

Greek particles and treebank annotation

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Overview

- Why Greek particles?
- Greek particles reviewed: traditional views, particles & corpus linguistics, and “modern” views
- AGDT tags used to annotate particles
- Querying AGDT@Tündra
- Using AGDT available on Tündra; using PDL-Scaife Viewer and translations on Ugarit to check on some particles
- Particles, modalities and annotations



Why particles?

- How do first-year students perceive particles when working with translation alignment?
- Long discussion history of particle categorization
- Particle impact on frequency, lexical density, style, etc. corpus linguistics related studies



Particles and beginners of ancient Greek

In translation-alignment tasks - what does confuse freshmen?

- inflection? Automatic morphological analyzers are available : Perseus/Alpheios/Eulexis/Diogenes, etc.
- finding appropriate meaning?
- "why can't I align these words?" "why can't I find the Portuguese word for this Greek word?"



Example (Hom. Od. 6 21-23)

 ALPHEIOS
Od. 6.21

and stood above her head, and spoke to her, taking the form of the daughter of Dymas, famed for his ships, a girl who was of like age with Nausicaa, and was dear to her heart. Likening herself to her, the flashing-eyed Athena spoke and said: (Murray)

στῆ parou	δ' άρ' da *	ύπερ acima	κεφαλῆς cabeça	,	καί e	μν dirigi	πρὸς dirigi	μῦθον discurso	ἔειπεν disse	,	εἰδομένη assemelhada
κούρη filha	ναυσικλειτοῖο famoso pelas naus	Δύμαντος Dimas	,	ἢ ela	οἱ de	όμηλική mesma idade	μὲν en	ἔην ,	κεχάριστο agradável	δὲ e	
θυμῷ ânimo	. τῇ a ela	μν Semelhante	ἔεισαμένη Semelhante	προσέφη disse	γλαυκῶπις olhos de coruja	Ἀθήνη Atena	.	Ναυσικάα “Nausícaa	,		

* Por. **da** = de + a <=> En. of the (fem.)

5



No exact match / match - in transl-alignments

The screenshot illustrates the challenge of aligning words between a source text and its translation, particularly when the source text is in a different language (Greek) and the target text is in English. The ALPHEIOS interface features a toolbar at the top with various tools like Mode, Translation, Inflection Tables, Grammar, User Tools, and Options. Below the toolbar, there are two main sections: 'Beta Version' and 'Reading Mode'. The 'Beta Version' section contains a tooltip for double-clicking on Greek words to look them up. The text itself is presented in a clear, sans-serif font.

Left Window (Greek Text):

Προμηθεὺς δὲ ἐξ ὕδατος καὶ γῆς
ἔδωκεν αὐτοῖς πῦρ, λάθρᾳ Διός
ώς δὲ ἦσθετο Ζεύς, ἐπέταξεν Ἡρακλεῖ
προμηθεὺς δὲ ἐξ ὕδατος καὶ γῆς ἀνθρώπους πλάσας
ἔδωκεν αὐτοῖς καὶ πῦρ, λάθρᾳ Διός ἐν νάρθηκι κρύψας.
ώς δὲ ἦσθετο Ζεύς, ἐπέταξεν Ἡφαιστῷ τῷ Καυκάσῳ ὅρει
τὸ σῶμα αὐτοῦ προστηλῶσαι: τοῦτο δὲ Σκυθικὸν ὄρος

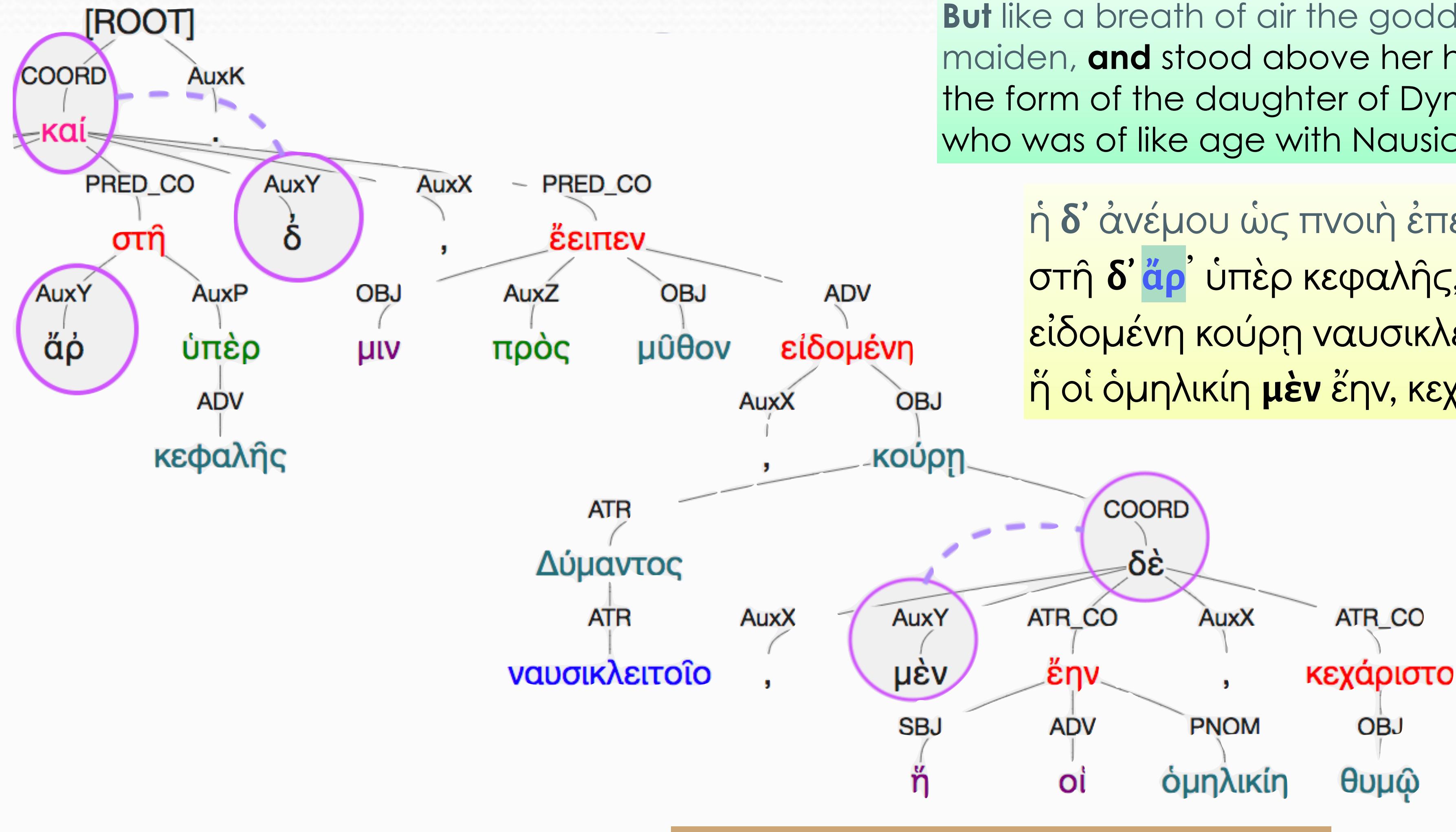
Right Window (English Translation):

Prometheus moulded men out of water and earth and gave them also
fire, which, unknown to Zeus, he had hidden in a stalk of fennel. But
when Zeus learned of it, he ordered Hephaestus to nail his body to
Mount Caucasus, which is a Scythian mountain. On it Prometheus was
nailed and kept bound for many years. Every day an eagle swooped on
him and devoured the lobes of his liver, which grew by night. That was
the penalty that Prometheus paid for the theft of fire until Hercules
afterwards released him, as we shall show in dealing with Hercules.

Apollodorus. Apollodorus, The Library, with an English Translation by Sir James



Example in treebank



But like a breath of air the goddess sped to the couch of the maiden, **and** stood above her head, **and** spoke to her, taking the form of the daughter of Dymas, famed for his ships, a girl who was of like age with Nausicaa, and was dear to her heart.

ἡ δ' ἀνέμου ὡς πνοιὴ ἐπέσσυτο δέμνια κούρης,
στή δ' ἄρ' ὑπὲρ κεφαλῆς, καί μιν πρὸς μῦθον ἔειπεν,
εἰδομένη κούρη ναυσικλειτοῦ Δύμαντος,
ἥ οἱ ὁμηλικίη μὲν ἦν, κεχάριστο δὲ θυμῷ.



Greek particles

- Large group of words with different functions and a long discussion history of particle categorization
- Dionysius Thrax (2nd BC)- sundesmoi - σύνδεσμοι (conjunctions)
- Denniston (the most comprehensive work, 1934/54)
 - Adverbs (sentence adv or not) large range of force, elusive meaning: rhetorical/emotional value
=> difficult translation=> pause? alterations in pitch?
 - conjunctional
- Smyth §2774 - "As regards their meaning, particles may be arranged in classes, e.g adversative, affirmative, asseverative, concessive, confirmative, conjunctive, inferential, intensive, interrogative, limitative, negative, etc". These classes cannot always be sharply distinguished>>
- Influence of discursive pragmatics and corpus linguistics methodologies (Rijksbaron and others)
- Non-content words with high frequency.



