Two Notes on PIE Stems in Dentals

1. d-*Stems*

While stems with a suffix *-t* are well documented, those with a suffix *-d* are hardly established with certainty. In fact I know of only one good example, Skt. *śarád-* 'autumn, year'. The two *a* vowels show that we must consider *-ad-* as a suffix. Av. *sarəd-* has this morfeme in the zero grade. The Old Persian cognate can be read *θard-* as well as *θarad-*. This gives a noun **ḱer-(e/o)d-*. As we do not know whether *-ad-* represents *-ed-* or *-od-*, it is not possible to decide whether the word belonged to the protero- or the hysterodynamic inflexion (*-od-* would point to the latter).

The aim of this paragraph is to point to another *d*-stem, which I think can be found in Lat. *hērēs, -ēdis* 'heir' and Gr. *χηρωσταί* 'relatives who divide the property of somebody who died without sons'.

It has not been possible as yet to explain the relation that, as is mostly assumed, exists between these two words. That the first element is also found in Gr. *χήρα* 'widow' is generally accepted (e.g. Benveniste, *Vocabulaire des institutions i.–e.* 1, p. 83f.). But the further interpretation is not convincing. Ernout-Meillet, for example, qualify them as "hypothèses incertaines". That it would contain the root **ed-* 'eat'[1] has been generally rejected on account of the meaning. Since Brugmann one compares Skt. *ā-dā-* 'receive'.[2] However, the existence of *ō-* in Greek is very doubtful (Frisk 2. p. 342) and so is that of *ē-* in Latin (Ernout-Meillet s.v. *ēcastor, quidem*). But most important is that it is improbable that in a "ready-made word" the particle could have the form *ē* as well as *ō*. This difference in vocalism cannot be explained when one assumes a compound.

The explanation I would like to propose is simple. The Greek word probably contains the suffix *-τηϛ*, which is found in words of the same semantic sphere: *ἕτηϛ, ἐεδνώτηϛ, κηδεστήϛ* etc. This *-τηϛ* was probably added to **χηρωδ-*. For **χηρωδ-, hērēd-* I assume a suffix *-ed-*, with a hysterodynamic inflexion: **ghéh₁r-ōd(-s)*, acc. *-éd-m̥*, gen. *-d-ós* etc. In Greek the nominative form of the suffix was generalized, in Latin a new nominative in *-ēd-* was formed on the basis of the accusative suffix *-ed-*. This is parallel to what happened to the word

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[1] For litterature the reader is referred to Frisk's dictionary.

[2] This supposes *-ē/ō-dh₃-*. Fraenkel has a variant *-ē/ō-deh₃-t-*, cas. obl. *-dh₃-t-* > *-ωδτ-* > *-ωστ-*. In this way *hērēd-* can hardly be explained.

for 'foot', where Greek has *πώς*, while Latin generalized the *-e-* (*pēs pĕdis*). Only in *hērēs* the long vowel was carried through, but this happened more often in Latin (e.g. *honor*, *-ōris*).

We thus have a second instance of a nominal suffix *-d*, for which hysterodynamic inflexion is certain, found in two languages. Given the scarity of this suffix the word—and the notion expressed by it—must date back to a remote period of Proto-Indo-European.

2. *Gr. -αντ-.*

With the suffix *-nt-* Greek has beside participles in *-ων*, *-οντος* also forms that contain *-ent-*. Forssman, MSS 16 (1964) 17–20, has pointed out that *δρακείς*, *-εντ-*, occurring thrice in Pindar (P. 2,20, N. 7,3, fr. 123,3 Snell), must continue an athematic participle with *-ent-*. In *Die Sprache* 15 (1969) 4 with n. 13 Hoffmann has shown that *θεντ-* probably originates from **dhh₁-ent-*, *σταντ-* from **sth₂-ent-*, *δοντ-* from **dh₃-ent-*, as seems proven by GAv. *dantō* (nom.pl.m. Y. 32,4) and *vyāvantəm* (< **u̯i-ā-bhantam* < **-bhh₂-ent-* Yt. 8,2).

Beside these forms Greek seems also to have forms with *-αντ-*. Of course many nouns with *-αντ-* are of non-IE origin; see Schwyzer, *Gr. Gr.* 1 p. 526 and now Furnée's "handbook" of substratum elements in Greek, *Die wichtigsten konsonantischen Erscheinungen des Vorgriechischen*, p. 216 n. 71 and 191 n. 35.

But other forms are clearly participial: *ἀκάμας* (Il.), *ἀδάμας* (Hes.; as a personal name in the Iliad, also in *Πουλυδάμας*). I agree with Chantraine (*Dict. étym.* s.v.) that there is no reason to suppose that *ἀδάμας* is a loan[3]. That these forms are old is shown by *τάλαντα* 'pair of scales', from which *τάλαντον* was formed later, and its derivative *ἀτάλαντος*, which occurs in an ancient formula[4]. Also Mycenaean has *tarasija* = *ταλασία*, that represents **talansi-* < **talanti-* according to Lejeune, Historia 10, 419.

The origin of this *-αντ-* has hardly been discussed. Mostly we simply find *ἀ-καμα-ντ-* (Frisk s.v. *κάμνω*) with a reference to Schwyzer, *Gr. Gr.* 1 p. 526: 3. There it is suggested that some of these forms are recent for original *-ās*, *-āo*. However, the evidence presented concerns names, which are for a great part non-IE (e.g. *Ἄτλας*, *Ἀτλαγενέων*). For *-κάμαντ-*, *-δάμαντ-*, *ταλαντ-* there is nothing to suggest this interpretation.

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[3] Barb's connection (Fs. Renard 1, p. 66–82) with Akk. *adamu* 'dark red' (as 'Hämatit, Blutstein') is far fetched.

[4] *Διὶ μῆτιν ἀτάλαντος* supposes *Διϝει μῆτιν ἀτάλαντος* as *Ruijgh* pointed out (*Etudes Myc.* p. 53).

For compounds like *Πολυδάμας* De Saussure (Rec. 588) supposed an original root noun **-δαμα-ς*, gen. **-δαμ-ος*. This idea was accepted by Pedersen, *Cinqième Déclinaison* 51 and Schwyzer (526 n. 5). However, it is not probable that this form was replaced by a type which did not at that time exist in the language. One would rather expect such a form to have become thematized into *-δαμος* (and merge with the type *ἱππόδαμος*).

Also it is not probable that these forms are new formations of Greek, as is suggested by analysis *-καμα-ντ-*, as it is not clear from where the stems *-καμα-*, *ταλα-* originated.

I think that these forms can be easily explained by assuming a suffix *-ent-*, for in all three instances we are concerned with roots ending in h_2. That is we have:

$$*t\underset{\circ}{l}h_2\text{-}ent\text{-} > \tau\alpha\lambda\alpha\nu\tau\text{-}$$
$$*d\underset{\circ}{m}h_2\text{-}ent\text{-} > \text{-}\delta\alpha\mu\alpha\nu\tau\text{-}$$

In fact we have the same phenomenon here as with *σταντ-* < **sth₂-ent-* (explained by Hoffmann), only here with a resonant preceding the laryngeal, which explains the *a*-vocalism of the root.

The original nominative cannot be reconstructed with certainty. If *τάλᾱς* has *-ανος* secondary for *-αντος* (Frisk 2, p. 848), *τάλᾱς* must represent **tl̥h₂-ent-s*. If the nominative originally had *-n̥t-s*, as we would expect with these proterodynamic forms (cf. Av. *stavas*, Joh. Narten, Fs. Kuiper p. 13–16, Watkins, *Idg. Gramm.* III 1, p. 142–144), we would have had **τάλᾰς*. It is not certain that *(πολυ-) τλᾱς* is ancient and represents **tleh₂-(e)nt-s*, since it may be analogical, cf. *δρᾰ́ς*, *βᾰ́ς*, *γνούς*, *δύς*.

The form **tl̥h₂-ent-* > *ταλαντ-* thus reconstructed is not without importance, as it explains the Greek sequence *aRa*, so hotly disputed, in a new way. It has mostly been interpreted as *ₑRh₂*, with a reduced vowel (cf. my *Development of the PIE Laryngeals in Greek* p. 206–209), but now it appears—as we could have realized earlier—that it can as well represent *R̥h₂-e*. E.g. *κάματος* can be **km̥h₂-etos*, *θάνατος* < **dhn̥h₂-etos*[5].

For some forms this interpretation seems very likely. In *Development* p. 195f., 200, I was surprised to find that, what are evidently old *m*-stems, seemed to have three ablaut phases of the root. This

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[5] Ruijgh (Lingua 27, 1971, 272) may be right in rejecting **dhu̯enh₂-* and the connection with Skt. *ádhvanīt*: we would expect **ἐσσανον* (cf. *ἔσσειον* < **ἐ-τϝεισ-*) or **ἔτθανον* (cf. *ἔδδεισα* < **ἐ-δϝεισ-*). — [Korr.-Nachtr.: As to *θάνατος* etc. F.M.J. Waanders arrived independently at the same analysis in Mnemosyne 1974.]

is very rare. As far as I know it is surely documented only for neuters: **ĝonu *ĝenu *ĝn-eu-s, *u̯ŏd- u̯ed- ud-* 'water' (Hitt. *u̯ātar u̯etenas, ὕδωρ*). From *m*-stems we find:

o-grade	**ḱolh₂-m-*	**konh₂-m-*	
red. grade	**ḱelh₂-m-*		**pelh₂-m-*
zero grade		**kn̥h₂-m-*	**pl̥h₂-m-*
found in	OHG *halm* etc.	OHG *hamma*	
	κάλαμος		*παλάμη palma*
		κνήμη	OIr. *lám*

Here it is much more probable to assume **pl̥h₂-em- > παλάμη* as this leaves us with only two root forms. That we must then assume two forms of the suffix, *-em-* beside *-m-*, gives no difficulty. Put together we have the following forms:

**polh₂-(m-)*
**pl̥h₂-em-* (*παλάμη*)
**pl̥h₂-m-* (OIr. *lám*)

In passing it may be mentioned that *κάματος* could be an original *t*-stem, and that *-κμητος* could derive from the same noun:

**ḱm̥h₂-et- > καματ-*
**ḱm̥h₂-t- > -κμητ-*

(Cf. OHG *mord* and Skt. *mr̥tá-* etc. 'dead'.)

Also for **καρασ-*, supposed to occur in *κάρηνα*, such a basic form, **ḱr̥h₂-es-*, is probable. Skt. *śíraḥ* supposes a form in *-os*, which presupposes the ablaut form *-es-*[6]. The same explanation is possible for *γαλήνη*.

A good explanation is now possible for *ταλα-* in coumpounds of the type *ταλαεργός*. It is generally (Schwyzer 441, Frisk) called a present or aorist stem, but Greek has neither a present nor an aorist stem *ταλα-*: there is no present at all and of the aorists *τλῆναι* and *ταλάσσαι* the stems are *τλη-* and *ταλασ(α)-*. Also *ταλάσσαι* is secondary for *τελάσσαι* (Hsch.), and the only evident source for *ταλάσσαι* instead of

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[6] This form is possibly found in Lat. *cerebrum* < **ceras-ro-* (not **ceresro-*!) < *ḱerh₂-es-*, but **ḱerh₂-s-* gives also **ceras-*. Zero grade of the suffix have Skt. *śīrṣ-n̥-* and Gr. *κρᾶατος*, Full grade of the root has Lat. *cerebrum*. What was the original paradigm? **ḱérh₂-os* (in an older phase **ḱérh₂-s*?), **ḱr̥h₂-és-*, **ḱr̥h₂-s*,? Cf. also Polomé, RBPH 45 (1967) 814.

τελάσσαι is exactly the ταλα- of the compounds (τάλαντα and τάλᾶς by themselves were hardly enough to cause this replacement). This means that compositional ταλα- is the source of ταλάσσαι and not vice versa. This ταλα- must therefore be an archaic form. As ταλα-εργός is of the type ἀρχέκακος, it is possible that it contains an *-e-*, and after the foregoing it is now evident that ταλα- represents **tl̥h₂-e-*. It is well known that the type ἀρχέκακος is of PIE date. The type with zero grade of the root is as well documented as that with full grade, e.g. Skt. *ṛdhád-vāra-*, Av. *ərədaṯ.fəδrī-*, *vīdaṯ.gav-*, *frādaṯ.gaēθā-* < **pro-dh₃-et-*, Gr. δακέθυμος (Simon., Soph.). This type with zero grade of the root and accent on the *-e-* may well be the oldest. It cannot be decided whether **tl̥h₂-e-* is a present or an aorist, or perhaps none of them. Of course it contains the same element as ταλαντ- < **tl̥h₂-ent-*.

Incidentally it may be mentioned that if the theory is correct that the first member of these compounds is an old third person singular (now Watkins, *Idg. Gr.* III 1 p. 94–98), ταλαί-πωρος can have **tl̥h₂-ei-*, with the 3rd sg. ending *-e* augmented with *-i* as in Gr. φέρει.

In any case this interpretation of ταλα-, which explains the origin of the vocalism of ταλάσσαι, is a good confirmation of our theory that *aRa* can represent *R̥h₂e*.

For other Greek forms with *aRa*, however, the new explanation cannot be made probable. But of many of them the structure is not clear: χαλάζα χαράδρα, ταραχή. Some may be non-IE, like φάλαγξ, χάραξ[7].

Also it is not certain that the same explanation is possible for Latin, e.g. *palma* < **palamā* < **pl̥h₂-em-*, because this supposes that the vowel which arises before the resonant was coloured to *a*. This has not been demonstrated, but I see no evidence to the contrary either. In *ianitrices*, however, the new interpretation is impossible (it would require *-et(e)r-* beside *-t(e)r-*). As we have two ablaut grades of this root, full grade in ἐνατηρ, Lith. *jéntė*, and zero grade in Skt. *yātar-*, the Latin word seems to contain a third ablaut form, for which I have no explanation.

In Celtic, e.g. W. *garan*, a development *R̥He* > *aRa* seems quite possible (as a vocalic resonant before vowel develops into *aR*). Here too further research is required.

In Sanskrit most cases of reduced vowel adduced by Kuiper (AO 20, 1948, 29–35) can be explained by a zero grade, e.g. *sína-* 'supply'

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[7] The remaining forms are καναχή, μαλακός, σφαραγέομαι, χαλαρός.

from **sn̥Ho-* (instead of **sₑnHo-*)[8]. *Timirá-* could have a suffix *-ira-* (Wackernagel, *AiGr.* II 2 p. 362)[9]. But for *tuviṣ-* I see no convincing interpretation without reduced vowel[10].

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[8] Also *śimī-* < **ḱm̥h₂-ih₂-*.

[9] On *stimita-* 'slow' cf. Mayrhofer *Wb.*

[10] Contamination of *taviṣ-* and *tuvi-* would be an arbitrary assumption. For *tuvi-* the most evident assumtion is **tuH-i-*. This is simpler than to connect it with *turá-*. As regards σαός and ταῦς, both semantically and formally it is not sure that they are cognate with *távīti* (nor to one another); I withdraw my speculations *Development* p. 249f.