









Date: 8-12 July 2024

# A couple of issues concerning the annotation of the Pyramid Texts in the Egyptian-UJaen treebank

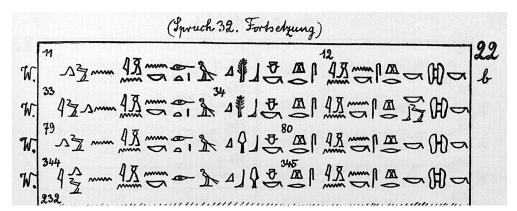
What are the Pyramid Texts?

The Pyramid Texts is a collection of spells recorded on the walls of the Pyramids of Old Kingdom kings. They contain more than eight hundred magic formulae recited during mortuary rituals for the king.

The Pyramid of Unas at Saqqara contains the oldest version of the Pyramid Texts, dated to 2353-2323 BC.



Unas' Pyramid Texts



Sethe's edition of the Pyramid Texts (1908-1922)

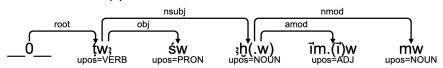
## 1. HIEROGLYPHS

Computer science has reached its limits concerning the annotation of hieroglyphs, as Unicode font of Egyptian hieroglyphs is incomplete. Hieroglyphs lacking a Unicode character are annotated by means of a code, for example UniC=13E03 or labelled UniC=No which means that no Unicode character exists for a given hieroglyph.

```
1376
        # sent_id = EUJA-119
        # ref = Pyramid Texts § 22b W, Saqqara, 5th Dynasty, rel, 0E
1377
1378
        # text = kb ib ≥k hr ≥ś
1379
            kb kbb VERB
                            SFC|Sub Mood=Sub
                                                0 root
                                                               ⊿UniC=13E03
            ib ib NOUN
                            MWE Gender=Masc|Number=Sing 1 nsubj
1380
                                           Gender=Masc|Number=Sing|Person=2|PronType=Prs
                    PRON
                            SFP|Poss=Yes
1381
                    ADP Pron.st Case=Sub|Poss=Yes 5 case
1382
                            SFP Gender=Fem|Number=Sing|Person=3|PronType=Prs
1383
                    PRON
```

#### 2. IDIOSYNCRATIC STRUCTURES, FOR EXAMPLE NISBA ADJECTIVES

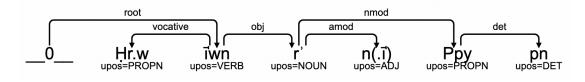
The genitive is expressed by means of the nisba n.i (.....). As a noun cannot modify an adjective, the name Pepi is not a noun modifier of the nisba, but of r "mouth". The same happens with other nisbas.



"The spirits who are in the water shall worship him."

#### **EVALUATION**

LAS	UPOS	UAS	Lemma	BLEX
60.93 %	87.01 %	71.69 %	88.90 %	51.96 %



"Horus, open the mouth of this Pepi."

### CURRENT STATE OF THE EGYPTIAN-UJAEN TREEBANK

Manual morphosyntactic annotation of:

- 1389 sentences
- 11927 tokens
- over 15000 hieroglyphs
- This is 1/6 of the Pyramid Texts





