Sunoikisis D.C. 2016
16th Session, May 18
Alignment & Treebanking @ UNESP

Anise Ferreira

& collabs*.

+ digital version
of Greek-Portuguese Dictionary

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Sunoikisis class 2016: Michel, Letícia, Zuleika, Monique, Kelli
+ Undergr. class 2016

Three main tasks

❖ Translation alignments with Alpheios @Perseids

❖ Treebanking with Arethusa @Perseids

❖ Greek-Portuguese Digital Dic.

- Decisions about what to align or not

- Different types of translations and its effect on alignment

- Awareness of different translators' choices when comparing translations of the same text.

- Our advantage? without open licensed translations available in Portuguese, we can adjust the translation to the alignment task.

- Disadvantage: Losing artistic metaphors ?

- Treebanking annotations

- impact on awareness of morphosyntax dependencies in Greek

  - impact on awareness of **Portuguese** syntax!

Obras/Autores	Tokens já alinhados	Situação
Biblioteca, Apol.	35317	toda a obra traduzida
Héracles, Eur.	1465	300 versos
Ciclope, Eur.	587	40 versos, mas toda obra já traduzida
Máximas, Men.	446	30 sentenças
Prometeu A., Ésq.	117	97 versos
Persas, Ésq.	3524	300 versos
Hist., Heródoto	1807	1.34-1.45
Medeia, Eur.	2310	6-29;115-167;244-58;316-403
Fábulas, Esopo (Bab.)	462	n.19, 20 e 107
Ode 22.5, Anacr.	107	22.5 12 versos
Hist.Pelop., Tuc.	2128	1.89-1.93
TOTAL	48270	————

- **2016**: begin in March - 6 undergraduate classes (for each 3 permanent professors); my case: in 2nd, 3rd and 4th years of the course.

- 50% of undergrats have day jobs or daytime commitments

- 1/5 have 1st degree in other areas

- **2 undergrat. began alignment transl. projects:** Xen.'Symp. ; Apol. Rhod'Argonautica

- Sunoikisis DC- 1 grad std officially enrolled for credit, w/ major in Greek; 4 attending as 'special' - - ¼ has major in Greek.

Greek-Portuguese Digital Dict.

Printed version: 5 vols 2005-2010   1300 pp

Publisher authorizes & gave up digital	Publ. writes new contract	We wait for signatures	Publ. gives files	First digital version?
Dec. 2012	**2013**	**2014**	**2015**	**2016**
	Funding for Scanning Ancient Greek OCR	Starting correction No fundings	Testing Ruben's first version tagger	Tagger new version

\<entryFree\> *headword*

\<def\>
all senses and definitions
\</def\>

\</entryFree\>

\<entryFree\>Ἡφαιστεῖον, ου (τό)

