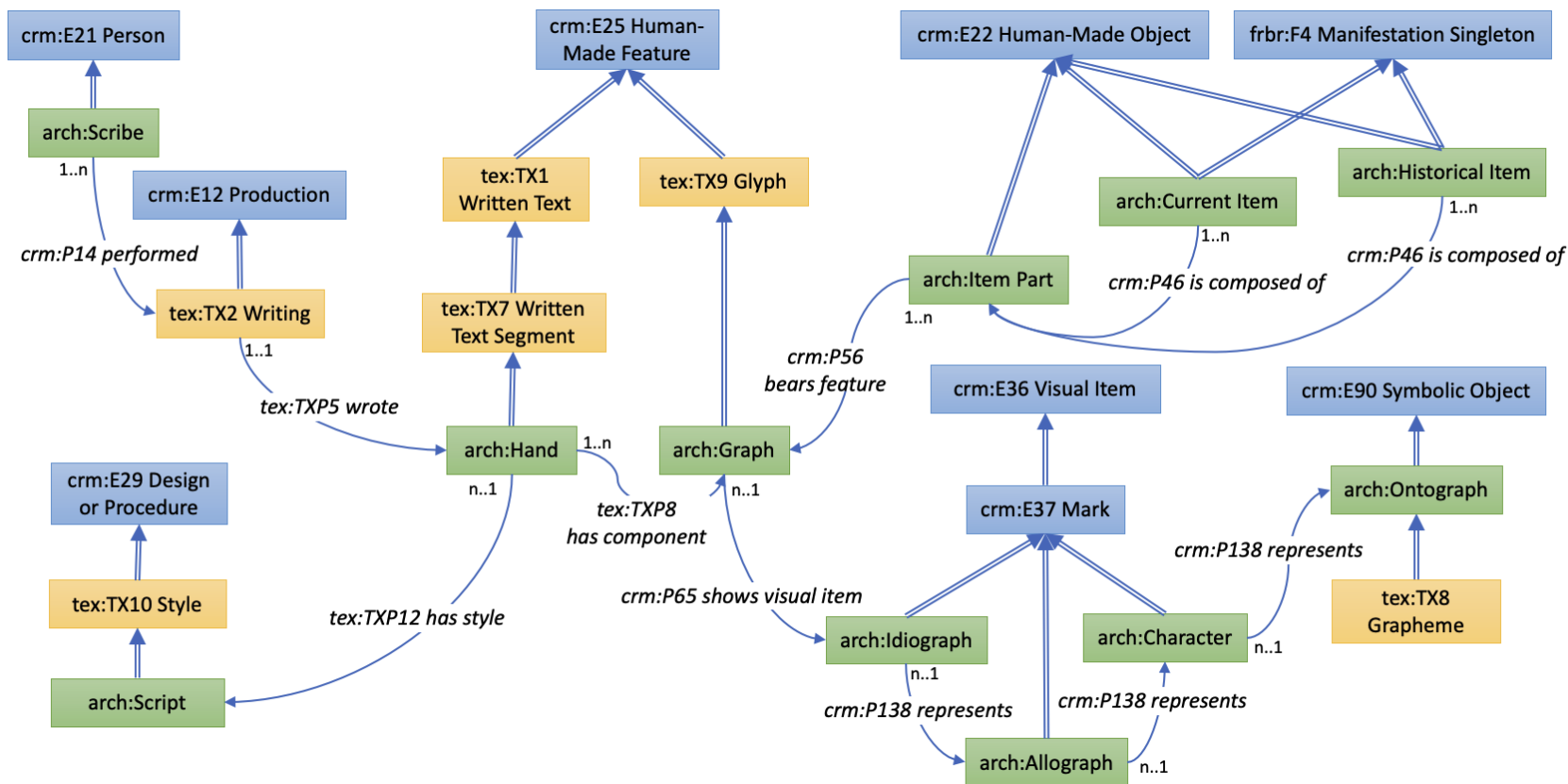
1. Digital palaeography / digital philology
2. Interoperability among digital scholarly editions

POGO: Philology-oriented Graphematics Ontology

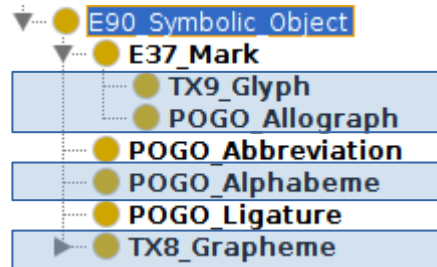
- Reusing/expanding [CRMtex](#) ontology (CIDOC-CRM)
 - [TX8 Grapheme](#)
 - [TX9 Glyph](#)
- Two closely related ontologies (to which POGO is connected via `owl:equivalentClass`)
 - Peter Stokes, [The Archetype Ontology](#)
 - Frekerike Neuber, [typoo](#)

The logo for CRMtex, featuring the text "CRMtex" in a large, green, serif font with a slight shadow effect.

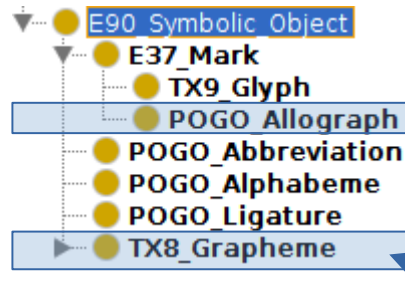
The Archetype Ontology



POGO: Backbone concepts



Allograph / Grapheme



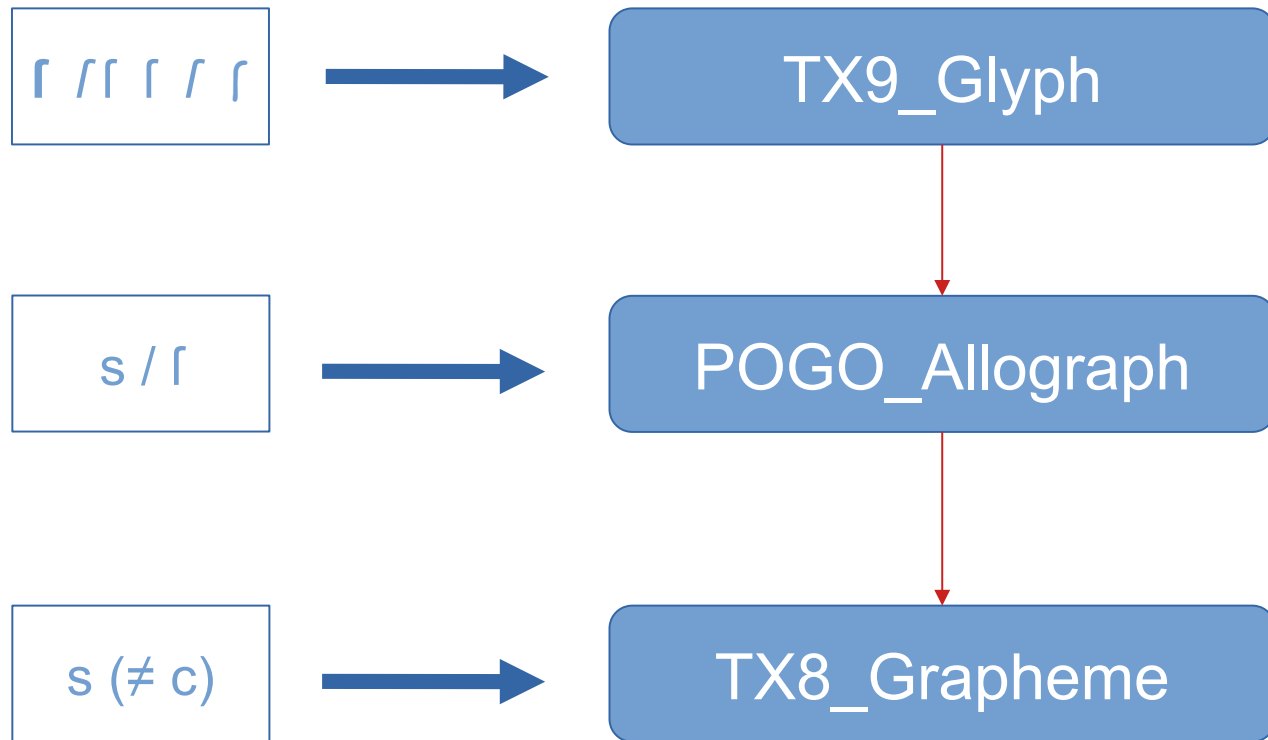
Abstract form of a
non-distinctive
graphic variant:

s / f
sou / fou

Minimal *distinctive* unit
of a graphic system:

s / c
sou / cou

Glyph / Allograph / Grapheme

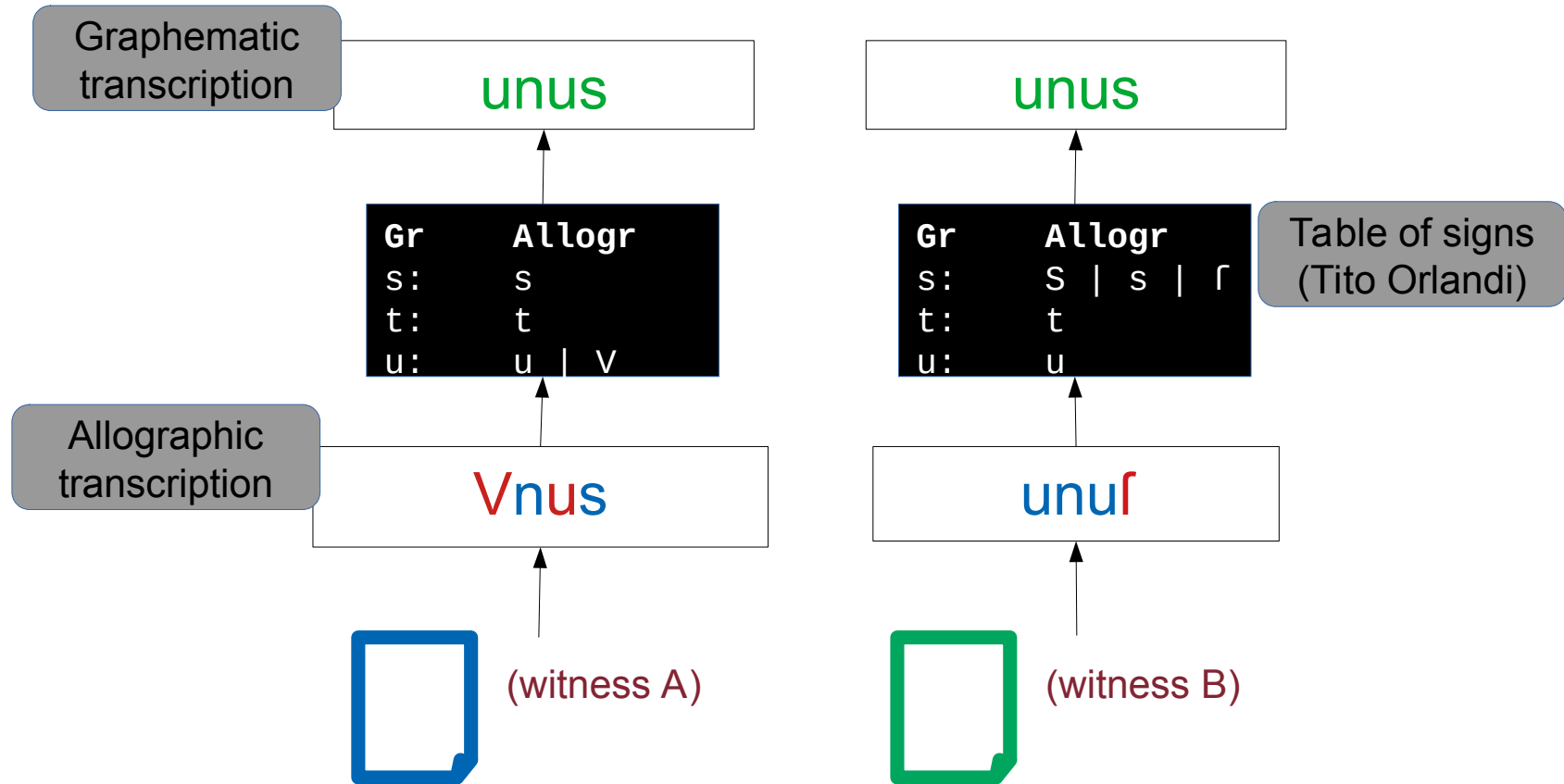


Interoperability

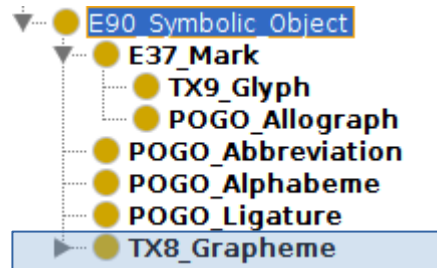
Why:

Interoperability among digital scholarly editions → *A practical example*

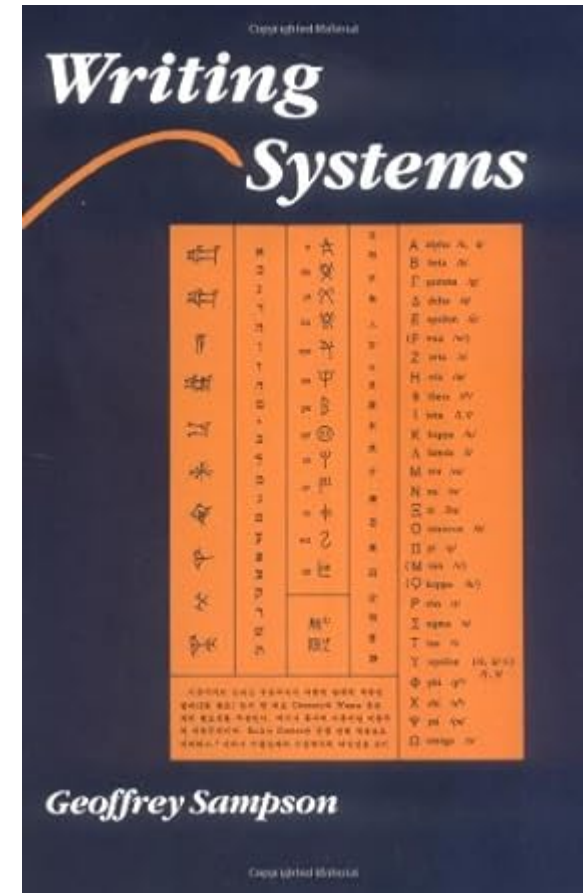
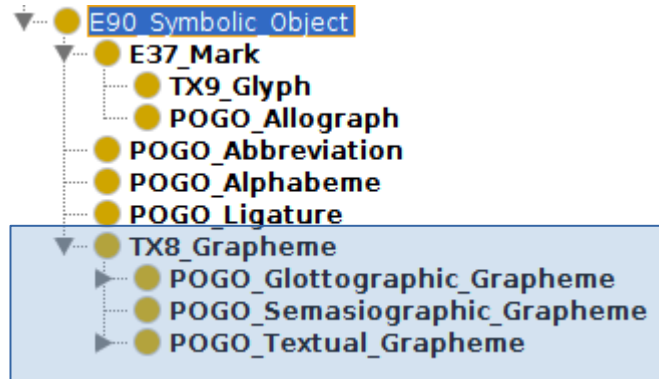
Allograph / Grapheme



Grapheme



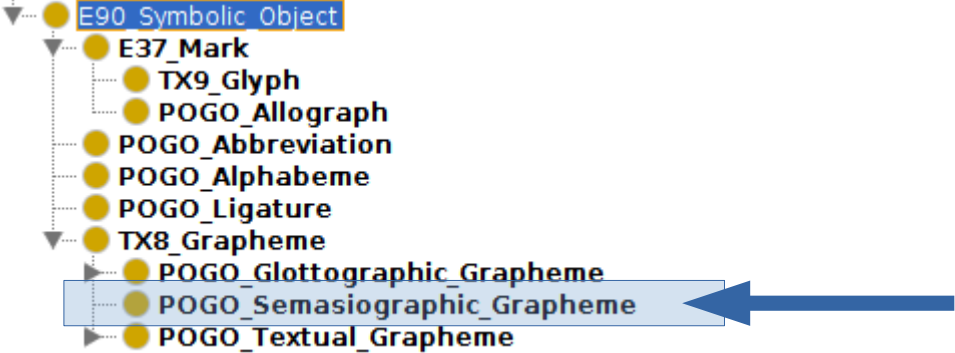
Grapheme classification (Sampson)