Particles, frequency, lexical density, written vs. spoken etc

- Lexical items vs. grammatical/function items
- Lexical density in modern languages => Halliday (1985) - $100 \times \text{lexical items (content words)} / \text{total of items}$ -
- Particles are grammatical words
(that would explain the particles being in STOP lists - excluded words in calculations for different purposes - as in TLG)
- Halliday 1985- Lexical density is recognized as a significant factor of complexity of written language.
Spoken language -> grammatical complexity. Higher frequency of fewer grammatical words. More diversity in content words.
- Stubbs, M. (1996) -
 - Expectations:
 - Written texts-> fewer repetitions of content words;
 - spoken: supported by physical context, more predictable
 - His findings in English language (large corpus) “the clearest difference is not between written and spoken, but within spoken genres”



Denniston and Duhoux about particles: written/ "oral" texts

Denniston (1954) on Greek particles: "words expressing thought in isolation or in relation to other": doubt, certainty, emphasis, emotion, sarcasm, irony".

- Denniston's belief: higher frequency in scenic texts; even higher in comedy. Reflect "oral quality".

Duhoux (1997) no significant statistical difference in quantities of particles used between dialogical and non-dialogical texts.

Duhoux's findings

- difference between *staged* and *non-staged* dialog passages, and comedy & tragedy (Aristophanes' and Sophocles') have LESS particles than prose texts (Plato's dialogs).
- Non-staged passages have more particles with coordination function suggesting staged texts have more asyndeta



New approaches and different ways of categories

- Coulter (2009) reviewing /Duhoux suggests Kroon's (1995/1998) levels of discourse: representational, presentational and interactional (based on Halliday's metafunctions of Systemic Functional Grammar).
 - **Representational** - concerning the content and the facts reported (ideational metafunction: clause = a transitivity, with process, participants and circumstances) - **non-dialogical particles**- e.g. καί, τε, ούτε
 - **Presentational** - concerning the arrangements of the text (textual metafunction: clause = message with theme and rheme)- dialogical: οὖν, ἄρα and non-dialogical: μέν, δέ, οὐδέ
 - **Interactional** - concerning the actors or subjects in dialogs (interpersonal metafunction - clause = exchange with mood) - **dialogical particles**: e.g. δῆτα
- Modality categories (Palmer) 2 systems: **Propositional** a) **epistemic** - degrees of certainty: speculative, deductive, assumptive); b) **evidential** -report (2nd, 3rd, gen.) and sensory types (visual, non-visual and auditory). // **Event** a) **deontic** (degrees of obligation/necessity: permissive, obligative, commissive; b) **dynamic**: abilitive and volitive.
Other types: presupposed; negative & interrogative; wishes & fears



Duhoux

- A particle most frequent in staged/theatrical texts:
- δῆτα (different uses)
- Coulter:
interactional

Denniston

δῆτα:

- interrogative
- emphatic
- connective
- in combination
- uncertain cases

Van Rooy

δῆτα in Plato's
Apologia Socratis -
25d

- Evidentiality ->
Inferential (acc. to
Denniston, p.
269/272)
unexpected
inference/surprise



Smyth (interactional, epistemic: specul. assev. neg., emotional (wishes/fears)?

- 2851 δῆτα assuredly, really, in truth, is rare outside of Attic. It occurs:

- (a) In answers, often when a word is repeated with assent; as

- γιγνώσκεθ' ὅμεις ἦτις ἔσθ' ἥδ' ἡ γυνή; γιγνώσκομεν δῆτα.

do you know who this woman is? Yes indeed we do [Ar. Thesm. 606]

- οὐ δῆτα surely not, in strong or indignant denial.

- (b) In questions, to mark an inference or consequence, as πῶς δῆτα; how in truth? τί δῆτα; what then?

- καὶ δῆτα ἐτόλμας; and didst thou really dare? [S. Ant. 449.]

- (c) In wishes and deprecations (stronger than δή), as

- ἀπόλοιο δῆτα! [Ar. Nu.6]

- μὴ δῆτα, θῦμέ, μή σύ γ' ἐργάσῃ τάδε no indeed, my heart, do not this deed [E. Med. 1056.]



What can AGDT show about the particles?

- Firth's famous saying: " You shall know a word by the company it keeps !
In Portuguese we say: "Tell me who you go with and I'll tell you who you are"
[" ... τοιοῦτος εἶναί τις ὑπολαμβάνεται ὅποιοις ἂν ἥδηται τοῖς ἔταίροις." " a person is considered similar to the people whose companionship he enjoys" [Aesop. Ch. n.263/Per. 237/Hsr.200]
- Querying on Tundra Beta
 - Treebank - AGDT
 - Statistics
 - KWIC
- Scaife and Ugarit
- What could we do about particle annotations?



Tündra website (beta - public)

- Tündra means - Tübingen Annotated Data Retrieval Analysis
- URL - <https://weblicht.sfs.uni-tuebingen.de/tundra-beta/#treebanks>

- select Perseus -



- Query syntax - on Help and Celano's [querying document](#)
- Searching for a word [word="δῆτα"]



```
#query: [word="δῆτα"]
```

The query field

Run Stop History Query help Close results X

Query match
matches
ποῦ δῆτα query νῦν ζῶν ἢ θανὼν ἀγγέλλεται;
Doc: um:cts:greekLit:tlg0011.tlg001.perseus-grc2
SubDoc: 73
the source

Dependency
Table view
KWIC
Statistics

ποῦ	query	νῦν	ζῶν	ἢ	θανὼν	ἀγγέλλεται	;
ποῦ	δῆτα	νῦν	ζάω	ἢ	θνήσκω	ἀγγέλλω	;
adverb	adverb	adverb	verb	conjunction	verb	verb	punctuation
-	-	-	-	-	-	third	-

Deianeira
Where, *then*, is he reported to be now—alive, or dead?



The Perseus Catalog

URN



urn:cts:greekLit:tlg0011.tlg

Search

You searched for:

URN > urn:cts:greekLit:tlg0011.tlg001.perseus-grc

[Start Over](#)

1 to 1 of 1

1. Trachiniae

URN: urn:cts:greekLit:tlg0011.tlg001.perseus-grc1

Author: Sophocles

Editor: Storr, Francis

Translator: Storr, Francis

Year Published: 1913

Language: Greek, Ancient (to 1453)

Browse

Editions

Editions

Series

Subjects

```
#query: [word="δῆτα"]
```

Run Stop History Query help Close results ✕

Dependency

Table view

KWIC

Statistics

Statistics

New column...

query: edge



Search



query	#	query: token	query: edge	Occurrences	Occurrences (%)
voice	1	δῆτα	AuxZ	23	62.162
gender	2	δῆτα	AuxY	14	37.838

Showing 1 to 2 of 2 rows

edge

pos

person

cite

categories

text

tense

order

AGDT 2 Guidelines

3.17 AuxY

The AuxY label is used to mark technical nodes (such as correlative conjunctions attached to the last one, which is taken to be the coordinating one: see [tree1](#) and [tree2](#)) or for sentence adverbs (i.e., non-conjunction particles in SG ([1094](#)), but only those whose scope is the whole sentence).

3.18 AuxZ

The AuxZ label is reserved for logical operators that are adverbs, such as those meaning "not", "even", and "also".

```
#query: [ lemma="δῆτα" ]
```

New column... 

query	voice	gender	mood	degree	lemma	token	number	edge	pos	person	categories	text	tense	order

query: edge 

Search   

#	query: token 	query: edge 	Occurrences	Occurrences (%)
1	δῆτ	AuxZ	39	42.391
2	δῆτα	AuxZ	23	25.000
3	δῆτα	AuxY	14	15.217
4	δῆτ	AuxY	8	8.696
5	δῆθ	AuxZ	5	5.435
6	δῆθ	AuxY	2	2.174
7	δῆτά	AuxY	1	1.087

Showing 1 to 7 of 7 rows

92 matches

[Dependency](#)[Table view](#)[KWIC](#)[Statistics](#)