\<def\>
templo de Hefesto ⟨Ἥφαιστος⟩
\</def\>

\</entryFree\>

tagger

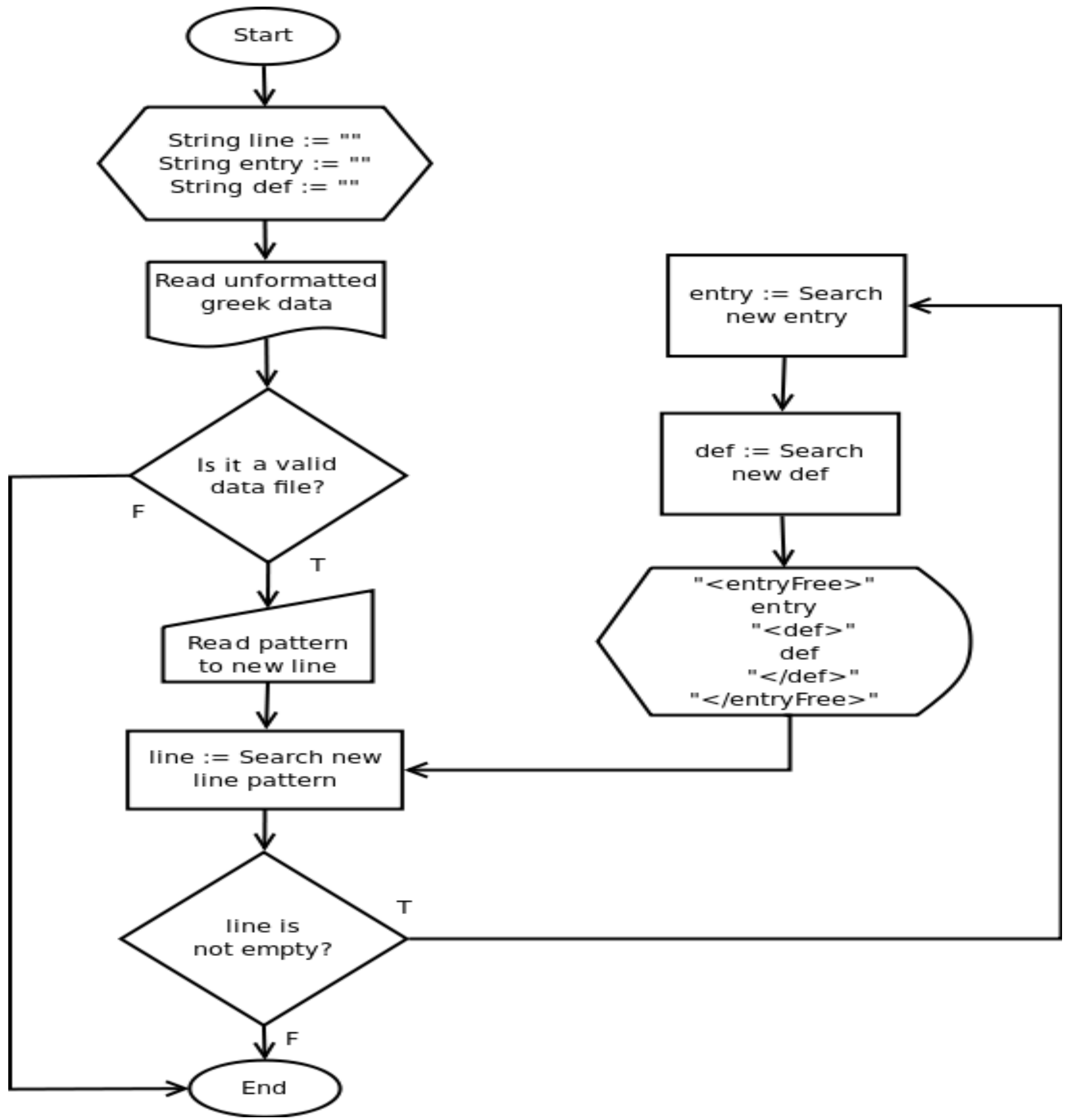**Greek-Portuguese Digital Dictionary Web Tagger**

Insert entry pattern:

Choose a data file:
Browse... No file selected.

Run

Greek-Portuguese Digital Dictionary Web Tagger
1.0-rc
(Rúbens A. Rodrigues e Anise Ferreira FCLAr/UNESP)

http://mercurio.fclar.unesp.br/tagger/

Rubens' algorithmn flowchart

Start

String line := ""
String entry := ""
String def := ""

Read unformatted
greek data

Is it a valid
data file?

F

T

Read pattern
to new line

line := Search new
line pattern

line is
not empty?

T

F

End

entry := Search
new entry

def := Search
new def

"<entryFree>"
entry
"<def>"
def
"</def>"
"</entryFree>"

tagger: next steps

From the easiest to the hardest

- \<etym> tag - marked with ⟩ **U+27E9**

- authors' abbr. in examples: hom. plat.

- numbered senses \<sense> each with one def. Ex.:

\<sense n="1"> \<def> xxxxxx\</def> \</sense>

- examples in block

- linking examples to sources (manually?)

why examples seem difficult?

(Senses/ definitions)

1   (pessoa) ter vindo; ter chegado; acabar de chegar a um lugar ou situação, ac. ou εἰς e ac., até alguém, dat. ou παρά e ac.
2   (coisa) ter vindo; chegar até alguém ou um local, dat.
3   (coisa) dizer respeito a; concernir a algo ou alguém, εἰς, ἐπί, πρός e ac.
4   com adv. εὖ ou καλῶς ἥκειν ir bem; sair-se bem

(Examples)