Semasiographic Grapheme (“ideograph”)

Not **words**
(language)

but **concepts**

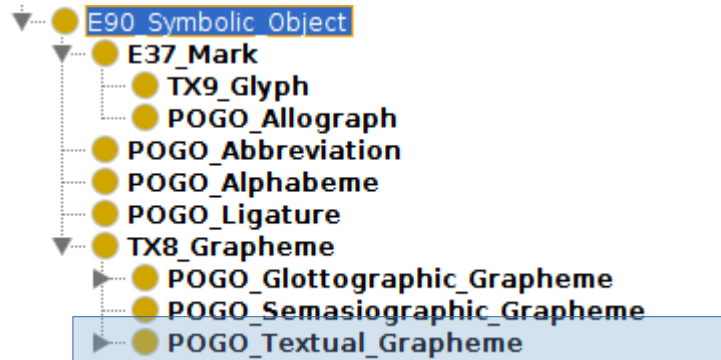


4
↓
(quatre, four,
τέσσερα...
the **concept**
of number 4
beyond
words /
language)

Textual Grapheme

Not **words**
(language)

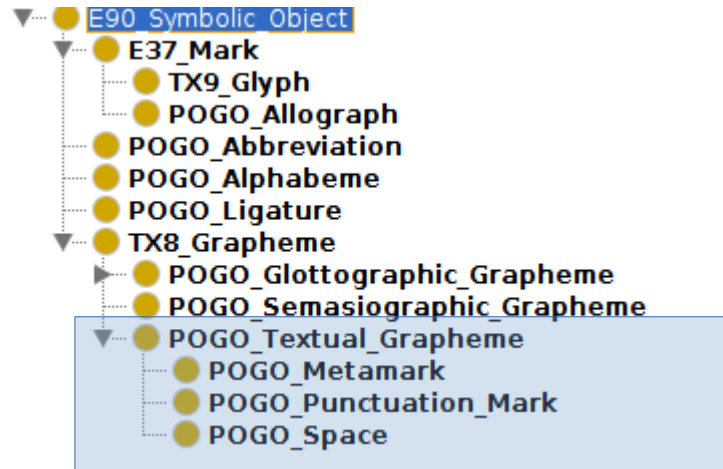
but meaning
of the **text**



Textual Grapheme

Not **words**
(language)

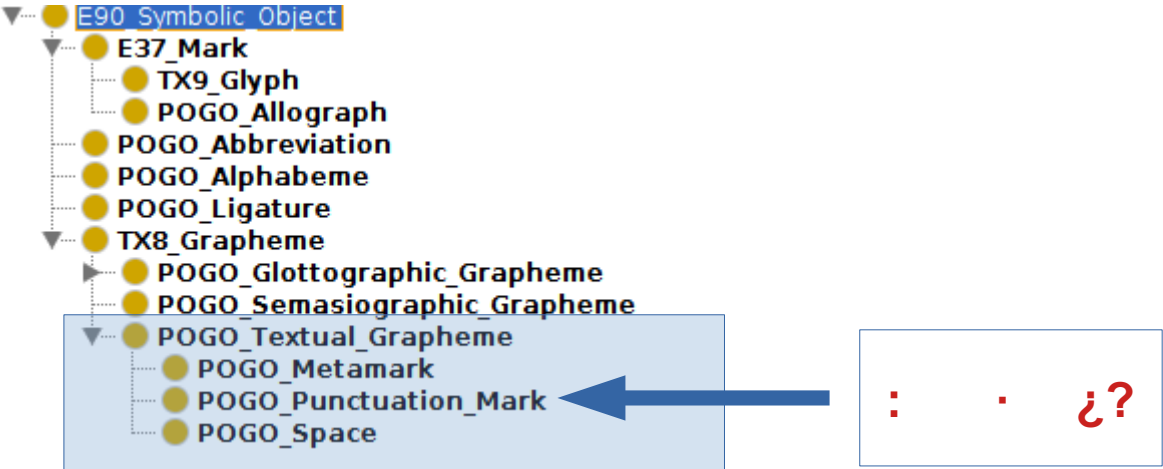
but meaning
of the **text**



Textual Grapheme

Not **words**
(language)

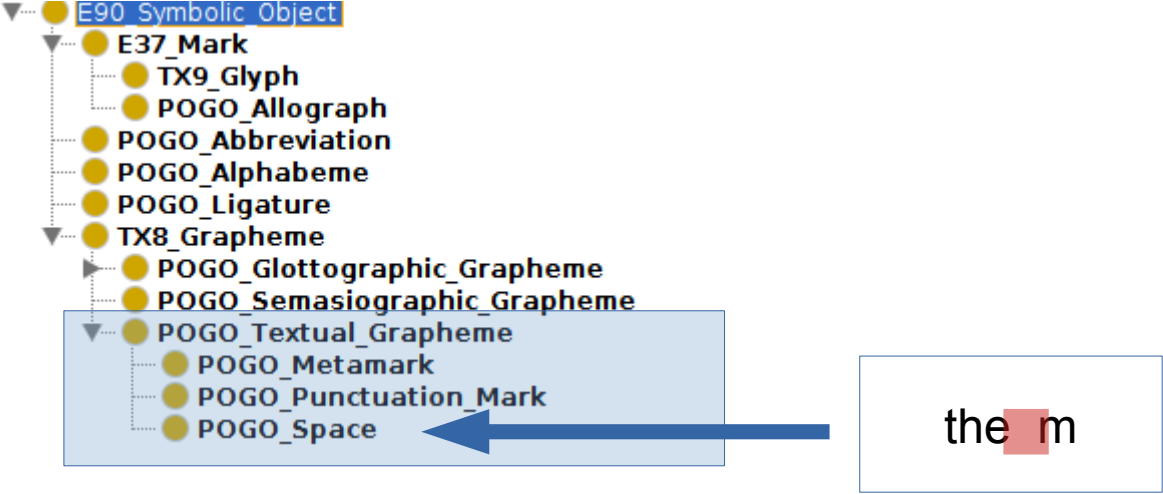
but meaning
of the **text**



Textual Grapheme

Not **words**
(language)

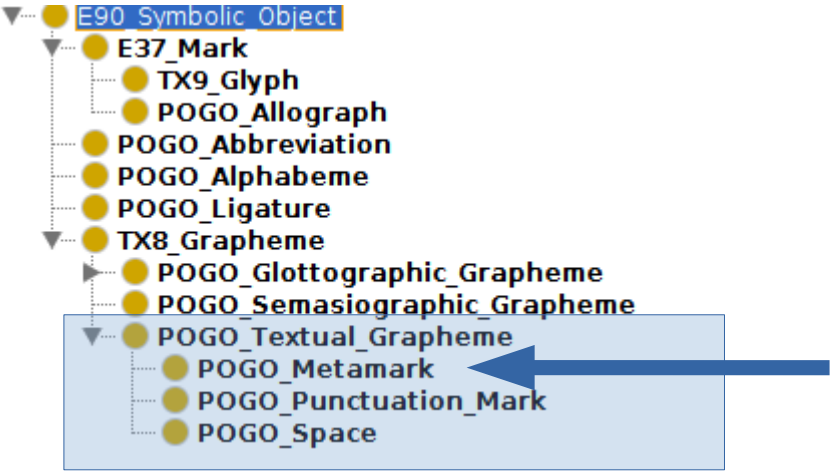
but meaning
of the **text**



Textual Grapheme

Not **words**
(language)

but meaning
of the **text**

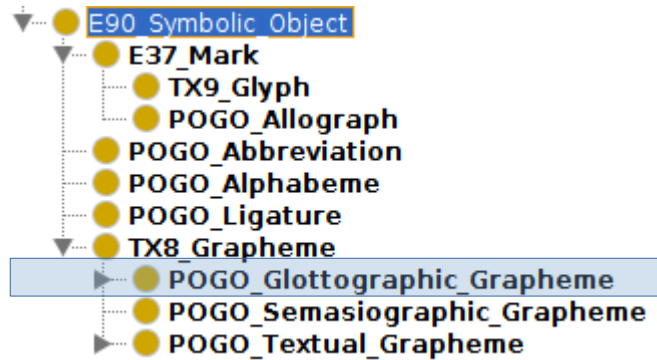


Intelligent thought¹.

