

# Mycenaean

## 2 Phonology

# <a>

./a, ā/ < \*h<sub>2</sub>, a, ā (eh<sub>2</sub>), m, n

- a-qi-ti-ta fem. PN = ἄφθιτα, from the phrase κλέος ἄφθιτον = Ved. śravo akṣitam, PIE \**kleuos n-d<sup>h</sup>g<sup>wh</sup>itom*.
- ma-te /mātēr/
- pa-te /patēr/ < \*ph<sub>2</sub>tēr
- a<sub>2</sub>-te-ro /hateron/ < \*sm<sub>ṛ</sub>tero-, Cl. Gr. ἕτερο- after εἷς 'one' < \*sems.

## <e>

./e, ē, ei/: e-ke /ek<sup>h</sup>ei̯/ ἔχει, pa-te /patēr/ < \*ph<sub>2</sub>tēr,

.e < \*i, mostly in loanwords:

.di-pa ~ δέπας ‘cup’ (Watkins: from Hluw. *tipaš*, cf. Cluw. *tappaš* ‘sky’, PIE \**neb<sup>h</sup>os* ‘cloud’, Gr. νέφος, OCS *nebo*)

.qe-to ‘jar’ ~ πίθος

.i-pe-me-de-ja ~ Ἰφιμέδεια – not from \*wī- ‘power’ contrast wi-pi-no-o /wīp<sup>h</sup>inohos/ Ἰφίνοος

.A-te-mi-ti / A-ti-mi-ti (Dat./Lok. Sg.) – raising of /e/ / \_\_N?

# <O>

.po-de /podei̯/, do-se /dōsei̯/

.pa-ro ‘from’ ~ παρά – why /o/? (ἀπό? Μυσ. *a-pu*).

.ko-wo ‘fleece’ ~ κῶας – probably κῶας later new formation replacing \*κῶος

.\*o > u: *po-ro-du-ma-te* /-dumartei/ beside *po-ru-da-ma-te* /-damartei/ ‘housekeeper, administrator’, Hom. δάμαρ, -αρτος ‘wife’ < \*dm̥<sub>o</sub>-ar-t-.

– PIE \*h<sub>2</sub>er- ‘to fit’, \*dem/dom- ‘house’.

.prefix /pro-/ as in in ko-re-te : po-ro-ko-re-te /pro-/ = vice-ko-re-te (lat. pro-consul etc.)

.Variant po-ru-? \*pru? Expect \*pu-ru-.

<U>

.tu-ro<sub>2</sub> 'cheese' (/turro-, turjo-/)

.e-ru-ta-ra /erut<sup>h</sup>rā/ 'red'

# diphthongs

./ai/: <a>, <a<sub>3</sub>>, <a-i> (KN)

- pa-i-to /P<sup>h</sup>aistos/
- a<sub>3</sub>-ka-sa-ma /aiksma(:)ns/
- a-na-ta / a-na-i-ta (KN) ‘without incrustation’ /anaitā/, cf. a-ja-me-no
- a<sub>3</sub>-te /aitēr/ ‘one who does incrustations’
- DAT.PL -a-i /-āhi/ < \*-ā-si
  - cf. Alb. ABL.PL fjalë ‘word’ (< Lat. *fabula*): *fjalësh* < \*-āsi

./ei/ : <e>, <e-i>

- <pe-i> /sp<sup>h</sup>eis/ '(to) them', Att. σφίσιν, or /sp<sup>h</sup>e<sup>hi</sup>/ (Arcad. σφέσιν)

./oi/ : <o>, <o-i>

- LOC./DAT.PL. -oihi <o-i> /-ōis <o>

./au/ <a-u>

- ka-ra-u-ko /Glaukos/

./eu/ <e-u>: e-u-da-mo /Eudāmos/, re-u-ko /leuko-/

./ou/ <o-u>: o-u /ou/ 'not', a-ro-u-ra /aroura(ns)/

./uj/ <u-j>: a-ra-ru-ja /araruja/ < \*ar-ar-us-ja 'fitted', -uĩα (: ἀραρίσκω, Arm. *aṛnem*, aor. *ar-ar-i*).

- cf. similar context GEN.SG o-st. \*-osio > \*-oiijo <o-jo>, Hom. -oio, Thessal. -oi



# Syllabic liquids and nasals

• \*r, l̥ > ar/al:

• ta-ra-si-ja /tala(n)siā/ 'weight' < \*tl̥h<sub>2</sub>-ti-

– \*telh<sub>2</sub>- 'to lift'; Lat. tollere, tulī, τληῖναι, OIr. tlenaid, τάλαντον, τλημοσύνη 'patience'.

• pa-we-a /p<sup>h</sup>arweha/ 'cloths', Cl.-Gr. φᾶρος < \*p<sup>h</sup>arwos < \*b<sup>h</sup>r̥u̯e/os (: \*b<sup>h</sup>er- 'to carry')

• a-re-pa /aleip<sup>h</sup>ar/ 'unguent', ἀλείφω

.With /o/ next to labial?

.qe-to-ro 'four' < \*k<sup>w</sup>et(w)r̥- in qe-to-ro-po-pi /k<sup>w</sup>etro-pop-p<sup>hi</sup>/ 'with four feet'.

- \*k<sup>w</sup>t(w)r̥- > Alph.-Gr. τρα- in τράπεζα 'with 4 feet' < \*k<sup>w</sup>t(w)r̥pedia, whence Boeot. τρίπεζα 'tripod'

.to-no /t<sup>h</sup>ornos/ or /t<sup>h</sup>r̥nos/ (Heubeck)?

- NB \*t<sup>h</sup>ronos should be spelled <to-ro-no>.
- Cf. Hesych. Θόρναξ· ὑποπόδιον. to-ro-no-wo-ko /thorno-worgos/, /thr̥no-worgos/, /throno-/? Cf. de Lamberterie FS Penney

• \*n̥, m̥ > a

– te-ka-ta-si /tektasi/ 'builders' < \*tekt̥n̥si (cf. τέκτων)

• \*n̥ > o next to labials?

– Cf. a-no-wo-to 'without ears/handles' : οὔζ, ὠτός, \*an-ows-n̥-to-? Cf. οὔατα 'ears' < \*ou̯s-n̥-ta.

– pe-mo, pe-ma < \*spermn̥ 'seeds': σπέρμα.

– 'wheel' only with <o>: a-mo /harmo/, pl. a-mo-ta /harmota/ < \*arsm̥n̥t-

– 'unguent' only with <a>: a-re-pa-te /aleip<sup>h</sup>n̥t-/ , but in the compound 'unguent-boiler' both <a> and <o>: a-re-pa-zo-o /aleip<sup>h</sup>adzo<sup>h</sup>os/, a-re-po-zo-o /aleip<sup>h</sup>odzo<sup>h</sup>os/

- Risch: -o „mycénien normal“ (continued in Arcado-Cypr.) vs „mycénien spécial“ (--> Ion.-Att.)
- Chadwick 1976: Myc. special (-a, -ti instead of -si) is Doric.
- Dorians not immigrated around 1200 („return of the Heraclidae“), but already present in Myc. times.

<j->

.double treatment as in Alph.-Gr. visible already here: /dz/ and /h/: ze-u-ke-si /dzeuges(s)i/ 'pairs'

.glide: <i-je-ro> /hijeros/ 'holy', / <i-e-ro>. Spelling variation or diachronic difference?

- /ihero-/ < \*is-ero- via /ihero-/, then /hi(j)ero-/ with metathesis of /h/.
- PIE \*h<sub>2</sub>eis(h<sub>2</sub>)- 'to impel', Gr. ἰάομαι 'to heal', Ved. *iṣṇāti* 'impels', Gr. ἰβάω 'pour' (García Ramón FS Risch)
- \*#i̇ > #h-, but some spellings with <j-> -- /y/ retained? <o-te> /hote/ < \*iote, <jo-> / <o-> /jōs ~ hōs/, ὡς 'so/how'.
- The pair of agent nouns *ja-ke-te-re*, *a<sub>2</sub>-ke-te-re* = *yakestēres/hakestēres* 'menders' suggest that the j-less spellings indicate the change y > h, as in the later dialects.

<j̥->

.traces of /y/ in Homeric metrics?

- Similar to /w/ (and /s/~h/)?
- A 51 αὐτὰρ ἔπειτ' αὐτοῖσι βέλος ἐχεπευκὲς ἐφίεις : ἐχε- < \*hek<sup>h</sup>e- < \*seg<sup>h</sup>e-  
(→Grassmann's Law later than this)
- Γ 230 θεὸς ὦς# : ὦς < \*yōs
- πότνια Ἥρη# (25x) < \*sēr- or \*yēr-? (cf. Myc. E-ra)

<j->

.VyV > VhV?

- A-e-ri-qo-ta /A(j)eri-k<sup>wh</sup>ontās/ ‘killing in the morning’? like Ved. vasar-han-?
  - If one takes, as Leujeune does, the second member of the compound as /°k<sup>wh</sup>ontās/ ‘striking, killing’, a-e-ri-qo-ta could be compared with the Vedic epithet vasar-hā ‘killing (the demons) in the morning’ said of the wind (vāta-) in RV 1.122.3.
  - However, vasar-hā́ may also be derived from hā ‘to move’, i.e. ‘rising early’ which seems to make better sense as an epithet of the wind, cf. (Jamison und Brereton 2014):I.284 and Jamison’s online commentary
  - <http://rigvedacommentary.alc.ucla.edu/>

.or φοιτάω ‘go to and fro’, i.e. °*k<sup>wh</sup>oitās*?

.First member: Hom. ἤρι ‘early, in the morning’ < \**āeri* (cf. ἠέριος ‘early’) < \**h<sub>2</sub>euseri*? [Kiparsky]

.Or Av. *aiiarə* ‘day’; \**āier-i* ‘at day’ – whence /*ā-*/? Contrast ἄριστον ‘breakfast’ < \**aieri-h<sub>1</sub>d-to-* ‘Früh-essen’?

.Alternative (Hajnal 1992): \**aseri* = LOC of \**asōr* ‘spear’, Hom. ἄορ, Ved. *así-*, Lat. *ēnsis*, Pal. *ḥašira-* ‘dagger’?,

‘killing with the sword’, cf. also PN *A-o-ri-me-ne* /*Ahorimenēs*/ (with secondary -o- instead of -e- in the suffix):



.PY Qa 1296 \$1295\$ (15) a-o-ri-me-ne , i-je-re-u \*189 [

‘directing his mind to the sword’, ‘who has the rage of the sword / raging with the sword’~ μαίνομαι/μένος

.Il. 16.74 οὐ γὰρ Τυδεΐδew Διομήδεος ἐν παλάμησι / **μαίνεται ἐγχεΐη** Δαναῶν  
ἀπὸ λοιγὸν ἀμῦναι, 8.110f. ὄφρα καὶ Ἔκτωρ / εἴσεται εἰ καὶ ἐμὸν **δόρυ μαίνεται**  
ἐν παλάμησιν.

.μένος ‚battle rage‘: μ. ἀνδρῶν the battle-rage of men, Il.2.387; μ. Ἄρηος 18.264.

- Cf. Kölligan, Daniel. „Myc. a-o-ri-me-ne and Hom. δόρυ μαίνεται“. *Kadmos* 54(1/2) (2015): 31–38.

.retained in to-ro-qe-jo-me-no /trok<sup>w</sup>ejomeno-/ 'turning'

.variation seen in adjectives of material in \*-eyos: e-re-pa-te-jo and e-re-pa-te-o /elep<sup>h</sup>ante(y/h)ois/ 'made of ivory'.

.→ does this show the change of /y/ > /h/ /V\_V in progress or are the spelling with j-signs historical?

.NB there are no inverse spellings with j-signs e.g. for /h/ arisen from \*s.

•VsiV > ViiV ~ ViV:

- Gen. sg. o-st. <o-jo> /oi̯o/ < \*os̯io;
- Ptc. Perf. fem. -u-ja < \*us-ia;
- Fem. PN -e-ja < \*es-ia : a-ti-ke-ne-ja /Anti-geneia/ ~ Antigonos / Antigenēs.

•Vu̯iV : me-wi-jo / me-u-jo 'less'.

.i-je-re-ja fem. of i-je-re-u /hiereus/ ~ /hiereja/ from \*-ēu-ja? Why different development? Or not derived from stem in -eu-?

- -ry- may be spelled with  $ro_2 / \_o$ : a- $ro_2$ -e 'better' < \*ari $\bar{o}$ ses.
- Synizesis in the sequence \*RiV: po-pu- $ro_2$  'purple' < \*porp<sup>h</sup>uri(i)os.
- Same development with agent noun suffix -ri-ja/- $ra_2$ .
- Does this imply that /ry/ is retained here, as Lejeune (1972b:156) argues?
- Question of a-ke- $ra_2$ -te: Docs.<sup>3</sup> 234 (Thompson) takes this as aor. ptcp.  
 \*agersantes > agerrantes. This would imply that /ry/ > /rr/, and a prs. ptcp.  
 \*ageriontes can be excluded here.
- Alternative: form of ἀγγέλλω, e.g. /angēlantes/ or /angellantes/

## <W->

.retained throughout:

- #w-: wa-na-ka, we-to 'year', wo-ze 'works' /w(o)rzei/, wi-pi-no-o...
- -w-: ka-ra-wi-po-ro, ka-ke-we
- Cw: wi-do-wi-jo /widwojos/, ke-se-nu-wi-ja /ksenwija/ 'foreign, for export(?)', pe-ru-si-nwo /perusinwon/ 'last year's', ko-wa /korwa/ 'girl'
- glide: a-re-ku-tu-ru-wo /Alektrowōn/

# some implications

- <e-ne-ka> /eneka/, cannot be \*enweka, rather \*h<sub>1</sub>nekm 'for reaching, for the sake of'
  - Homeric εἴνεκα does not show lengthening because of loss of /w/, but metrical lengthening.
- question of i-je-re-ja: if /ksenwija/ retains /wj/ or /wij/, why loss of /wj/ in this word if it derives from /ihereus/ 'priest'?
- Thompson Docs<sup>3</sup> 233 concludes: "Nor, as used to be thought, can ἱέρεια 'priestess' be built to the stem of ἱερεύς, in light of Mycenaean i-je-re-ja." -- But what would this basis be? /iheros/ > /ihereio-/? → debate about the origin of nouns in -eus.

# some implications

•(opi ...) o-ro-me-no 'watching':

- cannot go back to \*u<sub>r</sub>- (Lat. *uereor*, Germ. *gewahren*), but \*ser-: Av. *haraiti*, Lat. *ob-ser-u-āre*, *servus* 'slave' < 'herdsman'.
- cf. Hom. ἐπι ... ὄρονται 'sie achten auf, führen Aufsicht'.

•po-se-da-o 'Poseidon' /poseidaōn/ - no trace of digamma. Corinthian ΠοτειδᾶFων hypercorrect form?

- IG IV 211 Σιμίον μ' ἀνέθεῖκε Ποτε(ι)δάFων[ι] [Fά]γακτι.

•Also ἥρωσ without F: ti-ri-se-ro-e /tris-hērohei/, note also <e-ra> Hera.

## <S->

- #s- in non-IE words: *se-ri-no* /selinon/ ‘sellery’
- -sm- retained in *do-so-mo* /dosmos/ ‘payment’
- -ksm-: *a<sub>3</sub>-ka-sa-ma* /aiksmans/ ‘spear tips’ : αἰχμή
- <s-> /s(s)/ N\_V:
  - *ze-u-ke-si* /dzeuges(s)i/
  - *e-so-to* /es(s)ontoi/ ‘they will be’
  - *ze-so-me-no* ‘about to be cooked’ (PIE \*yes-se/o-)



## <S->

./ts/ > /s/:

- pi-we-ri-si < \*-id-si
- de-ma-si 'skins' < \*dermḡt-si
- da-sa-to < \*datsato 'was distributed' ~ δατέομαι
- \*/t(h)j/ > /s/: to-so /toso-/ < \*totjō- 'so much', a<sub>3</sub>-sa /aisa-/ 'share' < \*aitjā-.
  - Unclear if this notes a geminate or not.

## <Z->

•\*/k(h)j̥/: ka-zo-e ,worse' < \*kakiōses.

•\*/j̥/: ze-u-ko /dzeugos/ ,pair'. Greek representation of \*j̥/h/ ~ /dz/ due to laryngeal?

•Possible exception to ze-u-ko: e-pi-\*65-ko. \*65 = ju (cf. i-\*65 if i-ju 'son'), hence e-pi-ju-ko /epijugon/, part of the yoke? Conservative spelling?

•\*/d̥j̥/: to-pe-za /torpedza/ < \*k<sup>u</sup>turpedi̥a, me-zo = medzōs 'bigger' < \*megyōs (cf. μείζων).

•\*/gj̥/: wo-ze /worzei/ < \*ur̥ĝ-je/o-; me-zo-e < \*meĝ-ios-e(s); a<sub>3</sub>-za /aiza/ 'goat leather'

.some problems:

.wa-na-se-wi-jo seems to presuppose a base form \*wa-na-sa 'lady', i.e., \*wanaktia? Why spelled with <s->?

.a-ke-ti-ri-ja beside a-ze-ti-ri-ja 'decorators'? /askētrija-/ ~ ἀσκέω? Maybe -ske- with palatalized -k'-, spelled <z>?

.From the opposite perspective: /h/ in Mycenaean < \*s and \*y word-initially and intervocalically:

.a<sub>2</sub>-te-ro /hatero-/ < \*sm<sub>o</sub>-tero- 'next (year)'

.pa-we-a and pa-we-a<sub>2</sub> /pharweha/ 'cloths' -- what does this variation indicate?  
Loss of /h/ /N\_V in progress?

.Meißner (2007): scribes of Knossos consistently write a glide instead of /h/ after /i/ -- so probably for them /h/ was already lost in this context, e.g. \*prisentēr <pi-ri-je-te> /pri(i)entēr/ 'sawyer'(πρίω 'to saw')

.By contrast, in Pylos sometimes a glide is written, sometimes not, suggesting that it is in the process of disappearing, e.g. pi-ri-e-te-re /prihentēres/.

.Spellings without glide in Knossos only found on tablets from the room of the chariot tablets (RCT), which are probably older than the other material found in Knossos.

.Word initial /h/ indicated by a<sub>2</sub> in Knossos only in the RCT.

.So probably /h/ was lost earlier in Knossos word-initially and intervocalically than on the mainland.

# Grassmann's Law

.post-Mycenaean feature: cf. de Decker (2015: 148-151) and de Lamberterie on *A-mu-ta-wo* (and [Kölligan 2023](#)).

.Best examples are probably those based on forms of ἔχω: *a-ni-o-ko* 'charioteer', *wa-tu-o-ko* (PN) and *a-pi-e-ke* (verb), not spelt with glide to block hiatus, which suggests presence of a different consonant: /hāni-hokhos/, /Wastu-hokhos/, /amphi-hekhei/ with /h/ retained despite following aspirate, i.e., unlike Alph.-Gr. τίθημι < \*θίθημι.

- de Lamberterie, Charles. 2012. « Sur un anthroponyme héroïque du grec ancien (hom. Ἀμυθάων, myc. a-mu-ta-wo), avec un excursus relatif à la famille du verbe ἔχω et à la loi de Grassmann ». *Revue des Études Grecques* 125(2):341-363. doi: 10.3406/reg.2012.8099.
- Kölligan, Daniel. 2023. 'Thoughts on Myc. A-mu-ta-wo and PIE \*h<sub>2</sub>meu̯- and \*h<sub>2</sub>meu̯d<sup>h</sup>- "to surpass".'. Papers and Summary of the Discussion Held at the Summer 2023 MAST Seminar (Friday, June 30) - Classical Continuum (Harvard.Edu). <https://continuum.fas.harvard.edu/papers-and-summary-of-the-discussion-held-at-the-summer-2023-mast-seminar-friday-june-30/>

# Stops

.Labiovelars retained:

.qi-ri-ja-to /k<sup>w</sup>riato/ ‘bought’ ~ Alph.-Gr. πρίατο (Od. 4× - only object: slaves, as in Myc.)

.to-ro-qe-jo-me-no : τροπέω ‘turn’ < \*trok<sup>w</sup>eje/o- : lat. torquēre.

.also /\_C:

– qi-si-pe-e /k<sup>w</sup>si<sup>h</sup>epe/ ~ ξίφος,

– maybe Mo-qo-so = Μόψος = Luw. Mukšaš. KN De 1381.B, PY Sa 774, Phoenic. mpš (later borrowing, after change \*k<sup>w</sup> > p). Hitt. mu-uk-šu /Muksus/ (KUB 14.1 rev. 75 „Anklage des Maduwatta“).

- Oettinger, N. 2008: ‘The seer Mopsos (Muksas) as a historical figure’ in M. Bachvarova, B.-J. Collins, I. Rutherford(eds), *Anatolian Interfaces: Hittites, Greeks, and their Neighbours in Ancient Anatolia*. Oxford, Oxbow: 45–56, und Ilya Yakubovich 2015. “Phoenician and Luwian in Early Iron Age Cilicia” *Anatolian Studies* 65 (2015): 35–53, British Institute at Ankara.

• \*u/uk<sup>w</sup> > u/uk̃: *qo-u-ko-ro* ~ βουκόλος, \**g<sup>w</sup>ouk<sup>w</sup>olos* (Lat. *anculus* / *ancilla* 'servant' < \**amb<sup>h</sup>i-k<sup>w</sup>olo-*)

• Dissimilation of two /k<sup>w</sup>/:

- *qe-re-qo-ta* /k<sup>w</sup>ēle-k<sup>wh</sup>ontās/ 'killing from afar' ~ τηλε-φόντᾱς (e.g. Apollo, τηλεβόλος Pi. P. 3.49 χερμάδι τηλεβόλω, (Kölligan 2000)). Beside this *pe-re-qo-ta*.

• Assimilation:

- probably in the case of *i-po-po-qo-i* /hippop<sup>h</sup>org<sup>w</sup>oihi/ beside *i-qo-po-qo-i* /hikk<sup>w</sup>op<sup>h</sup>org<sup>w</sup>oihi/ 'ostlers' (regressive assimilation).



•πᾶς: traditional derivation from \**kwant-* ~ Skt. *śáśvant-* < \**saśvant-* 'repeating itself, uninterrupted, complete, all, every' like Gr. ᾗ-πας < \**sm<sup>o</sup>-*.

•Hence, special development \**kwa* > \**pa* already in Myc.? (Docs.<sup>2</sup> p. 81).

•Toch. B/A *po*, *pont-* 'all' shows that root has \**p-*, e.g. \**ph<sub>2</sub>-ént-* PTCP of \**peh<sub>2</sub>-* 'to guard, protect' > 'protected, whole' (cf. Germ. *heil* 'safe, unharmed' ~ NE *whole*).

- Status of /b/ in Mycenaean therefore quite marginal:
- not yet development of /b/ from /g<sup>w</sup>/, cf. qa-si-re-u /g<sup>w</sup>asileus/ - Alph.-Gr.  
βασιλεύς
- no examples for epenthetic /b/ in /mr/-cluster as in later ἄμβροτος 'immortal',
- but epenthetic /r/ with /nr/ is found already in Myc. e.g. in a-di-ri-ja-te  
/andriantes/ 'images of men'.

.loanwords could provide a source for /b/, e.g.

.*pa-ra-ku-we*, the name of a precious material used to decorate items of furniture on PY Ta 715 and Ta 714, also spelt *pa-ra-ke-we* on PY Ta 642, and adj. *pa-ra-ku-ja* describing cloth (KN Ld (1) 575). 'emerald, turquoise'

.related to Akkadian *barrāqtu* (Hesychian gloss βαρακίς· γλαύκινον ἱμάτιον) → /b/ rendered with sign of the p-series? Or rather word with original /b/ adopted with /p/ in Myc.?

.similar problems with da-pu<sub>2</sub>-ri-to-jo (2x), da-pu-ri-to (1x) <> Λαβύρινθος.  
Source unknown, so we can only speculate.

# ρ/pt

•πτόλις, πόλις; πτόλεμος, πόλεμος.

•later ππ- > πτ- Thessal.: πτολιαρχεντ-, Ττολεμαῖος:

– SEG 47:717 Thessaly (IG IX,2) : Pelasgiotis : Atrax Μενεπτόλεμος  
Μενεπτόλεμος.

– SEG 43:311 Thessaly (IG IX,2) : Pelasgiotis : Skotoussa Ἀμφιπτολεμῖοι

•*Po-to-re-ma-ta* /Ptolemātās/, *E-u-ru-po-to-re-mo-jo* /Euruptolemoio/ GEN.SG 'of Euruptolemos';

•*po-to-ri-ka-ta* /Ptoli-kastās/ ("renowned/excelling in the city"),

•*po-to-ri-jo* /Ptoliōn/,

# pt/p

.pte-re-wa /ptelewās/ GEN.SG of \*ptelewā ,elm-tree‘,

.pte-no /pternō/ dual of πτέρνη 'sole' (part of the chariot? footboard? -- Goth. *fairzna*, Skt. *pārṣṇi-*).

.Palatal \*pj > pt /\_e? Cf. πίλον (Dor. ψίλον) 'feather, down', Myc. *pi-ti-ro-we-sa* (adj. used with *to-pe-za*) 'decorated with images of feathers' (/ptilowe(n)sa/) ~ Lat. *pilus* 'hair'? Or related to πέτομαι 'to fly' with suffix \*(pt-)-ilo-? Substrate word?

.Dunkel 1992: -pt- abstracted from compounds of the type Skt. *bharad-vāja-* 'bringing riches',

.Gr. -Vt.p- > -V.pt- e.g. in \*φερετ.πολεμος > φερε.πτολεμος,

.whence new simplex πτόλεμος

.But this compositional type is not attested in Greek - circular argument.

- Dunkel, George E. 1992. 'Two Old Problems in Greek: Ptólemos and Terpsímbrotos'. *Glotta: Zeitschrift Fur Griechische Und Lateinische Sprache* 70(3–4):197–225.