1 μάλα τηλόθεν ἥκω hom. venho de muito longe, ἰσθμὸν Κιμμερικὸν ἥξεις ésql. chegarás ao Istmo Cimérico, οὐ γὰρ ὀίω ἥκειν εἰς Ἰθάκην hom. pois não acredito que me encontro em Ítaca, ἥκειν πρὸςπόλιν sóf. chegar perto da cidade, ἥκουσιν αὐτῷ ἄγγελοι xen. vêm até ele os mensageiros, αὐτὰ ταῦτα ἥκω παρὰ σέ plat. é exatamente por isso que venho a ti, εἰς τοσοῦτον ἀμαθίας ἥκω ὥστε plat. chego a tal ponto de ignorância que, εἰςτοσήνδ᾽ ὕβριν ἥκειν sóf. chegar a tal ponto de desmedida, οὕτω πόρρω σοφίαςἥκειςplat. chegaste a este ponto de sabedoria

2 ἥκει ἦμαρ ésql. chegou o dia, ἥξει πόλεμος tuc. uma guerra sobrevirá, ποῖ λόγοι ἥκει; eur. aonde levará este argumento? ἐμοὶ ἀγγελίη ἥκει παρὰ βασιλέος her. chegou-me uma mensagem do rei, δώμασιν ἡμετέροις φάτις ἥκει ar. à nossa casa chegou um rumor

3 ὅσα ἐπὶ τὴν πρεσβείαν ἧκε dem. tudo quanto à embaixada concernia, εἰςἔμ᾽ ἥκει

solutions?

\<entryFree>χρεία, ας (ἡ) \<def>
   \<list>
\<item>1 emprego; uso; utilidade; serventia \</item>
\<item>2 serviço; ocupação; função \</item>
\<item>3 modo de relacionar-se com alguém, gen. ou πρός e ac.; convívio \</item>
\<item>4 objeto que se usa; apetrecho; equipamento \</item>
\<item>5 matéria de discussão; assunto tratado \</item>
…(cont. 6-9)
\</list>
\<cit type="example">
   \<quote type="list">
   \<list rend="numbered">
\<item>1 τὰ οὐδὲν εἰς χρείαν dem. as coisas que não têm nenhuma serventia, χρεία τῶν ὀνομάτων plut. emprego das palavras, χρείαν ἔχειν τοῖς ἀνθρώποις plat. ter utilidade para os homens \</item>
\<item>2 ἡ πολεμικὴ χρεία καὶ ἡ εἰρηνική artt. a ocupação em tempo de guerra e em tempo de paz, χρείαι πολιτικαί plut. serviços públicos, καταστήσομαι ἐπὶ τῆς χρείας n.t. nós os [os homens de confiança] empregaremos nessa função \</item>
\<item>3 συνεβίω Ἀμύντα ἰατροῦ καὶ φίλου χρείᾳ d.l. convivia com Amintas numa relação de médico e amigo, ἐν αὐτῶν τούτων χρείᾳ τινὶ τῇ πρὸς ἀλλήλους plat. em alguma relação dessas pessoas entre si \</item>
\<item>4 χρεῖαι ναυτικαί el. equipamento de um navio \</item>
\<item>5ʹ ῥῆμα πρὸς τὴν προκειμένην χρείαν ἀνάρμοστον plut. palavra que não tem relação com o assunto proposto \</item>
… (cont. 6-9)

χρεία, ας (ἡ)

- 1 emprego; uso; utilidade; serventia
- 2 serviço; ocupação; função
- 3 modo de relacionar-se com alguém, gen. ou πρός e ac.; convívio
- 4 objeto que se usa; apetrecho; equipamento
- 5 matéria de discussão; assunto tratado
- 6 máxima; sentença; dito espirituoso
- 7 proveito; vantagem no uso de algo
- 8 necessidade; carência; falta de algo ou alguém, gen.
- 9 privação; indigência, pobreza