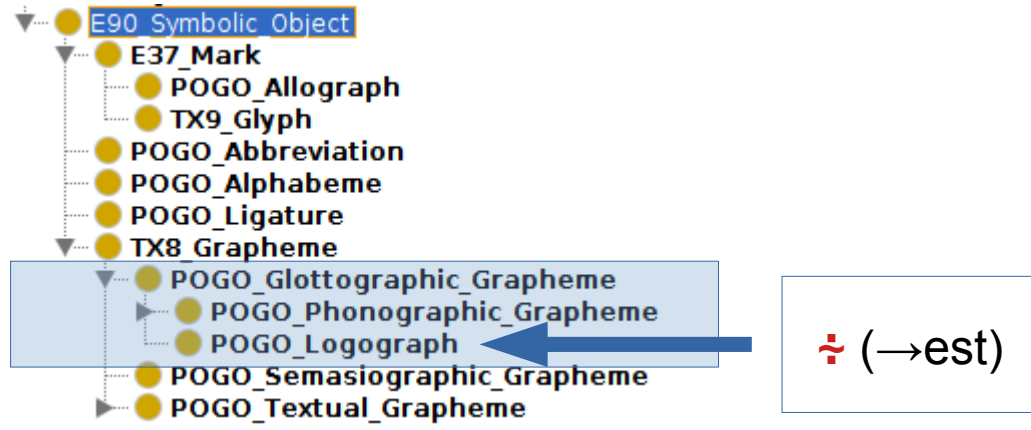
¹ Thorough footnote

Glottographic Grapheme

Words
(language)

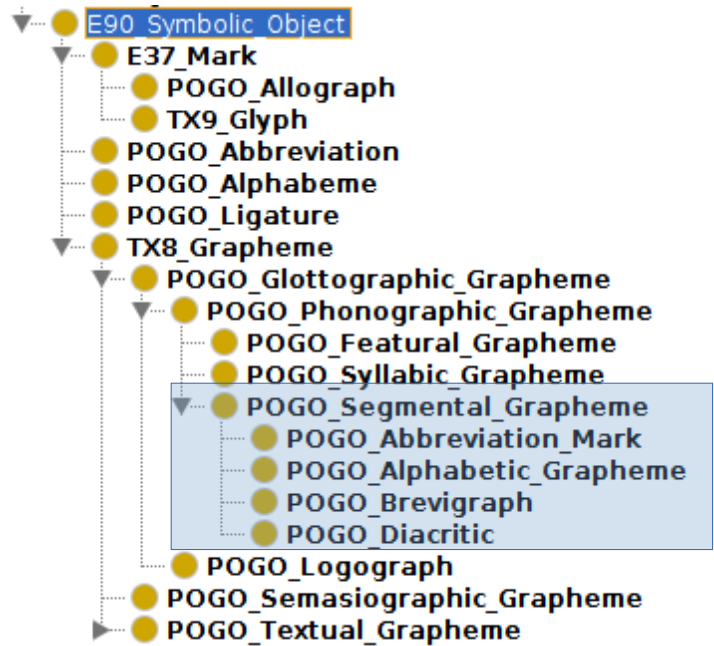


Logograph

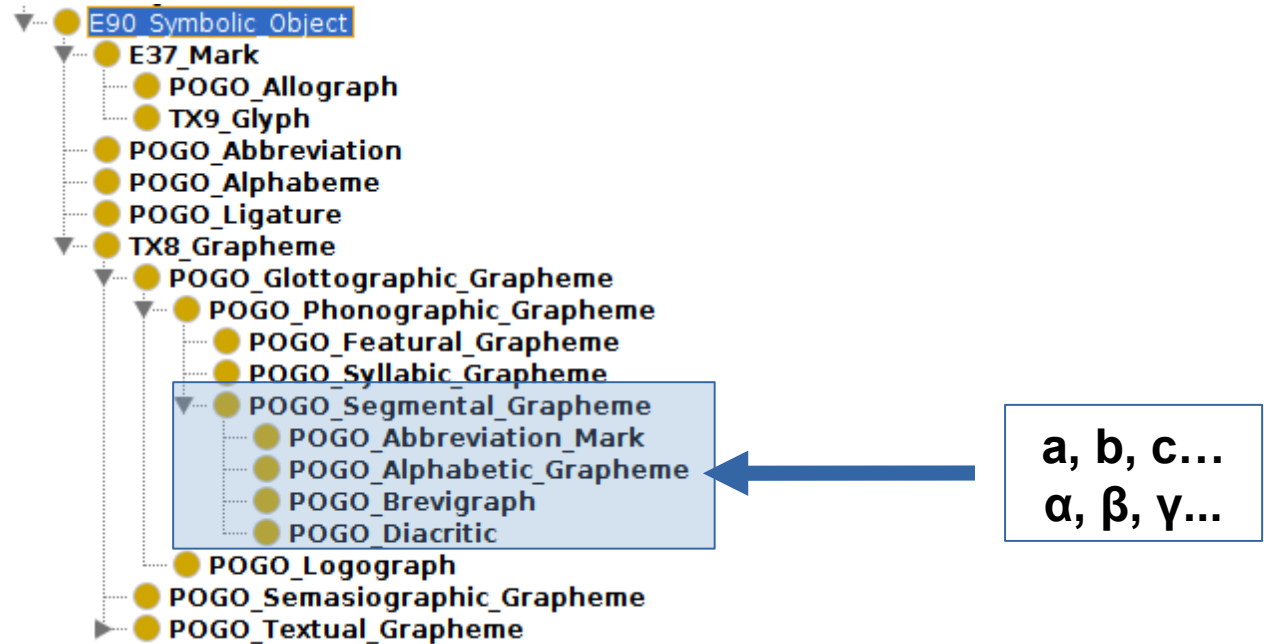


Segmental Grapheme (→“alphabet”)

→ “Alphabet”
... and around

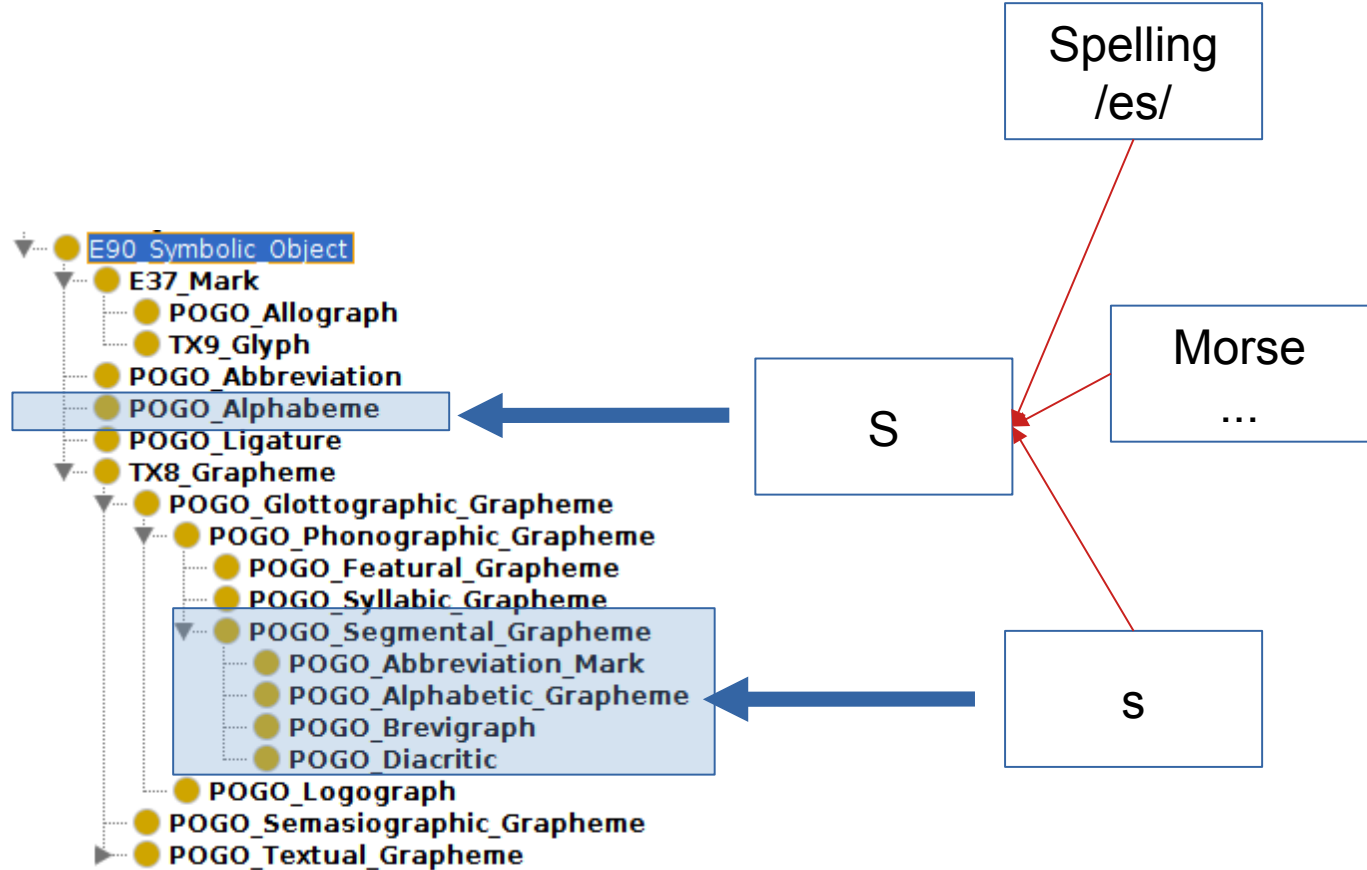


Alphabetic Grapheme

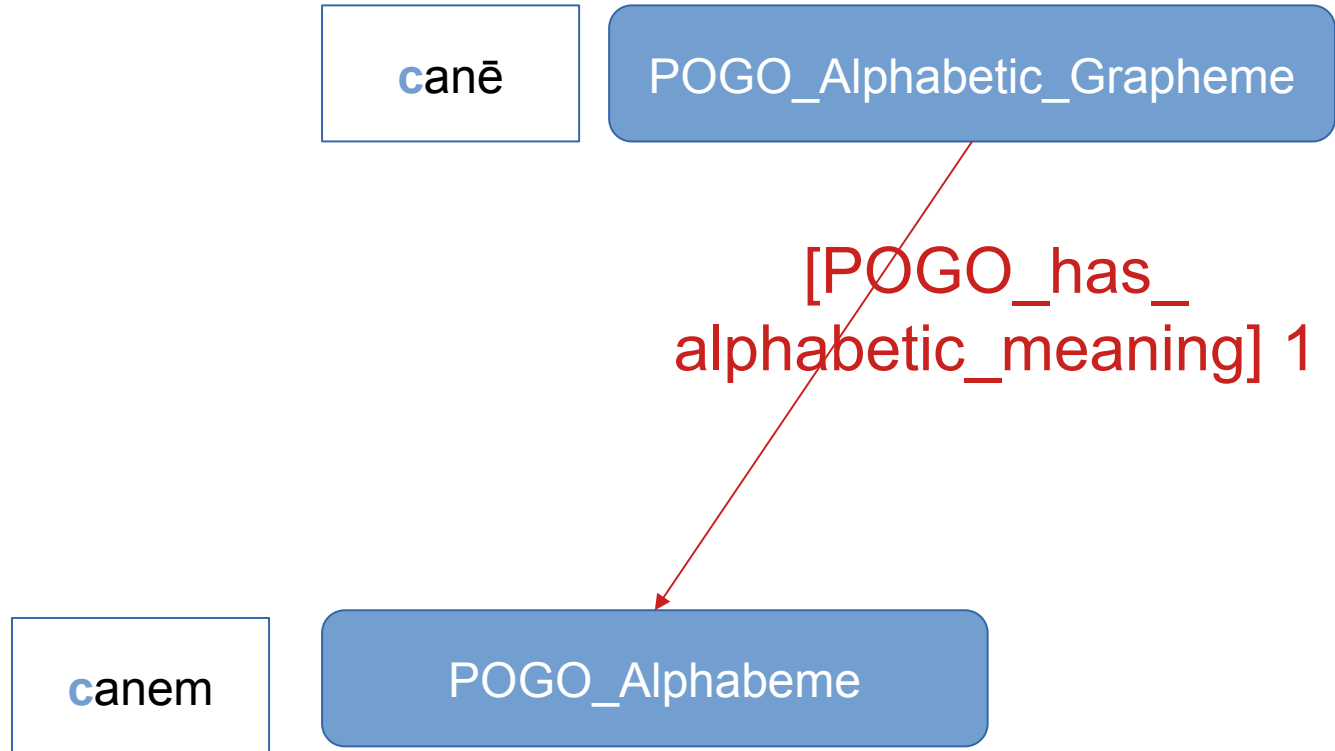


a, b, c...
α, β, γ...

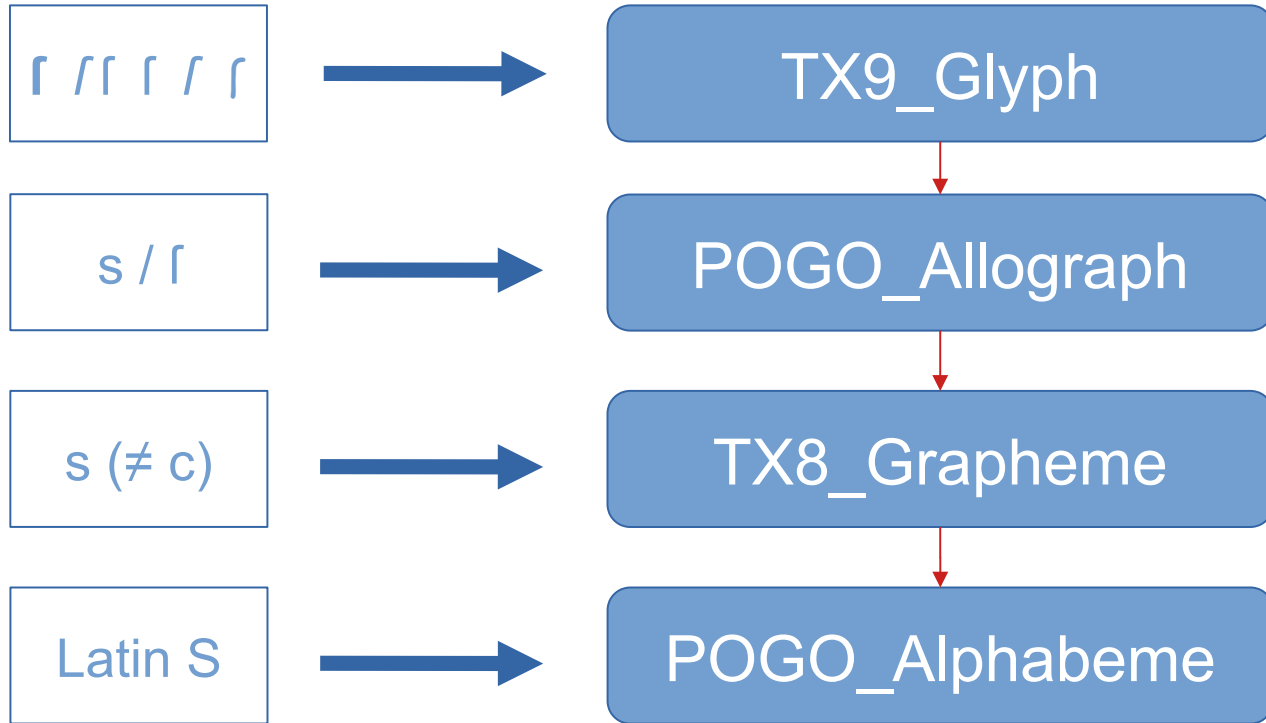
Alphabeme (“alphabetic letter”)



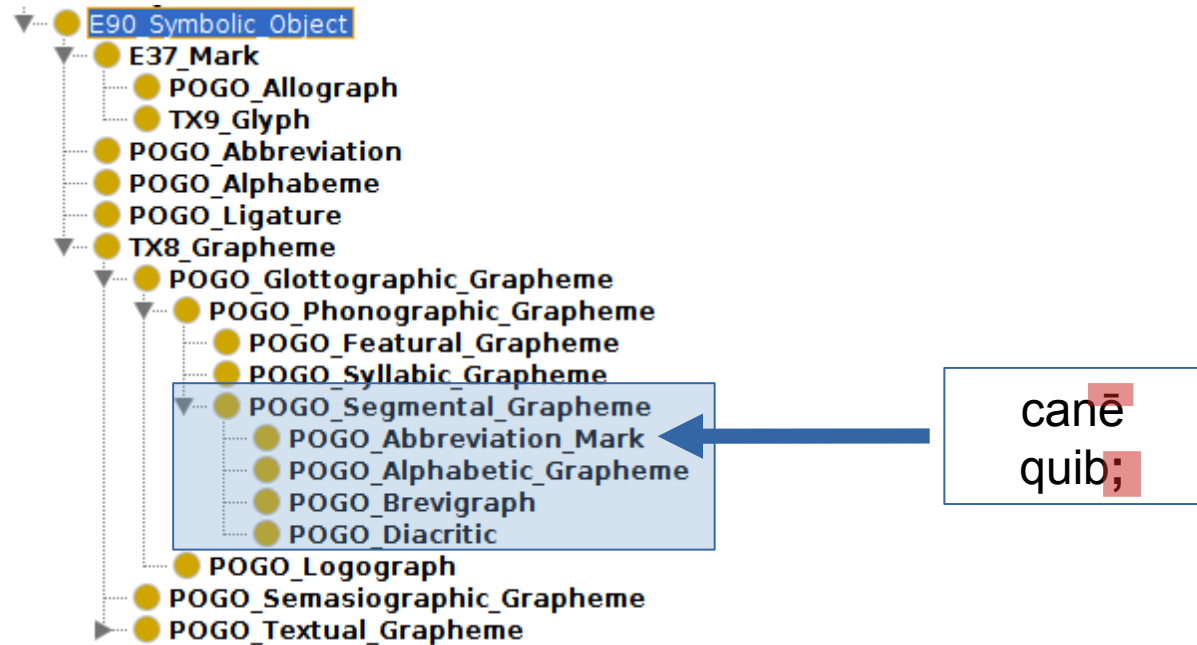
POGO_has_alphabetic_meaning



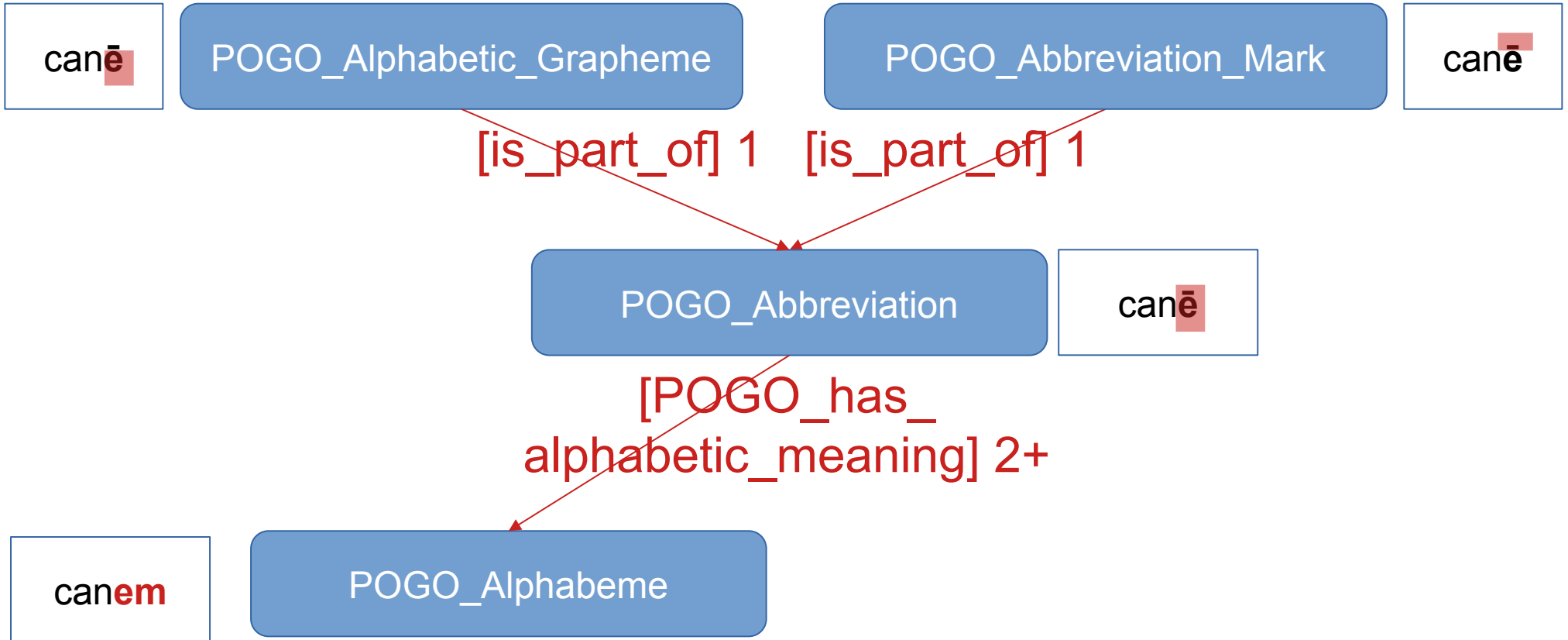
Glyph / Allograph / Grapheme / Alphabeme