Search



#		left	match	right	Sentence	Index
1	Γναθαίνιον δέ εἴπε ω τάλαν , μὴ		δῆτ	, ἄνερ · –	3531	8
2		ποῦ	δῆτα	νῦν ζῶν ἢ θανὼν ἀγγέλλεται ;	4370	2
3		ἄρ οἰσθα	δῆτ	, ω τέκνον , ώς ἔλειπέ μοι μαντεῖα πιστὰ τῆσδε τῆς χώρας πέρι ;	4372	3
4	πότερον ἐκείνους		δῆτα	δεῦρο αύθις πάλιν καλῶμεν , ἢ ' μοὶ ταῦσδέ τέξειπεν θέλεις ;	4496	3
5		τίς ή γυνὴ	δῆτ	ἐστὶν ἡν ἡκεις ἄγων ;	4532	4
6		τί	δῆτα	; --	4543	2
7		τί	δῆτ	ἄν ἄλλο γέ ἐννέποις ;	4657	2
8		οὐ	δῆτα	τοῖς γε πρόσθεν ἡμαρτημένοις . –	4899	2
9		οὐ	δῆτ	ἔγωγέ , ἀλλ ὅν ἔχω παιῶνιον καὶ μοῦνον ιατῆρα τῶν ἔμῶν κακῶν . ----	4958	2
10	τὴν Εύρυτείαν οἰσθα		δῆτα	παρθένον ;	4968	4
11		ἀλλ ἐκδιδαχθῶ	δῆτα	δυσσεβεῖν , πάτερ ;	4987	3
12		τί	δῆτ	ἄν ἄλλο τοῦτό ἐπεντέλλοις ἔτι ;	5091	2

Greek Texts & Translations

[search](#) [help](#) [report a problem](#)
[Hom. Il. 2.345](#) [Citation Lookup](#)

Bibliographic criteria: **none**
 Searching Entire Database for δῆτα
 Your search found 386 occurrences

[Click here for a Concordance Report](#)

This page contains the first 25 occurrences. Please follow the link(s) at the bottom of the page to see the rest of the occurrences your search found.

Δὲν τοιαύτην ποιεῖσθαι τὴν ἀπόδειξιν τοῦ πράγματος: αὐτὸς δῆτα. τί οὖν: ἀπέωνον οἱ καινόμενοι: μὰ τὸν Ἱοακλέα. ἐπεὶ θανάτῳ προστραπέσθαι τούσδε' ἐπέστελλον δόμους. καὶ τὰς προπομποὺς δῆτα τάσδε λοιδορεῖς: οὐ γὰρ δόμοισι τοῖσδε πρόσσφορον μολεῖ οἰδ' Ὁρέστην πιολλά σ' ἐκπανλουσέννην. καὶ ποδὲ τὸ δῆτα τυνχνῶν κατευνάτων: ὅδε εἴμι· μὴ μάτει' ἐμοῦ μᾶλλον δ' αὐτὸς ἡλθεῖ ποθεν σωτήρ. οὐδὲν εἶπα: ποτὶ δῆτα καστελλῆσαι μετακοιτισθὲν μένος ἄπτεις: πούκακα λένεις. <ἰώ ίώ> δῆτα ἥννυ' ἀναθῶν ἑτάρων μοι ὑπομιλήσκεις <κλινεῖς> ἄλιστα στυνναίας δύσβατος. Ιωάδη δὴ κατ' ἔστι. Ιωάδη δῆτα. νοῦν νοῦν. νοῦν δύσβατα. [ωά ίώ. Περσὶς ἀλλά] οὐδὲ μεντίσιον τοῦδε στις διωρίματος. τί δῆτα μέλλεις μὴ οὐ νενωνίσκειν τὸ πάντα: φθάνοντας μὲν οὐδὲν ἔστιν αὐτῶν τῆσδε' ἀποστροφὴ τύχης: οὐ δῆτα. πλὴν ἔνων' ὃν ἐκ δευτερῶν λυθεῖς. τίς οὖν ὁ διαίμων κοινὸς ἦν δικαιοῖν διάνοιαν. αὐτὸς δ' ἀναλοιδή δῆτα δύσποτουν νένος. τοιαύτα καθίσειν καὶ διακρίνεσθαι πάρα· πόλιν χειστὸν διμοσπόροισιν. διδύσπορος δῆτα καὶ πανώλευθος. διατουμαῖς οὐ φύλοις. ξοῖδι μαλινούμενα. νείκεος ἐμετάσθι. Ζεὺς δὲ νεννήτωα ἴδαι· ἴδαιτο δῆτα πρεμενοῦς ἀπ' ὅμηρος· θέλοις' ἀντὶ δέδοι σοὶ πέλας εἰδῶς ἀντὶ αἰσαντὸν τίνεις συγγνοῖν Βροτοῖς. συγγνοῖτο δῆτα καὶ παρασταῖν πρόσφων. τίν' οὖν κικλήσκω τῶνδε διαιώνων ἔτι: φασίν. ποέποντα Βουθρόων ταύων δέμιας. τί δῆτα ποδὲ ταῦθ' ἀλογος ἵσχυσθεὶς Διός: τὸν πάνθ' διάωντα νῦν δὲ κατὰ θάλατταν ταῦς πολίτας ταῦς σεαυτοῦ: οὐ δῆτα. οὐδὲν ἐναντιόν ποτε οὐδὲ συνκρατέσκαψας τὰ τε εἶναι καὶ Βουλόμενοι δυνήσονται. τούτους δὲ ἀπόλλυτε. μὴ δῆτα. ἔπειτα καὶ ταῦθ' ὑμῶν δέουμεν. εὐ ποιῶν ὑμᾶς ὑψ' δὲ τοὺς νῦν ἔχοντας τὸν πόλιν δύτῃ Λακεδαιμονίων. μὴ δῆτα. ὡς Αθηναῖοι. υπδεῖς διαδεῖ ταῦτα πείσονται· τὰ νῦν εἰκεῖνος δὲ γνόματι τὸν ἔμὸν κίνδυναν ἐκποίασθαι: οὐ δῆτα· τοῦ μὲν νὰρ οὐκ ἔν τον καθίματα· ἔμοὶ δὲ δὲν· αἰτίας καταστήσω. ἔτερον δέ τινα εἰς αἰτίαν ἀνάγω· οὐ δῆτα ἔνωνε. πλὴν νε τῆς τύχης. πίπειοι οἴναι καὶ ἄλλοις πολλαὶ εἴς οἱ δόδικαντος ἐλπίδαις κέκαι εἴπει. διλλά με πικοτὶ δῆτα καὶ διατοιχεῖ ἀνάγκη μίνυνειν κακοῖς ἐντὸνται. τοῦτον μετὰ Σιτάλκους ἔπινον τὸν κορδόν. καὶ δῆτα φιλαθήναιος ἦν ὑπεροφωτώς. ὑμῶν τὸν ἔραστης δέδοι διενά τάσσα πείσματι. ξειδοίμην. ἦν ἀκαύσω. τῶν πολεμίων νῦν εἰσάγεις θυμαλλίδως. ἔπειτα φάνεις δῆτα διὰ θυμαλλίδα: αὔτη νὰρ ἐμπορίσειν ἀντὶ τὸ νεώριον καὶ δὴ τις δύοις ἔρχεται. νῦν Δί' δύοις δῆτα. τίς ποτὲ ἔστιν: οὐ δήπου ταῦς: οὐτος αὐτὸς ἔτερος δύοις δύοτοισι. νῦν Δί' ἔτερος δῆτα καίτοις ἔειδον τούτων ἔγων. τίς ποτὲ ἔσθι ὁ μαυρόμαντις τοῖσι πάπποις τοῖς ἐμοῖς: ἀλλά ἀπ' ἔχθρῶν δῆτα πολλὰ μανθάνουσιν οἱ σωφοί. ή νῦν εὐλάβεια σώζει πάντα.

1. Aeschin. 1.89
2. Aesch. Eum. 205
3. Aesch. Cho. 215
4. Aesch. Cho. 1075
5. Aesch. Pers. 988
6. Aesch. Pers. 1070
7. Aesch. PV 625
8. Aesch. PV 770
9. Aesch. Sept. 810
10. Aesch. Sept. 933
11. Aesch. Supp. 207
12. Aesch. Supp. 215
13. Aesch. Supp. 300
14. Andoc. 1.101
15. Andoc. 1.149
16. Andoc. 3.32
17. Antiph. 5.63
18. Antiph. 6.15
19. Ap. Rhod. 2.230
20. Ar. Ach. 140
21. Ar. Ach. 320
22. Ar. Ach. 915
23. Ar. Av. 267
24. Ar. Av. 275
25. Ar. Av. 375

Results Bibliography

- Aeschines, *Speeches* (XML Header) [genre: prose; rhetoric] [\[word count\]](#) [Aeschin.].
 Aeschylus, *Eumenides* (XML Header) [genre: poetry; drama; tragedy] [\[word count\]](#) [Aesch. Eum.].
 Aeschylus, *Liberation Bearers* (XML Header) [genre: poetry; drama; tragedy] [\[word count\]](#) [Aesch. Cho.].
 Aeschylus, *Persians* (XML Header) [genre: poetry; drama; tragedy] [\[word count\]](#) [Aesch. Pers.].
 Aeschylus, *Prometheus Bound* (XML Header) [genre: poetry; drama; tragedy; suspect] [\[word count\]](#) [Aesch. PV].
 Aeschylus, *Seven Against Thebes* (XML Header) [genre: poetry; drama; tragedy] [\[word count\]](#) [Aesch. Sept.].
 Aeschylus, *Suppliant Women* (XML Header) [genre: poetry; drama; tragedy] [\[word count\]](#) [Aesch. Supp.].
 Andocides, *Speeches* (XML Header) [genre: prose; rhetoric] [\[word count\]](#) [Andoc.].
 Antiphon, *Speeches* (XML Header) [genre: prose; rhetoric] [\[word count\]](#) [Antiph.].
 Apollonius Rhodius, *Argonautica* (XML Header) [genre: poetry; hexameter] [\[word count\]](#) [Ap. Rhod.].
 Aristophanes, *Acharnians* (XML Header) [genre: poetry; drama; comedy] [\[word count\]](#) [Ar. Ach.].
 Aristophanes, *Birds* (XML Header) [genre: poetry; drama; comedy] [\[word count\]](#) [Ar. Av.].

More search results (batches of 100)

1 2 3 4

[Retrieve all occurrences](#)

[Click here for a Concordance Report](#)



Text Search

SEARCH GUIDE

- + signifies AND operation
- | signifies OR operation
- negates a single token
- " wraps a number of tokens to signify a phrase for searching

- * at the end of a term signifies a prefix query
- (and) signify precedence
- ~num after a word signifies edit distance (fuzziness)
- ~num after a phrase signifies slop amount

 Form Lemma (Greek only)

Text Groups

Plato	117
Sophocles	50
Aristophanes	43
Aeschylus	25
Suda	23
Anna Comnena	22
Xenophon	21
Gelasius	17
Libanius	16

Showing 1-10 of 455

page 1 of 46

Aeschylus, Persians, Line 988 (988)

ἰὼ ἱὼ δῆτα

Aristophanes, Frogs, Line 420 (420)

βιούλεσθε δῆτα κοινῇ

Aristophanes, Ecclesiazusae, Line 928 (928)

οὐ δῆτα.

Sophocles, Philoctetes, Line 757 (757)

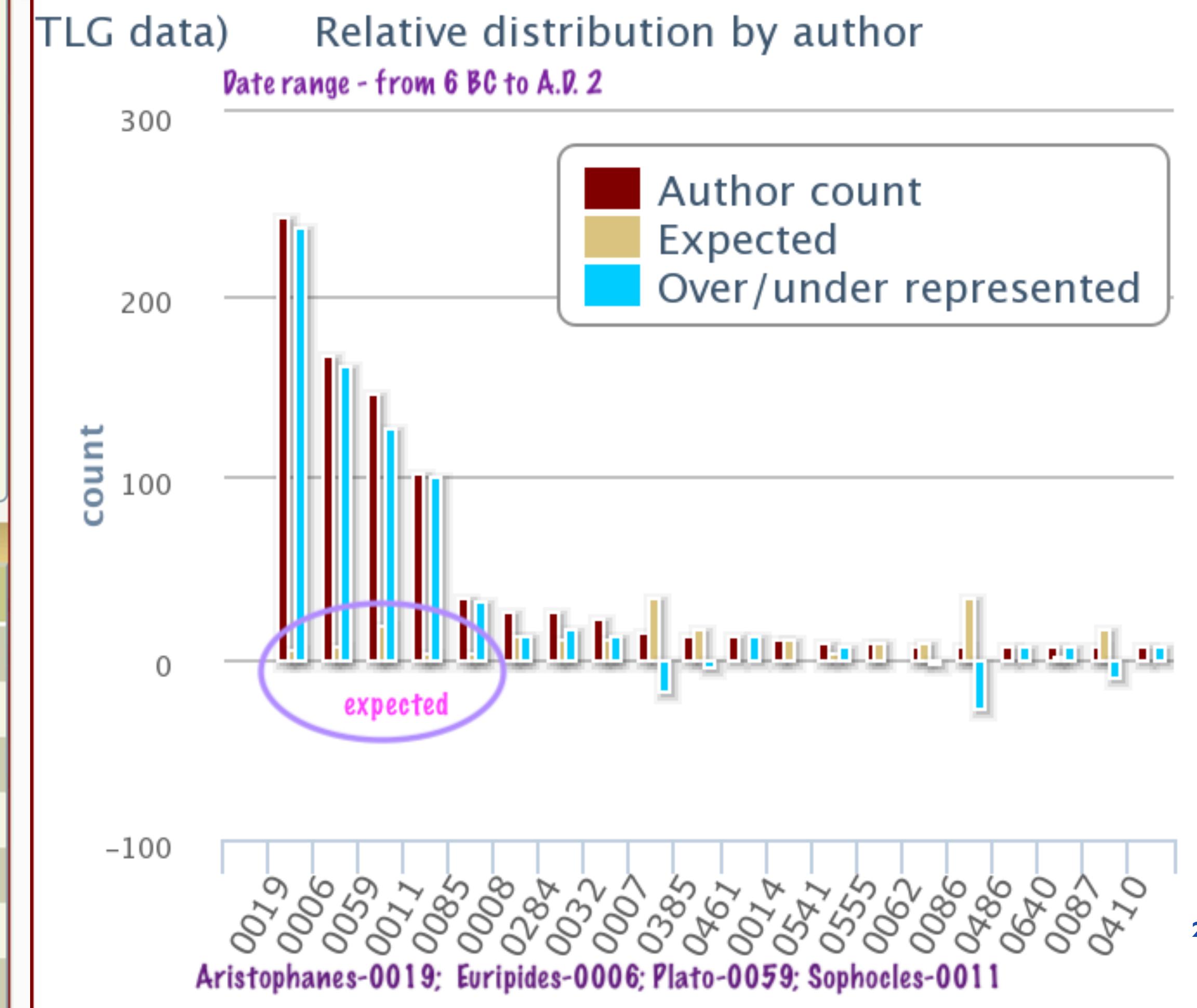
τί δῆτα δράσω;

Aristophanes, Clouds, Line 148 (148)

πῶς δῆτα διεμέτρησε;

SUMMARY	
• This lemma is attested in the corpus	995 times
• The highest use is found in authors:	ARISTOPHANES, EURIPIDES, PLATO (less)
• The highest use is found in works:	ARISTOPHANES, <i>Nubes</i> {0019.021}, ARISTOPHANES, <i>Ranae</i> {0019.027}, PLATO, <i>Alcibiades i</i> {0059.013} (less)
• Its highest attestation by century is:	5 B.C. (727), A.D.2 (134), 4 B.C. (47) (less)
HIGHEST USE BY AUTHOR	
Author	count
1. ARISTOPHANES {0019}	242
2. EURIPIDES {0006}	167
3. PLATO {0059}	146
4. SOPHOCLES {0011}	102
5. AESCHYLUS {0085}	33
6. ATHENAEUS {0008}	26
7. Aelius ARISTIDES {0284}	26
8. XENOPHON {0032}	22

TLG on lemma δῆτα -from 6 BC to A.D. 2



From 6 BC to A.D. 2

TLG corpus has:

4,489 documents
31,107,762 words
141,061 lemmata and
820,436 unique wordforms



What can Tündra still give me?

- [word=/.*/] > [lemma="δῆτα" & edge="AuxY"]
- will give me **any word** to which the lemma annotated as AuxY is attached to.
- They are all verbs 25/92
(5 elliptical/recovered)

Statistics

query: edge

Search

Occurrences

Occurrences (%)

#	query: token	query: edge	Occurrences	Occurrences (%)
1	-	PRED	3	12.000
2	-	OBJ	1	4.000
3	-	PRED_CO	1	4.000
4	δεῖ	PRED	1	4.000
5	κινεῖς	PRED	1	4.000
6	κομιζέτω	PRED	1	4.000
7	λοιδορεῖς	PRED	1	4.000
8	οὖσθα	PRED	1	4.000
9	πάρεστι	PRED_CO	1	4.000
10	συγγνοῖτο	PRED_CO	1	4.000
11	τύχοις	PRED	1	4.000
12	άναλοι	PRED	1	4.000
13	άπύοι	PRED	1	4.000
14	άπώλεσας	PRED	1	4.000
15	ἄξεις	PRED	1	4.000
16	έκδιδαχθῶ	PRED	1	4.000
17	έπαινεῖς	PRED	1	4.000
18	έστι	PRED_CO	1	4.000
19	έστιν	PRED	1	4.000
20	ἔμελλε	PRED	1	4.000
21	ἢ	COORD	1	4.000
22	ἴδοιτο	PRED	1	4.000
23	ώλοντί	PRED	24	4.000

Showing 1 to 23 of 23 rows 50 ▾ rows per page

Same search with AuxZ

- [word=/.*/] > [word="δῆτα" & edge="AuxZ"]
- will give me any word to which the word δῆτα annotated as AuxZ is attached to.
- They are a majority (here) attached to pronouns
12/23 AuxZ and 12/37 total of δῆτα forms.
- Treebank gives Sophocles (0011-1, 2, 3, 4 and 5); and Aeschylus (0085 - 1, 3, 4 and 6)

query: cite

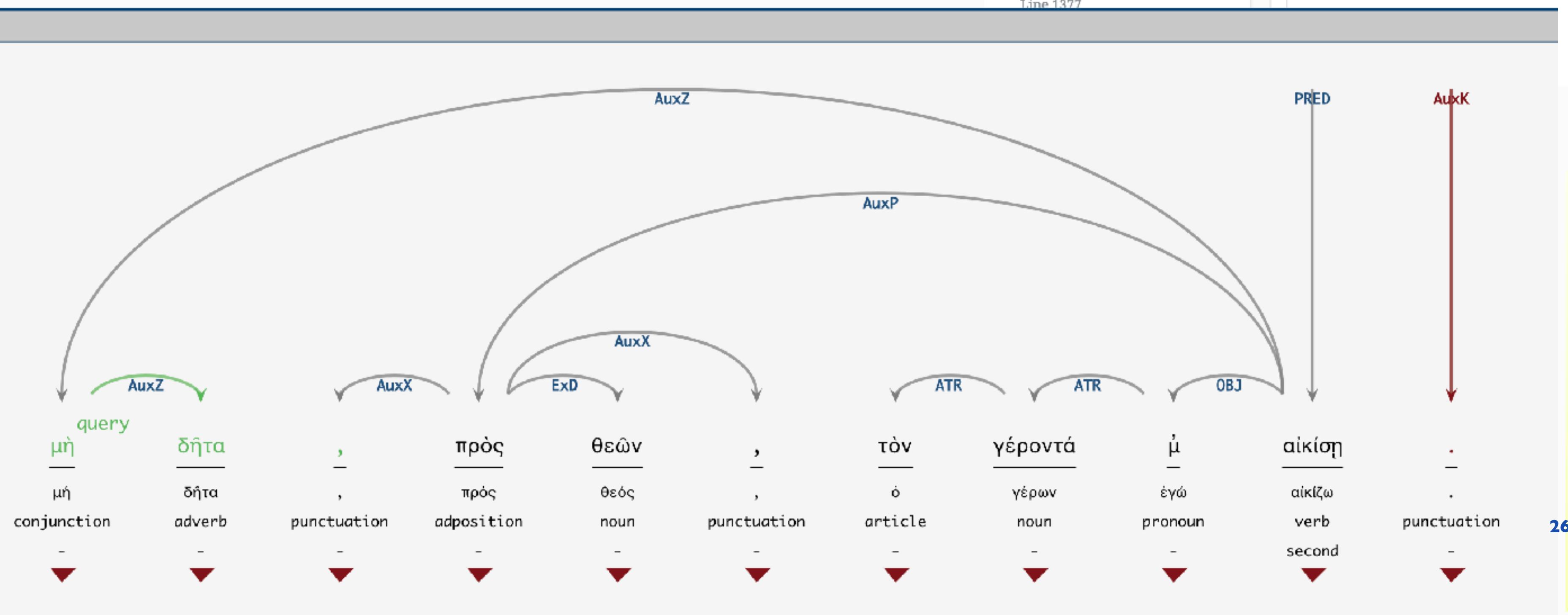
Search

#	query: token	query: edge	query: pos	query: cite	Occurrences	Occurrence
1	καὶ	AuxY	conjunction	urn:cts:greekLit:tlg0085.tlg006:218	1	
2	μὴ	AuxY	conjunction	urn:cts:greekLit:tlg0011.tlg004:830	1	
3	μὴ	AuxZ	conjunction	urn:cts:greekLit:tlg0011.tlg004:1153	1	
4	μὴ	AuxZ	conjunction	urn:cts:greekLit:tlg0011.tlg005:1206	1	
5	μὴ	AuxZ	particle	urn:cts:greekLit:tlg0011.tlg003:111	1	
6	οἰσθα	PRED	verb	urn:cts:greekLit:tlg0011.tlg004:1014	1	
7	οὐ	AuxZ	adverb	urn:cts:greekLit:tlg0011.tlg005:403	1	
8	οὐ	AuxZ	adverb	urn:cts:greekLit:tlg0085.tlg003:770	1	
9	ποῦ	ADV	adverb	urn:cts:greekLit:tlg0011.tlg001:73	1	
10	πῶς	ADV	adverb	urn:cts:greekLit:tlg0011.tlg003:215	1	
11	τί	ADV	pronoun	urn:cts:greekLit:tlg0011.tlg003:42	1	
12	τί	ADV	pronoun	urn:cts:greekLit:tlg0011.tlg003:540	1	
13	τί	ADV	pronoun	urn:cts:greekLit:tlg0011.tlg003:969	1	
14	τί	ADV	pronoun	urn:cts:greekLit:tlg0085.tlg003:627	1	
15	τί	ATR	pronoun	urn:cts:greekLit:tlg0011.tlg003:109	1	
16	τί	ATR	pronoun	urn:cts:greekLit:tlg0011.tlg004:1419	1	
17	τί	OBJ	pronoun	urn:cts:greekLit:tlg0011.tlg002:1099	1	
18	τί	OBJ	pronoun	urn:cts:greekLit:tlg0011.tlg002:499	1	
19	τί	OBJ	pronoun	urn:cts:greekLit:tlg0011.tlg004:622	1	
20	τί	OBJ	pronoun	urn:cts:greekLit:tlg0085.tlg001:302	1	
21	τί	SBJ	pronoun	urn:cts:greekLit:tlg0011.tlg001:410	1	
22	τι	OBJ	pronoun	urn:cts:greekLit:tlg0011.tlg004:364	1	
23	όμοιοροι	PNOM_CO	adjective	urn:cts:greekLit:tlg0085.tlg004:933	1	

25

Closer look at the sentences with δῆτα as AuxZ

Treebank sentence #7178



Sophocles, Oedipus Tyrannus

▼ Oedipus Tyrannus
Greek edition

μὴ δῆτα,
πρὸς θεῶν,
τὸν
γέροντά μ'
αἰκίσῃ.

No, in the name of the gods, do not mistreat an old man.

CTS URN

L urn:cts:gree

grc2:1153

▼ TEXT MODE

NORMAL HIGHLIGHT
click and shift-click on words to h

▼ TEXT SIZE

Aa Aa Aa Aa **Aa**

▼ HIGHLIGHT

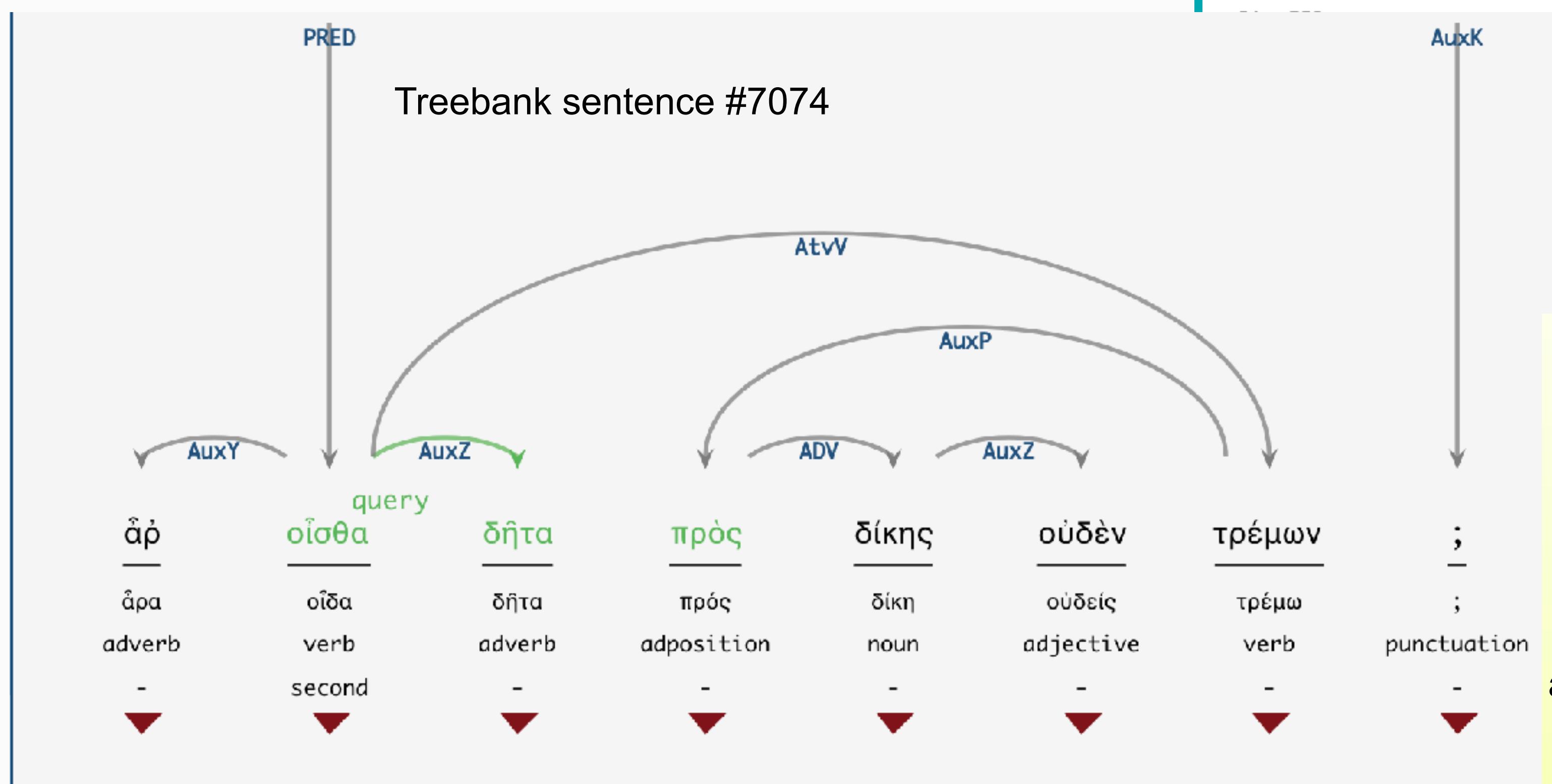
◀ MORPHEUS

Por. Transl by Trajano Vieira:
"Invoco os numes: poupa um homem
velho!"

Fr. transl. By Leconte de Lisle
{Le serviteur} Je t'en conjure par
les Dieux, ne frappe point un vieillard.

Spa. Transl by Alamillo ¡Por los dioses, me
26 a un an ciano como yo!

Closer look at the sentences with δῆτα as AuxZ



PASSAGE REFERENCE	Sophocles, Oedipus Tyrannus	Oedipus Tyrannus <i>Greek edition</i>	Oedipus Tyrannus <i>English translation</i>
1014		ὢρ' οἴσθα δῆτα πρὸς δίκης οὐδὲν τρέμων;	Do you know, then, that your fears are wholly in vain?
TEXT SEARCH (12) δῆτα Form Lemma (Greek only) Line 364 Line 445	AuxK		

Por. id.
“Pois não tem fundamento o teu pavor”.
(~ For your fear is not founded.)

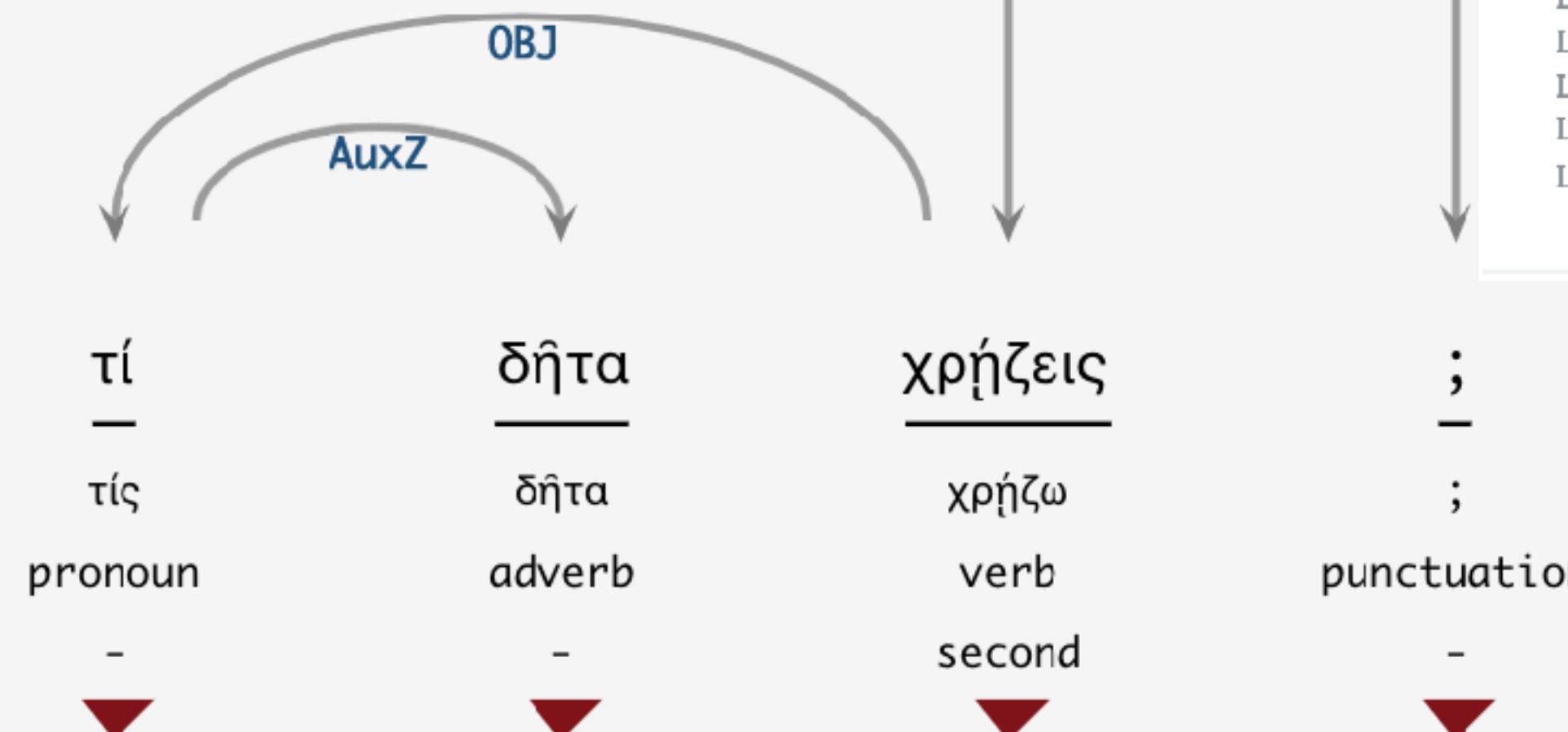
Spa. id.
"— ¿No sabes que, con razón, nada debes temer?"

Fra. id. - {Le messager} Ne sais-tu pas que tu n'as
aucune raison de craindre ?



Closer look at the sentences with δῆτα as AuxZ

Treebank sentence #6821



PASSAGE REFERENCE

622

TEXT SEARCH (12)

δῆτα

Form Lemma (Greek only)

Line 558
Line 622
Line 830
Line 942
Line 1014
Line 1153
Line 1161
Line 1337
Line 1377
Line 1419

Sophocles, Oedipus Tyrannus

Oedipus Tyrannus
Greek edition

τί δῆτα

χρήζεις; ή με

γῆς ἔξω

βαλεῖν;

Oedipus Tyrannus
English translation

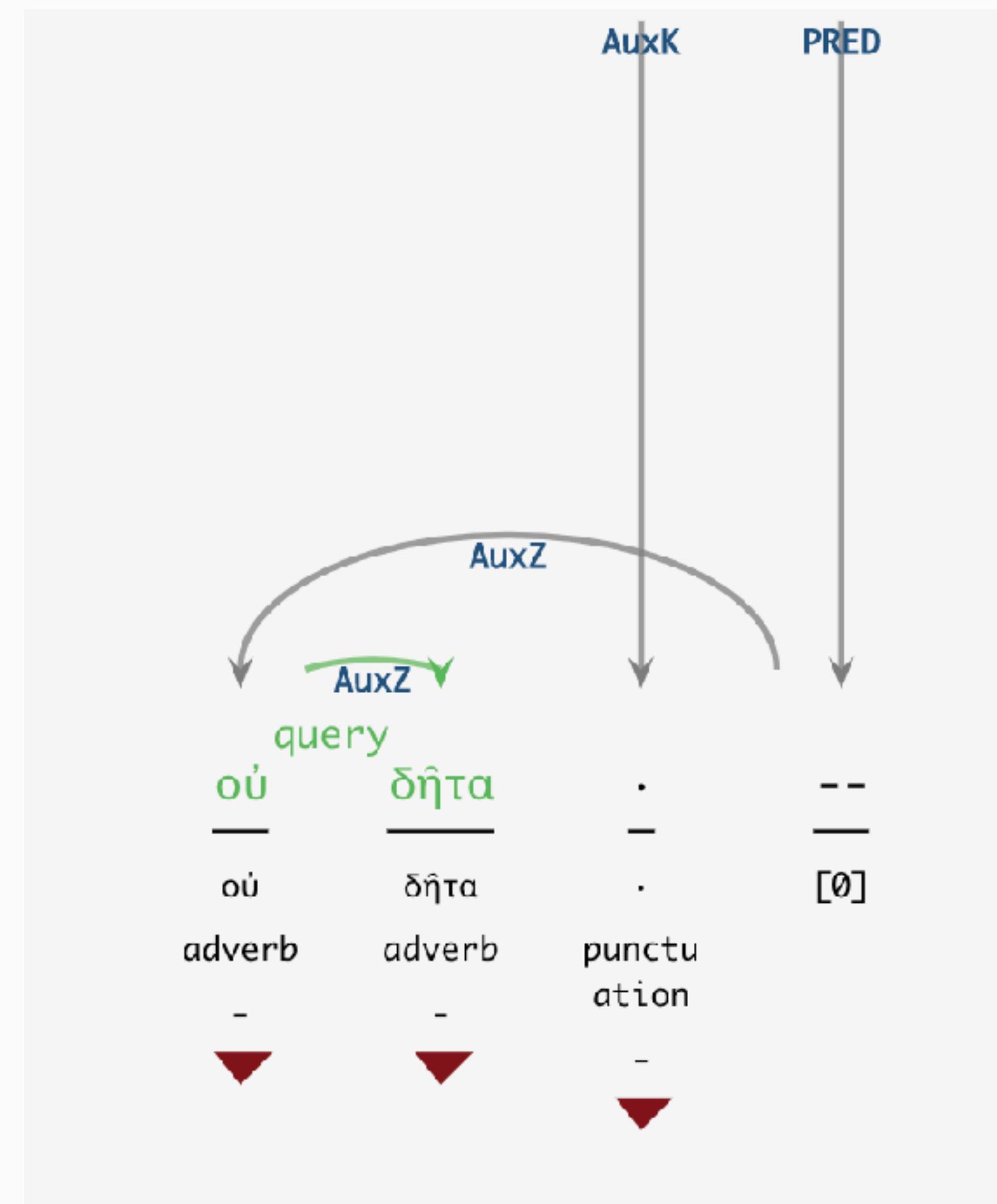
What do you
want then?
To banish me
from the
land?

Por. id.
“Qual é tua meta? Me banir de Tebas”.
(~ What is your goal? To banish me from Tebas?)

Spa. id.
“—Creonte.— ¿Qué pretendes, entonces? ¿Acaso
arrojarme fuera del país?”

Fra. id.. - {Créon} Que veux-tu donc ? Me chasser
de la Ville ?

Closer look at the sentences with δῆτα as AuxZ with negative



δῆτα

Form Lemma (Greek only)

Text Groups clear

Showing 1–10 of 117

Plato 117

Plato, Alcibiades 1, 125 (125)
είναι καὶ κακούς; ΑΛ. οὐ δῆτα. ΣΩ. ἀλλὰ τίνας ποτὲ τοὺς
δήπου ὅπων γε; ΑΛ. οὐ δῆτα. ΣΩ. ἀλλ’ ἀνθρώπων; ΑΛ. ναὶ.
κελευστῶν χρωμένων ἐρέταις; ΑΛ. οὐ δῆτα. ΣΩ. κυβερνητικὴ γάρ αὕτη γε
καὶ χρωμένων χορευταῖς; ΑΛ. οὐ δῆτα. ΣΩ. χοροδιδασκαλικὴ γάρ αὕτη γ'
ἡ τῶν κυβερνητῶν; ΑΛ. οὐ δῆτα. ΣΩ. ἀλλ’ εὐθουλία;

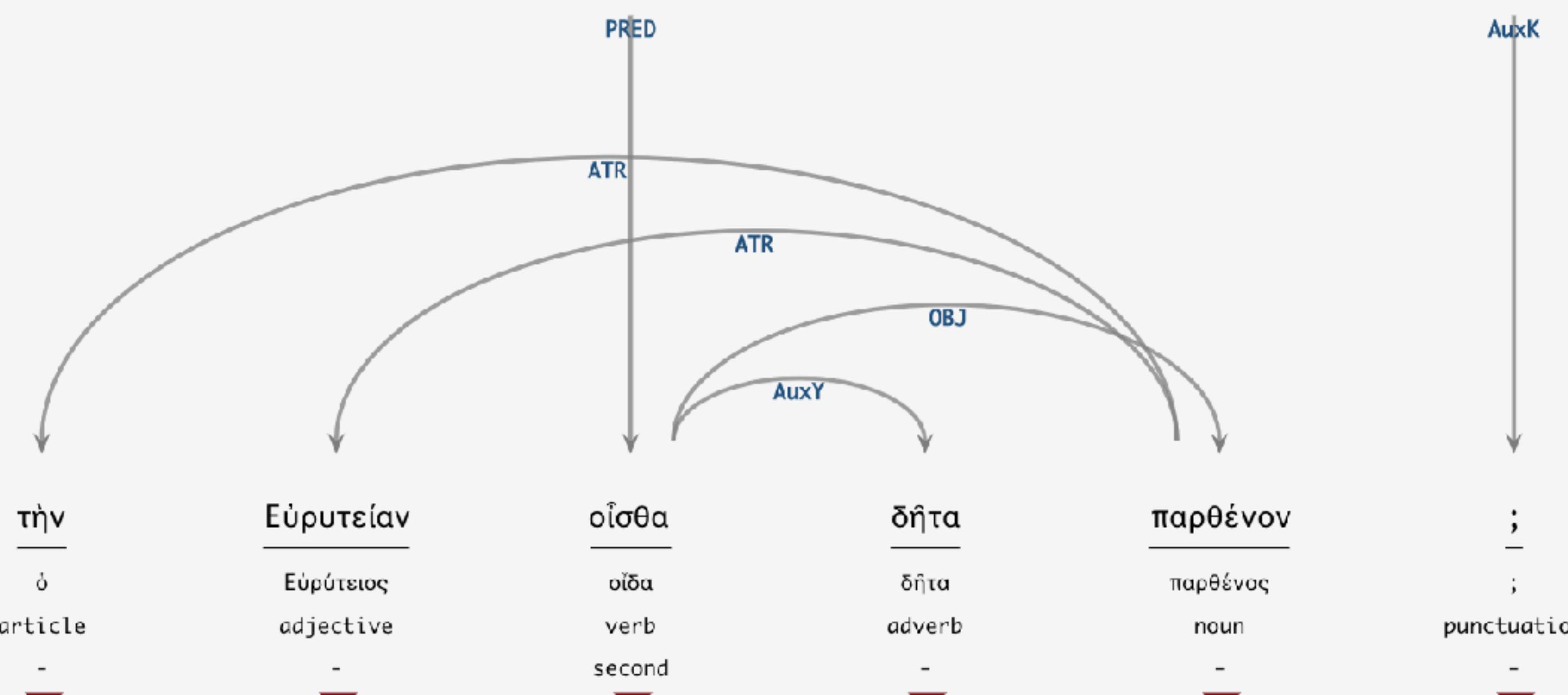
Plato, Alcibiades 1, 111 (111)
φήσεις εἰδέναι αὐτούς; ΑΛ. οὐ δῆτα. ΣΩ. τούτων οὖν διδάσκαλοι πῶς
τοῦτο ἴκανοι διδάξαι; ΑΛ. οὐ δῆτα. ΣΩ. ἴκανόν δέ σοι τεκμήριον
διδάσκαλοι οἱ πολλοί; ΑΛ. οὐ δῆτα. ΣΩ. ἦν δ’ ἄν σοι

Plato, Meno, 73 (73)
καὶ δικαίως διοικοῦντα; ΜΕΝ. οὐ δῆτα. ΣΩ. οὐκοῦν ἄνπερ δικαίως καὶ
ἄν ποτε γένοιντο; ΜΕΝ. οὐ δῆτα. ΣΩ. ἀλλὰ σώφρονες καὶ δίκαιοι;
τρόπῳ ἀγαθοὶ ἤσαν. ΜΕΝ. οὐ δῆτα. ΣΩ. ἐπειδὴ τοίνυν ἡ αὔτῃ



Closer look at the sentences with δῆτα as AuxY

Treebank sentence #4968



Sophocles, Trachiniae 1219

Trachiniae
Greek edition

τὴν Εὐρυτείαν

οἴσθα δῆτα

παρθένοι

Trachiniae *English translation*

Do you know, then,
the maiden,
daughter of
Eurytus?

Por. id.Flávio Oliveira
Decerto conheces a moca que é filha de Eurito?

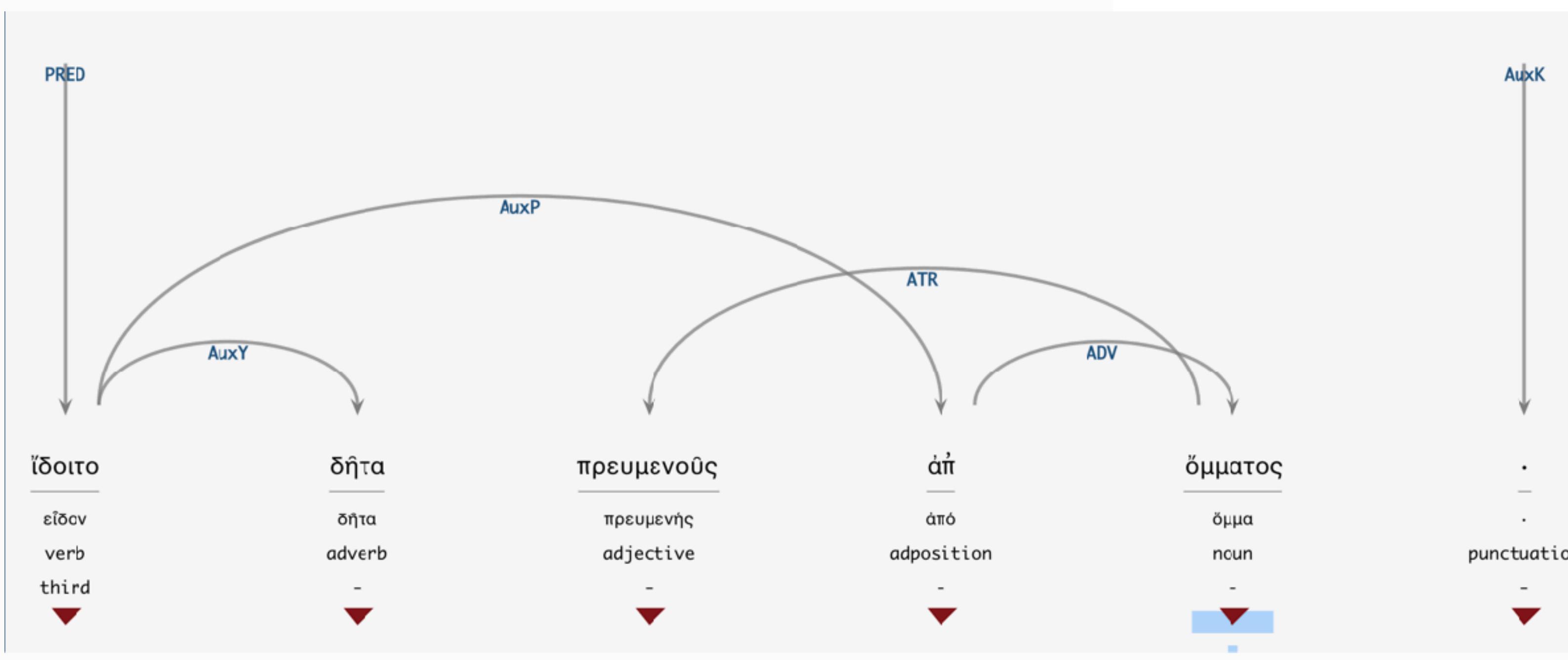
Spa. id.
"Heracles. — ¿Conoces, pues, a la hija de Éurito?"

Fr.HÉRACLÈS. — Tu connais, je pense, la fille d'Eurytos?



Closer look at the sentences with δῆτα as AuxY

Treebank sentence #27949



Iulus, Suppliant Maidens v.
207

Suppliant Maidens
Greek edition

ἴδοιτο δῆτα πρευμενοῦς
ἀπ' ὄμματος·

Suppliant Maidens
English translation

May he indeed behold
you, and with a gracious
eye.[*]

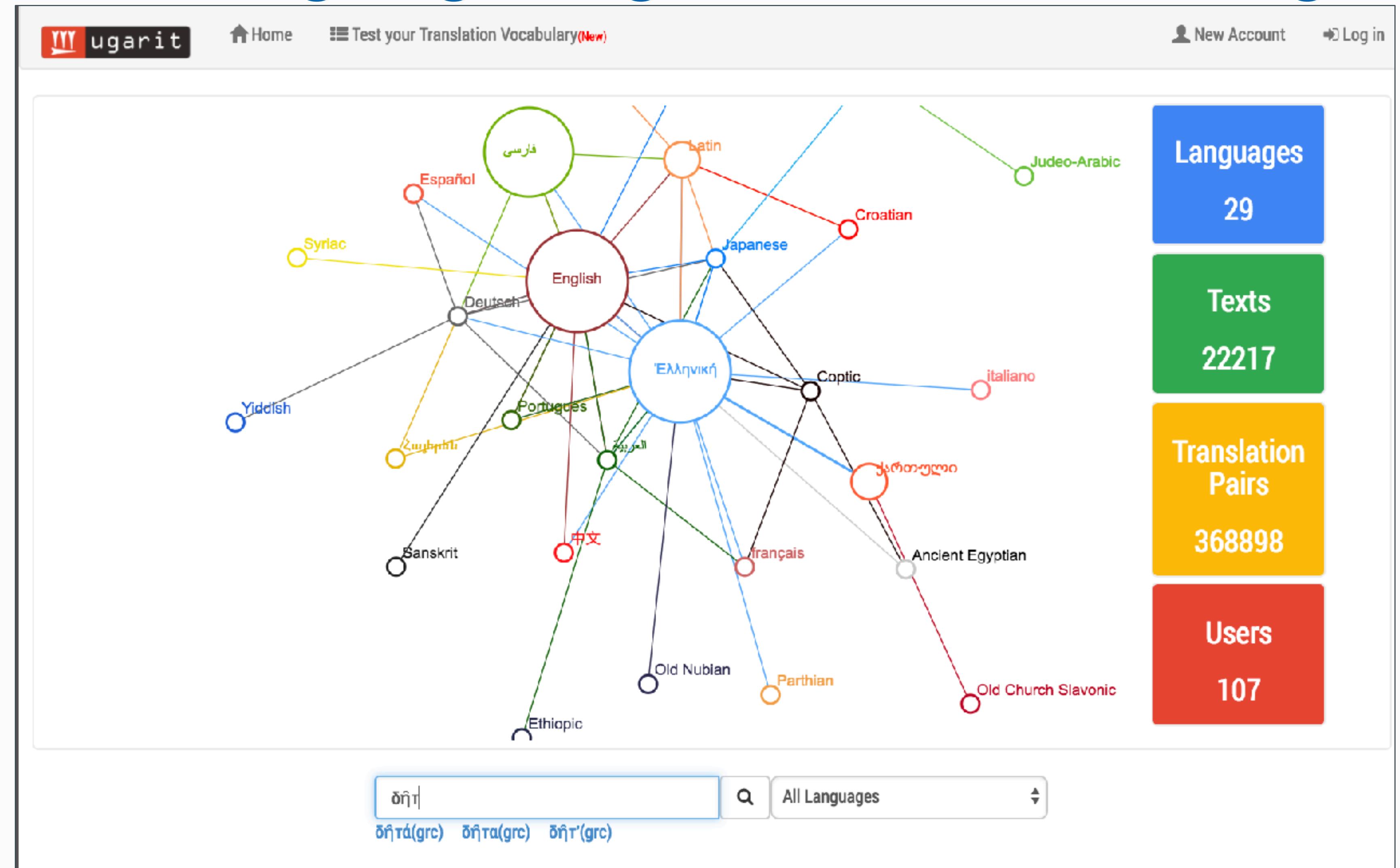
Por.Torrano:
Danao: "Vele, sim, com olhos favoráveis!"

Spa. Morales (Gredos).
"¡Que Zeus, nuestro padre, nos mire! "

Fr. Chambry
DANAOS. — Oui, qu'il nous regarde d'un oeil
bienveillant !



Multilanguage aligned translations- Ugarit



<http://ugarit.ialigner.com>
Tariq Yousef's project



Multilanguage aligned translations- Ugarit

ugarit [Home](#) [Test your Translation Vocabulary \(New\)](#)

δῆτα [🔍](#) Ancient Greek [▼](#)

105 results are found for **δῆτα**

Frequency: 108

English	Frequency
then	12
indeed	5
pray	5
oh	3
you	2
really	2
going	2
i	2
demos	2
really shouldn't	1
responding	1
want	1
prefer then	1
say	1
yes	1
wait	1
used	1
why	1
surely	1
stake	1
use	1
no	1
forsend	1
gentlemen	1
course	1
certainly	1
" " then	1
can	1
go further	1
helm	1
need	1
! !	1
most certainly	1
just	1
i see	1
ill	1
perhaps	1

କାରତ୍ତାଲ୍ପିନୀ ଅମ୍ବାର୍ଦୀ 1



So,... then...

- You shall know a word by the company it keeps ! -
 - Treebanking (syntax) & KWIC, concordances, aligned translations (modalities in discourse)
- As to δῆτα .
- Treebanking
 - AuxZ - depending on pronouns (interrogatives- τί, ποῦ, ᾧδα) and adverbs// (μή, οὐ)
 - AuxY - depending on verbs; functioning as sentence adverbs
- KWIC & concordances
 - Modalities and metafunctions interactional (dialogical both AuxZ and AuxY);
Epistemic-deductive: AuxZ/AuxY; Wish/Dynamic-volitive: AuxY; negative answer
 - As to other particles - to be explored in order to have a system and a tag set for annotation.



A speculative classification for δῆτα

- Interactional -> question/ answer/exclamation/direct speech (speech act)
- Answer -> positive/negative/
- Positive/Negative -> asseverative ?
- Question-> epistemic -> deductive /inferential /?
- Exclamation -> volitive modality -> wish/request/ > fear, joy, anger?



- "Do you *really* want to explore particles? " (you to me)
- "In the name of the gods, don't bring me particles to the treebank!" (Giuseppe to me)
- "What do you want to do, then, become more stressed than you are?" (to myself)