  - 1 τὰ οὐδὲν εἰς χρείαν dem. as coisas que não têm nenhuma serventia, ἔχειν τοῖς ἀνθρώποις plat. ter utilidade para os homens
  - 2 ἡ πολεμικὴ χρεία καὶ ἡ εἰρηνικὴ artt. a ocupação em tempo de guerra públicos, καταστήσομαι ἐπὶ τῆς χρείας n.t. nós os [os homens de confiar
  - 3 συνεβίω Ἀμύντα ἰατροῦ καὶ φίλου χρείᾳ d.l. convivia com Amintas num τῇ πρὸς ἀλλήλους plat. em alguma relação dessas pessoas entre si
  - 4 χρεῖαι ναυτικαί el. equipamento de um navio
  - 5 ῥῆμα πρὸς τὴν προκειμένην χρείαν ἀνάρμοστον plut. palavra que não
  - 6 ἡ χρεία τοῦ Κλεομένους plut. a máxima de Cleômenes, Ζήνων δ' ὁ Κτ προσράψαι τῷ τρίβωνι ἀνεπιστρεπτοῦντα. d.l. Zenão de Cítio nas "Máxi manto, sem importar-se com isso
  - 7 ἐξήκοντα καὶ τριακόσια χρειῶν γένη παρέχον αὐτοῖς τὸ δένδρον plut. a de usos
  - 8 ἔτ' ἐμοῦ χρείαν ἕξει ésql. ainda terá necessidade de mim, χρείᾳ φαρμ remédios, ἰατρῶν ἐν χρείαις ἐσόμεθα plat. precisaremos de médicos, ἐγ ser batizado por ti, διὰ χρείαν xen., διὰ τὴν χρείαν plat., ὑπὸ χρείας plut
  - 9 χρεῖαι τολμᾶν βιάζονται antif. as privações forçam a audácia.

other steps?

- to link examples to sources annotating the **Citation URI?**

- **POS** of headwords?
  <entryFree>ἠθικῶς**<def>** **<pos>adv.</pos>**
  1 conforme a ética....**</def></entryFree>**

  Which one would be priority?

Question

- Are the current tags w/ a teiHeader **enough** to put the dictionary online?

alignments & treebanking with Portuguese

- different approaches

- alignment particularities and alignment conventions

- main difficulties found

Different approaches

- align w/ personal translation in Portuguese

- align w/ two different given translations in Portuguese

- **align w/ a given translation > tree banking > own translation**

- …

@Sunoikisis

- **align Portuguese & English translations**

- **align Greek & Port, without familiarity with Greek**

- **align Greek & Port**

- **treebanking annotations**

editions

- Paul's Epistle - Corinthians 1.13

  - Greek - http://data.perseus.org/citations/urn:cts:greekLit:tlg0031.tlg007.perseus-grc1:13

  - English(1) Perseus' Rainbow Missions 1901

  - English(2) K.James. Holy Bible. 1611

  - Portuguese (1): Jerusalem's Bible. Paulinas Edition, 1989.

  - Portuguese (2): Ellen G. White Writings

English & Portuguese

- Verbs in Port: person inflected in majority of tenses; in English, not inflected

| If Ainda | I | speak fale | in as | the | tongues línguas | Ainda que fale |
| Though Ainda que | I eu | speak falasse | Though Ainda que | I eu | speak falasse | Ainda que falasse |

subjunctive in Port and Gr.

- => Greek Ἐὰν ταῖς γλώσσαις τῶν ἀνθρώπων λαλῶ

English & Portuguese

- Prepositions + articles

tongues	of	men	and	of	angels	aligned
línguas	dos	homens	e	dos	anjos	

dos	homens	e	dos	anjos	not aligned
	men			angels	

- Vocabulary choices

não	tivesse	a	caridade		tiver	amor	ἀγάπην
not	have		charity		have	love	

eu	entregue	meu	próprio	corpo	para	ser	queimado
I	give	my		body	to	be	burned

Greek & Portuguese

Unexpected finding

κἂν ainda que	παραδῶ entregasse	τὸ o	σῶμά corpo	μου meu	,	ἵνα às chamas	καυχήσωμαι às chamas

eu I	entregue give	meu my	próprio	corpo body	para to	ser be	queimado burned

καυχήσωμαι confused with καυθήσωμαι.
καυχάομαι, to boast, with καίω, to burn,

give entregue	over	my	body corpo	to	hardship	that	I	may	boast

si tradidero corpus meum ut ardeam

Greek & Portuguese

aligning multiple words

ainda	que	tivesse
κἂν	κἂν	ἔχω

inclusion of a reflexive pronoun "SE"
χαίρει = alegra-se
pronominal verb in Port.