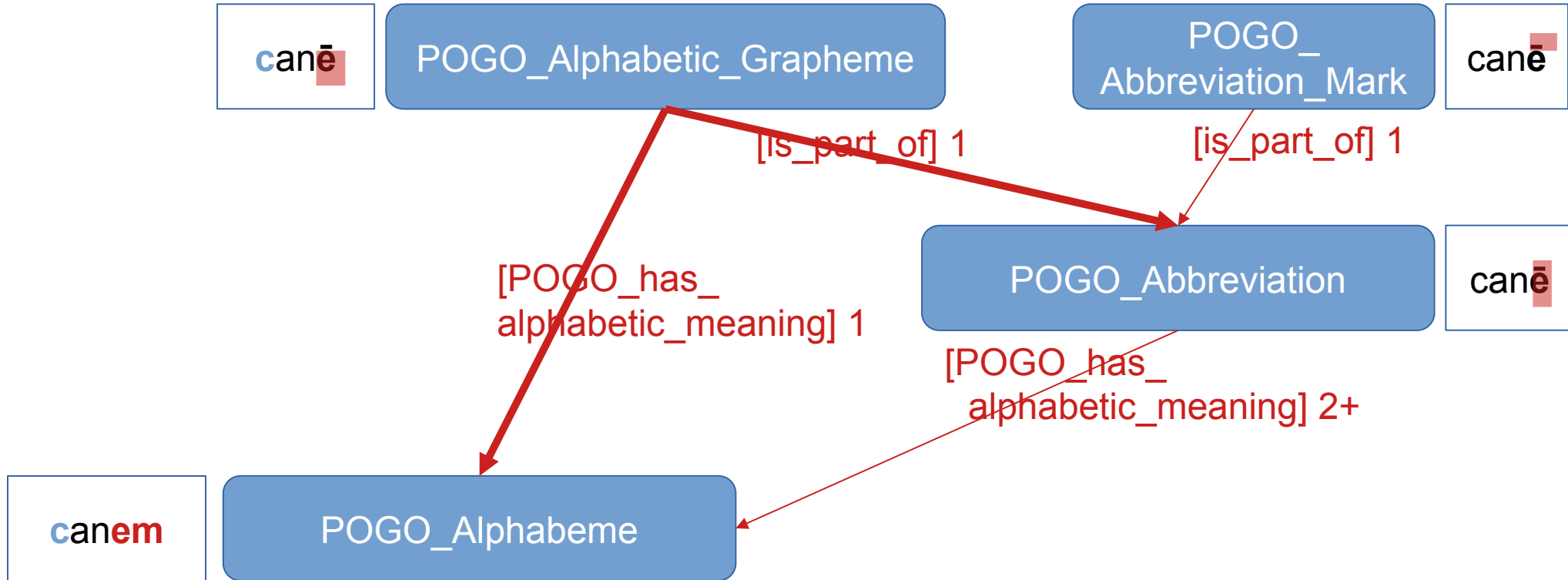
Abbreviation Mark



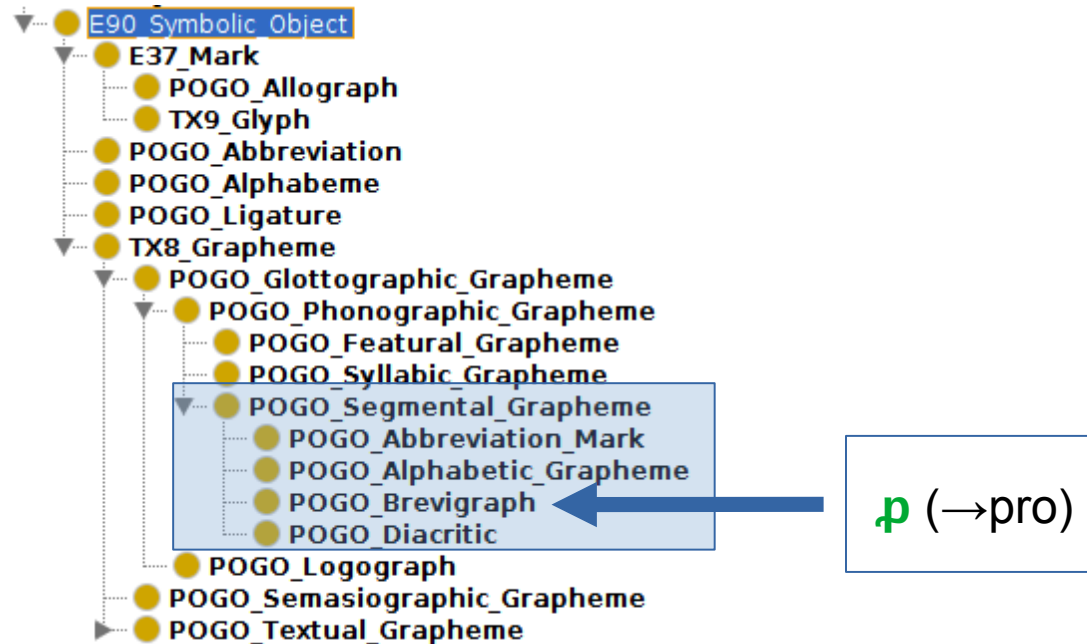
Abbreviation



Two paths of an Alphabetic Grapheme

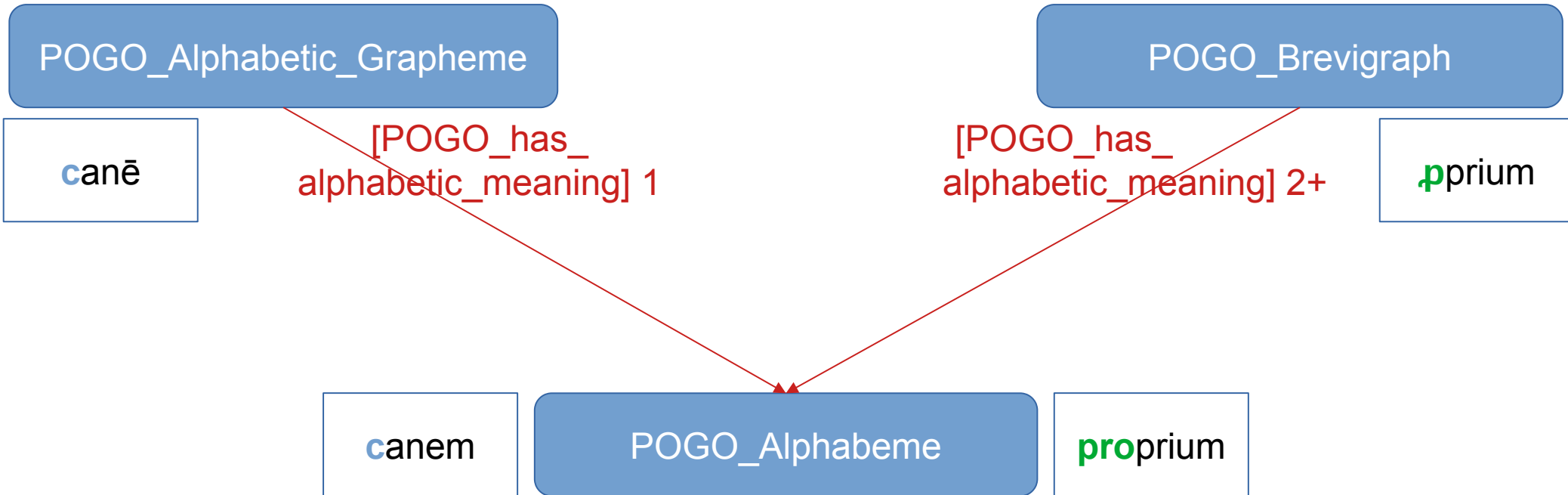


Brevigraph

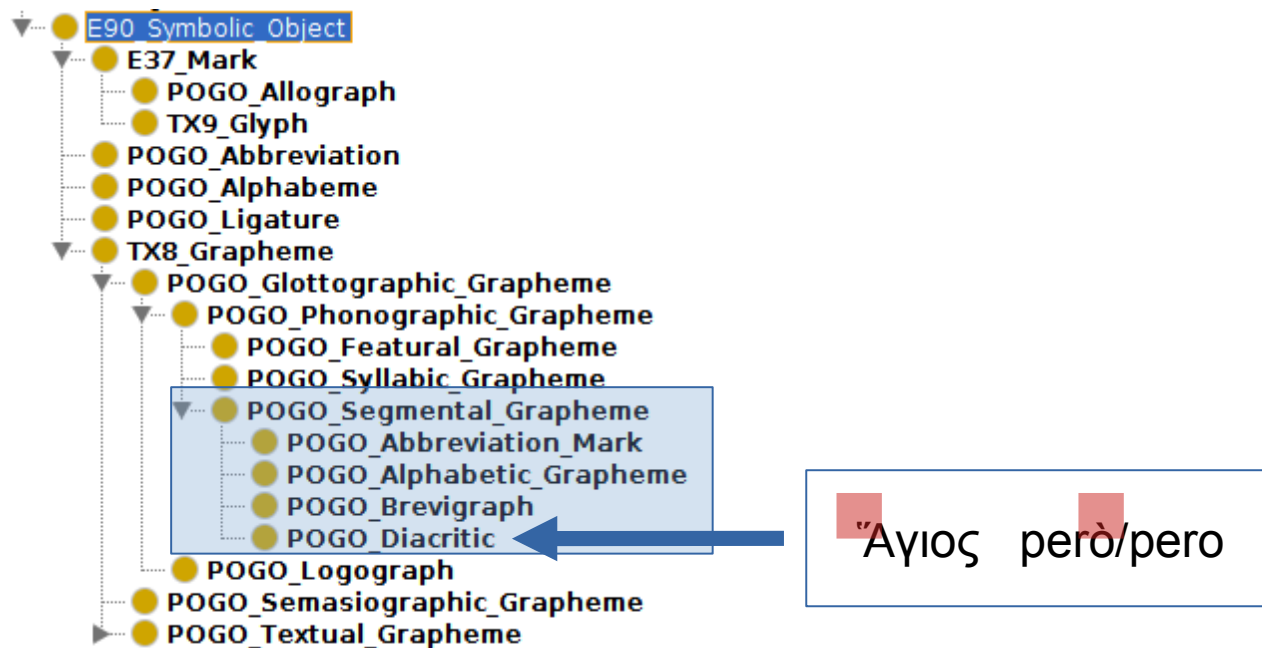


p (→pro)

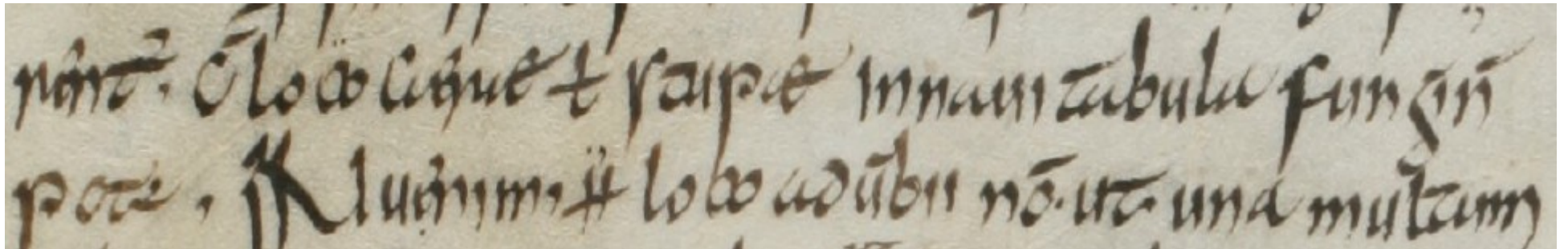
Brevigraph



Diacritic



Non-entirely-alphabetic writing systems



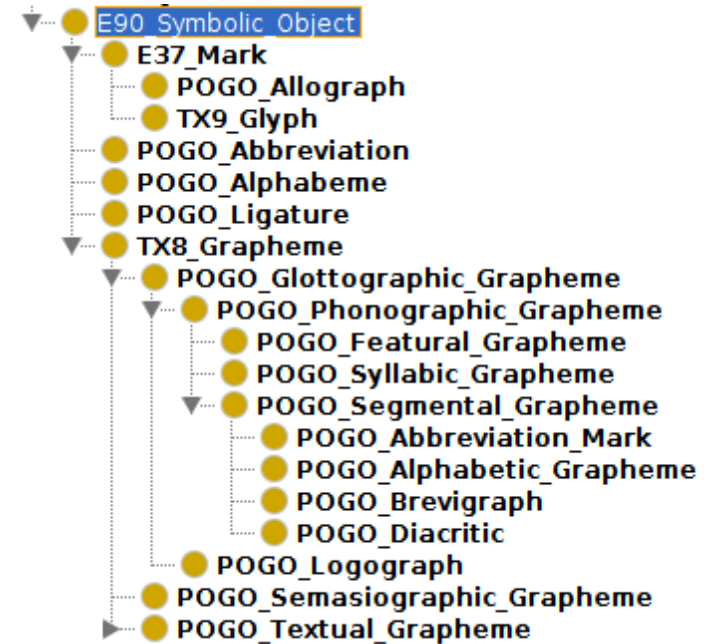
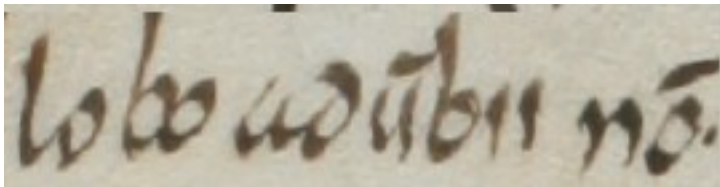
St. Gallen, Stiftsbibliothek, 904 (IX²; Insular script; Priscian, *Ars Grammatica*)

Non-entirely-alphabetic writing systems

non potest inuenimus enim

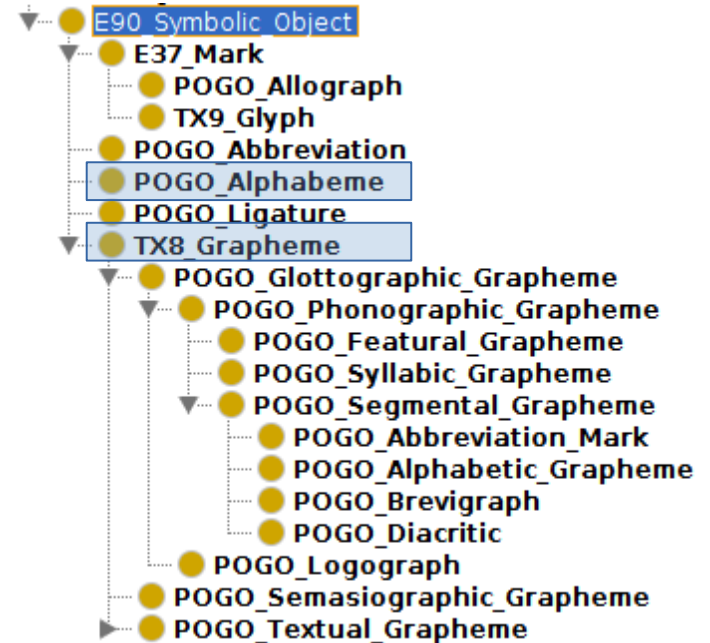


loco aduerbii **nomen**



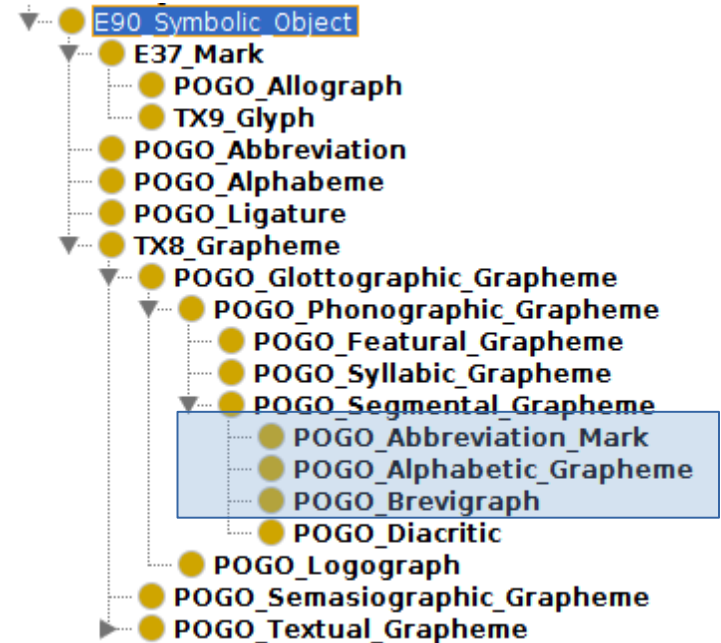
(Some) open issues

- Alfabeme (alphabetic letter) / Grapheme
 - Morse code, spelling etc.



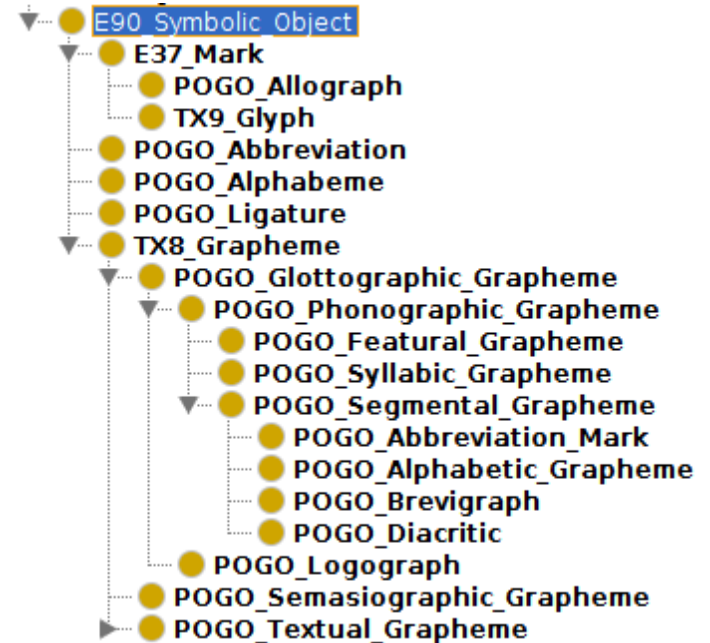
(Some) open issues

- Alfabeme (alphabetic letter) / Grapheme
 - Morse code, spelling etc.
- Abbreviation → ligature → brevigraph



(Some) open issues

- Alfabeme (alphabetic letter) / Grapheme
 - Morse code, spelling etc.
 - Abbreviation → ligature → brevigraph
1. Philology: Writing system of the *individual* witness
 2. Palaeography: “Caroline” as a whole



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