οὐ	χαίρει	ἐπὶ	τῇ	ἀδικίᾳ
Não	se alegra	com	a	injustiça

ἐκ	μέρους	προφητεύομεν
limitada é	limitada é	a nossa profecia

transformations:
ἐκ μέρους> is limited
verbo to noun:
we prophesy > our prophecy

- εἰς τὴν - > à (prep. + article)
- Ἡρακλεῖ => para Hércules (cases > prep + noun)
- ὁ Περικλέους, o filho de Péricles
- οἱ νῦν > follows transl.
- ὁ δὲ οὐκ ἔφη follows transl. "E ele disse que não".
- τυγχάνω / λανθάνω + participle> as adverbial phrase

- ἄν w/ verb
- ὅταν, ἐὰν, etc >conjunct. phrase. w/ "que"
- adverbial participles > conjunctions w/ finite verbs
- adjective participles> w/ relative pronoun
- no article in Greek > w/ indefinite article in Portuguese

some treekbanking difficulties

- Related to Port.: translation of to be, εἰμι as = there to be = haver - always in 3rd p. s. there is X, and X is the Subject.

- δεῖ = é preciso it is necessary + Inf. where the inf. is the subject. Example from the fable : ἔδει με...μακελλάριον ὄντα αὐλητήν μή μιμεῖσθαι - The transl. in Port. changed to "I shouldn't imitate a flute player, being a butcher" changing the first person into subject; being an object in Greek.

some treekbanking difficulties

- Relative clauses: ὃς τάσδε Θήβας ἔσχον , ἔνθ᾽ ὁ γηγενὴς σπαρτῶν στάχυς ἔβλαστεν , ὧν γένους Ἄρης ἔσωσ᾽ ἀριθμὸν ὀλίγον , οἳ Κάδμου πόλιν τεκνοῦσι παίδων παισίν .
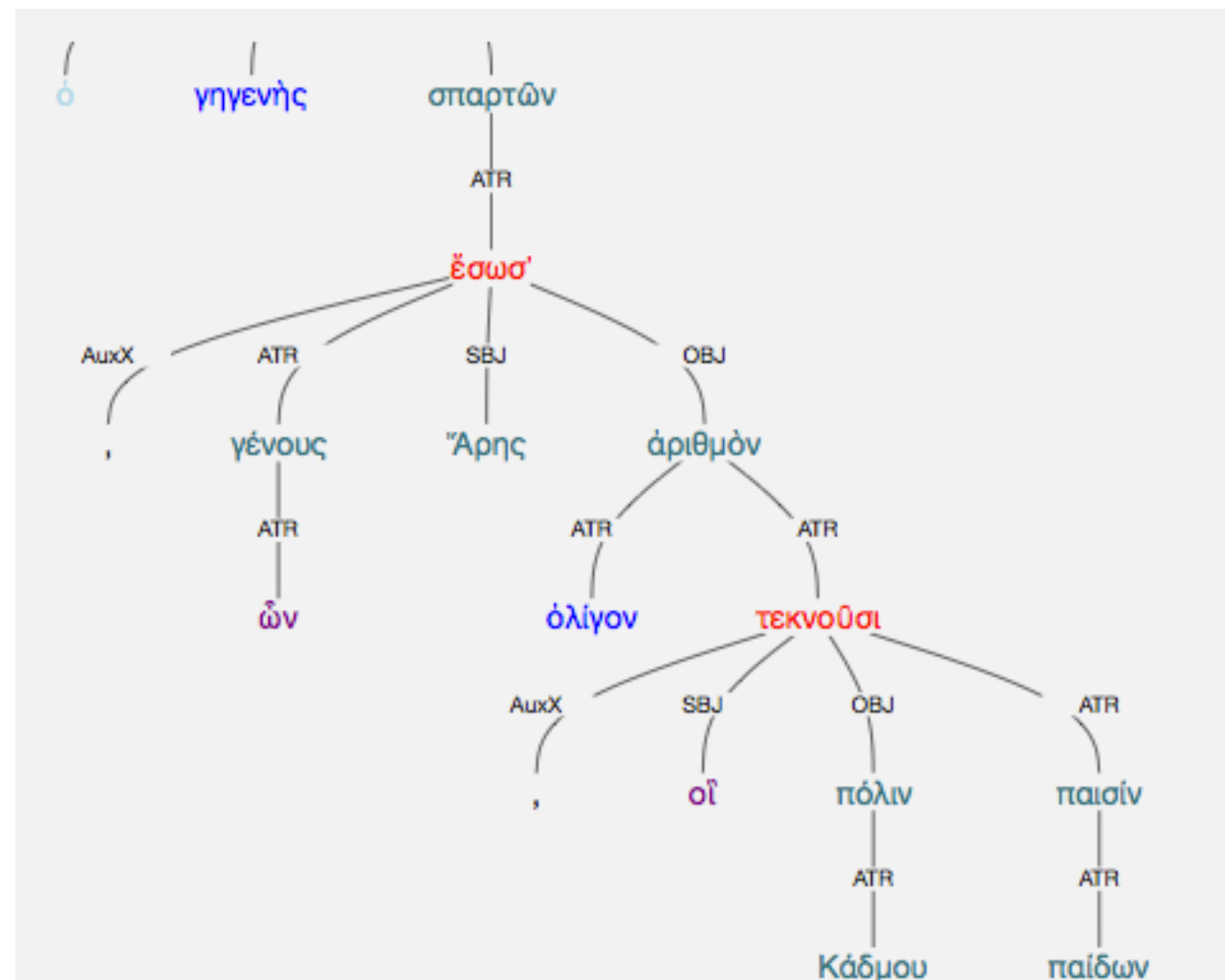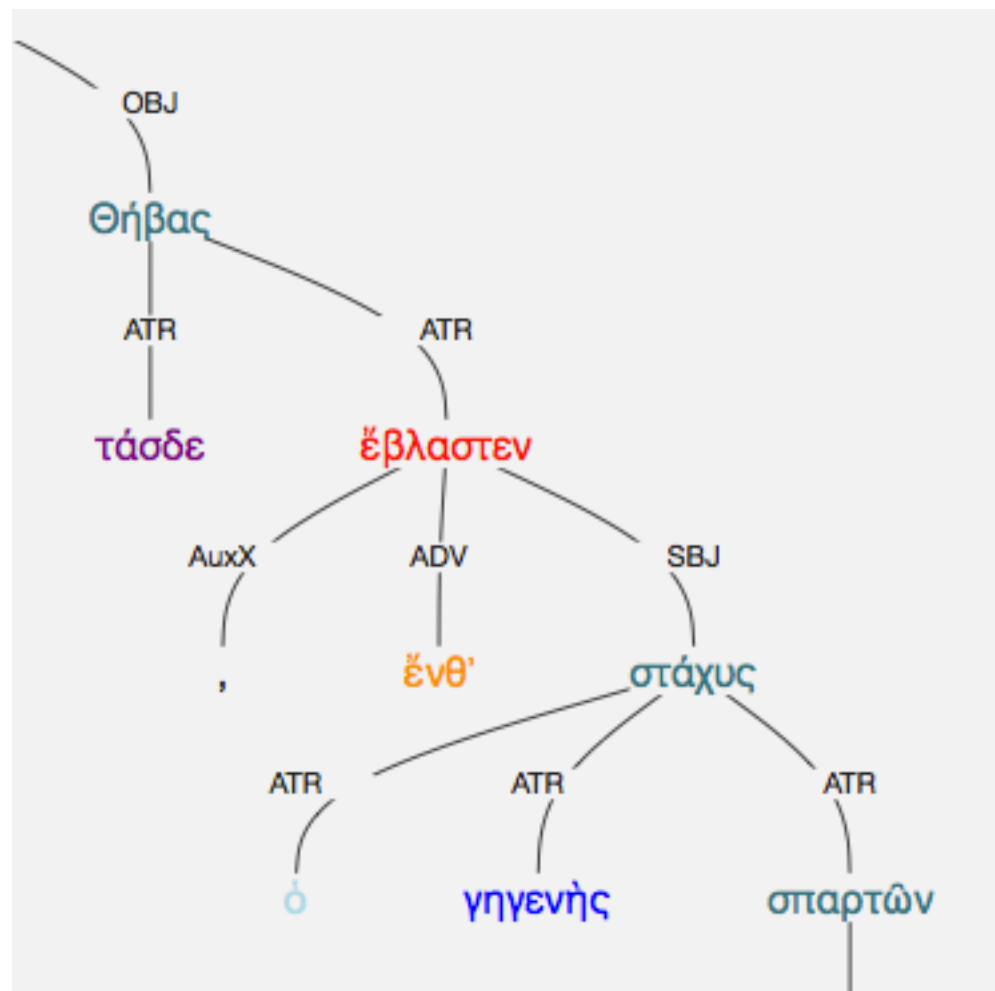
some treekbanking difficulties

- beginners: same subject to the finite verb and adverbial sentences in participle. For example: