

The Greek *i*- and *u*-Stems and πόλις, -ηος

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§ 1. The inflection of the *i*- and *u*-stems was treated by Kuiper in his *Notes on Vedic Noun-inflection* in the light of Pedersen's distinction between a protero- and a hysterodynamic inflection. As regards the inflectional type πόλις, -ηος, however, Kuiper made no explicit statement, though it might have been considered evident that the stem πολῖη- derives from a hysterodynamic¹⁾ type. It is the aim of these pages to demonstrate that we must indeed assume such an origin. It seems useful to give a short survey of the Greek *i*- and *u*-stems, and to make a few remarks on them because the treatment in many handbooks is not very clear and out-dated, while they are not systematically treated in the *Notes*.

For the sake of clarity the two possible types of PIE inflection may be repeated here.

sg. nom.	HD	<i>CéC-ēu-s/-ōu-s</i>	PD	<i>CéC-u-s</i>
acc.		<i>CC-éu-ṛ</i>		<i>CéC-u-m</i>
gen.		<i>CC-u-ós</i>		<i>CC-éu-s/-óu-s</i>
dat.		<i>CC-u-éi</i>		<i>CC-éu-i</i>
pl. nom.		<i>-éu-es</i>		<i>-éu-es?</i>
acc.		<i>-u-ṛs</i>		<i>-u-ns?</i>
gen.		<i>-u-ōm</i>		<i>-eu-ōm</i>
loc.		<i>-u-su</i>		<i>-eu-su</i>

A few general remarks must be made first.

¹⁾ Henceforth HD; PD will be used for proterodynamic.

As to the accent (for that of the HD nominative see KZ 86, 1972, 30–63), in both types the introduction of a ‘columnal’ accent may give a root as well as a suffix accent. Therefore, the original inflection cannot be inferred from the accent as long as it cannot be demonstrated that *one* of these accentual innovations was exclusively reserved for *one* of the ancient categories in Greek.

As for the vocalism of the root, this was identical in both categories, so this cannot be used as evidence either (unless it should prove that Greek in one case *always* generalized *one* root form).

As to the suffix, both types contain full and zero grade forms, which are, therefore, not decisive. Only a lengthened grade vowel (*η* or *ω*) is sure evidence for HD origin. Also the existence of old forms with *ī* or *ū* would prove a HD type.

If Greek itself gives thus very little decisive evidence about the original inflection, the only other way is to use etymological comparison. As, however, the PD type tended to be generalized in all languages, we can only rely on the cases where etymological comparison indicates HD origin. And such cases are very rare.

Taken together, then, we see that both internal and external evidence can only establish a HD inflection with certainty. This means that, though the PD inflection everywhere greatly extended its domain, it can hardly ever, not to say never, be established with certainty that it was the origin of a given Greek inflectional type. Indeed, all the forms that seem to continue the PD type can have developed from the HD one. (Essential was that Greek gave up the genitive ending *-s*.) It is, therefore, extremely difficult to say something definite as to the exact origin of most Greek inflectional types.

§ 2. With the *i*-stems the situation is much less complicated than with the *u*-stems, with which we shall start. I distinguish, partly on historical grounds, the following types.

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| 1° Ζεύς, Διὸς | 7a νέκυσ, -υος |
| 2° βασιλεύς, -ῆος | 7b ἐδητῆς, -ύος |
| 3° πᾶτρως, -ωος | 8a ₁ πληθῆς, -ύος |
| 4° εὔς, ἐηος? | 8a ₂ δρῦς, -υός |
| (πρέσβυς, -ηες?) | 8b ὀφρῦς, -ύος |
| 5° πῆχυνς, -εος/-εως | 9° ναῦς, νηός |
| 5a πέλεκυς, -εος/-εως | 10° γρηῦς, γρηός |
| 6° ἡδύς, -έος | 11° εἶνς, νῖος/νίεος |
| 7° πῆλυνς, -υος | 12° βοῦς, βοός |

Neuters

13°/1°	γόρνυ, γοννός	15°/3°	πῶν, -εος
14°/2°	δάκρυ, -νος	(16°/4°)	μῶλν

1° Ζεύς, Δι(φ)ός is the only word in Greek, as is *Dyáwih Diváh* in Sanskrit, that faithfully preserved the HD scheme, **Dī-ēu-s* **Di-ū-ós* (Notes 39). (One might ask whether the nominative had an older form **Déi-ēu-s*, as might be posited theoretically.) For the accusative (**Dī-ēm* < **Dī-ēu-m* for **Dī-éu-η*) see Notes 68–70.

2° βασιλεύς, -ῆος. Kuiper (Notes 56 et passim) showed the existence of a HD type *-ēu-s*, *-ū-ós*, from which the Greek inflection may have developed through generalization of *-ēu-* of the nominative, as in Avestan *nasāum*, *nas-āv-ō*.

The difficulties that remain may be summarized. 1) There are no inherited words with *-εως* (see 2). *Χελεύς* has cognates in Slavic (**žely*), but this name of an animal which is at home in eastern Europe, may well be non-IE. Furnée, *Vorgr.*²⁾ 247, points to the suffixes *-υμνα* : **-υfνα* (*-ῶνη*, Aeol. *-ωννα*), *-ωνη*. Also *χελεύς* appears late; *χέλῶς* is much older. 2) The words that are cognate with Indo-Iranian words that are hysterodynamic do not have *-εως*: *νέκως*, *πέλεκως*, *πῆχως*. (Furnée, *Vorgr.* 150, posits **πελεκεως* for *πελέ-κεα*· *πέλεκων* *δίστομον* Hsch., but we do not know how old this is; also note the accent.) 3) There are many names in *-εως* of pre-Greek origin. In Mycenaean they are the largest group but one (Landau, *Myk.-Gr. Personennamen* 178–80, 240).

So far there seem to be two arguments against Indo-European origin (1 and 2) and one that positively points to pre-Greek origin (nr. 3). The argument adduced for IE origin, that *πέλεκκων* contains the stem form of the oblique cases of a HD type, **pelek-ū-* (Notes 47), becomes dubious now that Furnée, *Vorgr.* 150f., ascribed the geminate to the pre-Greek substratum. The variant *βέλεκκος* (*ὄσπριόν τι*; see Furnée l.c.) shows *β* instead of *π*, which points to the Greek substratum. *Πελεκάω* beside *πελεκκάω* suggests gemination, though it remains possible that the first form was derived from *πέλεκως*, the other from *πέλεκκων* (< **pelek-ū-*) or influenced by it. Also gemination is not very frequent in substratum words (Furnée cites three cases). Nevertheless the form is now too dubious to be used as evidence. Another problem is presented by the fact that the Mycenaean feminines have *-eja* (e.g. *ijereja*) instead of expected *-euja* or

²⁾ E.J. Furnée, *Die wichtigsten konsonantischen Erscheinungen des Vor-griechischen* (The Hague 1972).

-ewja /-ewja/.³) Here again Mycenaean gives unexpected new evidence, which may prove to be very important. This form was discussed by Ruipérez (*Proc. Cambr. Coll. Myc. Stud.* 211–216; with reference to other views), whose interpretation seems to me convincing. It must be discussed here at some length. Ruipérez argues as follows.

The feminines of *u*-stem adjectives have *-u-ih₂* (> *-vī*) in Vedic, which form is also found in Hittite words. We may expect the same form in Greek, i.e. **-uja*. This form may have been replaced by *-eia*. This hypothesis is confirmed by the fact that for *-eia* of *u*-stem adjectives we find in Homer and in Ionic inscriptions also *-ea* forms, but not for *-eia* from *s*-stems (classical *-eia* must then have been analogically remade). The same may apply to the feminines from nouns in *-eus*, as appears from Cret. *Φοικεαν* and *Ιερήην* in Callimachus (*Epigr.* xl, 1). This *-eja* (not *-ewja*), replacing *-uja*, explains, and is confirmed by, Myc. *-eja*. The *-u-* in *-u-ih₂* is the zero grade of *-ēu-* (cf. *μήτρως μητρυνιά, θεράπων θεράπαινα*), “an alternative which we hesitate to recommend on account of the fact that the inflection of these nouns does not exhibit any vocalic ablaut . . . or else as the *u*-stem of *-us* nouns, in which, according to some scholars, the *-eus* nouns originated.”

The argument of the *-ea* forms is attractive, but the developments of *-ī-*, *-sī-* and *-uī-* require a new detailed study. E.g. we might expect that *-eia* from *-esja* had become *-ea* at least at the time of the Ionic inscriptions (cf. *-osīo* > *-ou*; *τέλειος/τέλεος* etc.). Also one would have expected the development *-eia* > *-ea* (from *-eja*) much earlier than in Ionic of the end of the epic phase. (Shipp, *Stud. Lg. Hom.* 31, thinks that *ὠκέα Ἰοίς* may be much older than *βαθέης* etc.; see on the last form Hoekstra, *Hom. Modifications* 119.) It seems to me, then, that *-eia* as we find it in Homer represents already an analogically remade form, and that Ion. *-ea* is a development of this restored *-eia*; a difficult, but — as it seems — neces-

³) Szemerényi, *Μνήμης χάριν* 2, 1957, 159–81 (repeated in *Atti e Mem.* 1° *Congr. Mic.* 2, 1967, 720–22 and *SMEA* 6, 1968, 7–13), seems not to know Kuiper's *Notes*. Because of the Mycenaean feminines in *-eja* he explains *-eus*, *-hos* from *-esus* *-esju-* (which would be the stem of *ἐὺς* ‘good’!). This is in all respects improbable, and impossible because *-esju-* gives *-ei(ʔ)-* in Attic-Ionic and *-eww-*, written *-ev(ʔ)-*, in Aeolic. His remark that “it is sufficient to note that after the loss of the digamma these developed into *-eas*” is understandable. For Homeric *-hos* can then in no way be explained (Ionic giving *-ei-* and Aeolic *-ev-*) and secondly *-eio-* was probably not metathesized at all. As far as I know there is no clear instance of it.

sary assumption. That $-εια$, or better $-ια$ in $-εια$, was restored (or rather protected) is a very probable assumption for Greek, which has feminines in $-ια$, $-εια$, $-νια$. But whether the $-εα$ forms are direct evidence or not, the explanation of $-εja$ remains. As regards the replacement of $-uja$ by $-εja$ we could point to the fact that the feminine ending of the adjectives with $-uēnt-$, $*-uēnt-ih_2 > *uatja > *-uasa$, was already replaced by $-wesa$ in Mycenaean: *pedewesa* [*pedwesa*] 'provided with feet', *mitowesa* [*mittowesa*] 'painted red'.

That the old feminines of the adjectives had $-u-ih_2$ also in Greek, is probably indicated by *Πλάταια* $< *plth_2-u-ih_2$, Skt. *pr̥thivī*. (In fact *Πλάταια* could also represent $*plth_2-eu-ih_2$, but if this was the basic form, the $-e-$ would probably have been immediately restored after the mass of forms where $-eu-$ did not follow a h_2 . So *Πλάταια* more probably is an old form with $-u-ih_2$. The difference with the development of $-u-ih_2$ with the other adjectives as assumed by Ruipérez is that here, in *Πλάταια*, h_2 was vocalized, while elsewhere $-u-ih_2$ followed a consonant that could not be vocalized.)

The form *μητροιά*, which Ruipérez cites, seems a close parallel for the supposed feminines in $-uja$ to masculines in $-εως$. For there can be no doubt that this word is derived from *μήτρως*, which continues a type in $-ōu-s$ (Frisk seems not to know *Notes* 57f.). However, the formation is probably not exactly the same. Kuiper explains *μητροιά* and OE *módrīe* from $*meh_2tr-uh_2-i(o)-$. Here too the intervocalic $-i-$ was preserved analogically (cf. for the regular loss $*poh_2iū > pōw$). Also it is important to see that here the $-u-$ in $-νια$ was not replaced. There was simply no basis for a change. Only $-ωια$ or $-οια$ could be expected, but such feminines are rare, while $-νια$ is supported by the ending of the perfect participle (Myc. *araruja*).

For the origin of the $-u-$ in $-uja$ Ruipérez gives two possibilities. As to the second of them, cited verbatim above, it is not clear to which theory it exactly refers. As far as I see it can only mean the theory that the $-εως$ nouns continue an PIE type of u -stems. (It has never been maintained that they were reshaped $-vς$ nouns.) In the first possibility it is only stated that in the inflection as we know it, we only find $-ēu-$. In fact we know that if the $-εως$ type is of PIE origin, it must have been a HD u -stem, presenting $-ēu-$, $-eu-$ as well as $-u-$ (Ruipeérez seems not to know Kuiper's *Notes*). There is, then, not the slightest difficulty in a feminine $-u-ih_2$ to these nouns, when they are of PIE origin.

But now I think we can draw at last a conclusion: a type masc. $-ēu-s$, fem. $-u-ih_2$ can only be of PIE origin. The feminines are

exactly the type to be expected in PIE, and it is hardly possible that, even if exactly this same type existed in the pre-Greek substratum language, it was taken over by Greek; it would have made feminines according to its own system (i.e. *-ēu-ja*). I think then, that Ruipérez's interpretation of the problematic Mycenaean ending *-eja* at last gives convincing evidence that the *-eus* nouns continue a Indo-European hysterodynamic inflection of *u*-stems.

3° Type *πάτωρ*, *-ωος*. Here we must assume a HD inflection with a nominative in *-ōu-s*, from where *-ōu-* > *-ω-* was generalized (Notes 37, 50, 56).⁴) (The fact that ἥρωος perhaps did not have a *u*, when Myc. *tiriseroe* is rightly interpreted as **τρισηρωι*, does not prove that the interpretation of this whole category is wrong, as one might read in Chantraine's words, *Morph.*² 69.)

4° For the sake of completeness the much debated form *ηγος*, if this is a genitive of *ἔως*, may be mentioned. It could continue a HD genitive **es-ēu-os*, but it is difficult to combine this with *ἡύς* etc., if this represents **ēs-u-* (cf. my *Development of the PIE Laryngeals in Greek* 287f.; though at present I am less sceptic as regards Ruijgh's suggestion that the *ē* belonged to the neuter form).

πρέσβυς would also belong to this type, when (pseudo-) Hes. Sc. 245 *πρέσβηες* is ancient. However, it might be analogic, after *βασιλῆες* (Chantraine, *Morph.*² 93).

Important is the alternation *γ/β*. The *γ* of (Doric) *πρειγυς* can have arisen before zero grade *-u-*, but the *β* is more difficult. Neither before *-u-* nor before *-ēu-* (there is no indication of *-ou-*) is it regular. It is hard to suppose that it was taken over from Aeolic, which moreover seems to have *γ* (*πρισγεες*). Therefore the *β* should have arisen before *-u-* (whether *-g^uuos* > *-β^uος* > *-βος* or rather *-g^uuos* > *-g^uος* > *β(β)ος*; the only parallel is *ἐκατόμβη* < *-g^u(H)u-ā*, Lejeune, *Traité phon.* 72). This would suggest HD inflection.

However, the situation changes entirely when Furnée, *Vorgr.* 295 n. 15, 301 A 3, 353 n. 52, 389 with Nachtr. (also 281), is right in considering the word as non-IE („Daß die verschiedenen Formen von *πρεσγυς* sich nicht sämtlich dialektisch erklären lassen, ist wohl ohne weiteres klar“, p. 353; note *ει/ιη/εσ/ισ/εισ*, p. 301). For the labio-velar cf. Kuiper, *Lingua* 21 (1968) 269–77, Beekes, *Development* 193d., Furnée 388ff. It should be stressed that the pre-Greek labio-velars did *not* develop exactly in the same way as the PIE

⁴) For *ἄλωος* the old oblique stem *āl-* is found in the Cyprian derivative *alawo* [*alw-o-*], cf. *Mnemosyne* 24, 1972, 350–52.

labio-velars. In this way the γ/β fits better, because the explanation suggested above is not too convincing. Though this loan may of course have been early incorporated in a Greek inflection, it is safer not to base any conclusions on it.⁵⁾

5° and 7° Some general remarks about the substantives in *-vs*, *-eos*/*-εως* and *-vs*, *-vos* must first be made. Kühner-Blass and Schwyzler give hardly any explicit statement. Chantraine (*Morph.*²⁾ states that the first type is well represented (p. 91 “un bon nombre de substantifs”) and the second “n’est pas très richement représenté” (p. 93). This could obscure a right view on these problems. In fact only three or four nouns have *-eos*/*-εως* (*πῆχυσ*, *πέλεκυς*, *ἔργχελυς*—which has also *-vos* forms—and in Attic *πρέσβυς*), whereas I count 19 words with *-vs*, *-vos*.⁶⁾

As to the accentuation, too, there must be made a correction. Vendryes, *Traité d’accent.* 179, Chantraine, *Formation* 119, Bally, *Manuel d’accent.* 78, state that masculines are paroxytona, feminines oxytona. The last statement is evidently wrong: only five feminines (in *-vs*) are oxytona, but 15 are paroxytona! (See note 6; add *πῆχυσ* *πέλεκυς* to the masculines, *ἔργχελυς* to the feminines.) The words in *-ūs* are all oxytona⁷⁾ and feminines (except *ἰχθύς*). (*ἰχθύς* and *ὄφρυς*—also accented *ū*—are included in type 8b.)

5° (See above on 5° and 7°.) To the type *πῆχυσ*, *-eos*, Att. *-εως*, belong *πέλεκυς* and *ἔργχελυς* (which also has *-vos*), and in Attic *πρέσβυς* (see 4°). As *πῆχυσ* and *πέλεκυς* have cognates that are evidently of HD origin (Av. *-bāzāuš*, Skt. *paraśvā*), the Greek declension must be derived from the same type. Kuiper regards the Ionic (non-Attic) type *-eos* as older than Att. *-εως* (*Notes* 45), and points to the importance of the dual for *πῆχυσ*, which had (HD) *πήχε(F)ε*. However, this explanation does not hold for *πέλεκυς* and *ἔργχελυς*, where the same generalization of *-εF-* is found (nor is it probable that

⁵⁾ The theory that *πρέσβα* represents an ancient feminine in *-uh₂* can therefore better be given up (cf. *Development* 158; but it should be retained that *πότνα* was coined after *πρέσβα*, ib. 156). Then *αἰπά*, *αἰπήν* (ib. 158) must not be explained in this way either. Note that *αἰπύς* is also of pre-Greek origin: Furnée, *Vorgr.* 158, who convincingly connects *ἐξαίφνης*, *ἐξαπίνης*, *ἄφαρ*, *ἄφρω*, *αἶψα*.

⁶⁾ Masc. *βότρυς*, *θρηῆνυς*, *νέκυς*, *στάχυς*, feminine *ἄρκυς*, *ἀτράφαξυς*, *γένυς*, *γῆρυς*, *ἴνυς*, *κάχρυς*, *κῆκυς*, *κόρυθυς*, *μίμαρκυς*, *μίτυς*, *πίττυς*, *ῥάπ/φρυς*, *σίκυς*, *χέλυς* and (oxytone) *δελφύς*, *ἰγνύς*, *ἰκνύς*, *λιγνύς*, *ὄστρυς* (*-vs*? Frisk).

⁷⁾ *ἀχλύς*, *ἰλύς*, *ἰξύς*, *ισχύς*, *νηδύς*, *οἰξύς*, *ὄσφυς*, *πληθύς* and all nouns in *-τῶς*. Some are also given with a circumflex.

these words followed *πῆχυν*). Also, as we shall see, *νῖν* too, which is probably of HD origin, had generalized *-εῖ-* (see 11°). It seems, then, that *-εῖ-* was generalized from the accusative singular and the nominative plural (and dual).

The Attic genitive *ἄστεως* is generally considered as analogical after *πόλεως*. But I think Schwyzler (p. 573) is right when he says that this is much less evident for *πῆχυν* etc. Kuiper too thinks that the creation of parallel *i*- and *u*- declensions was the essential factor. To my mind the very restricted number (three or four) tells against this assumption. (In *ἔγγελυν* we see *-voς* forms coming in.) When we then see that two of the three words are of HD origin one would be inclined to consider the possibility that *-εως* continues *-ηῖος*. It might be objected that Ionic *-εος* (*πήχεος* Hp., Hdt., *πελέκεος* according to Hdn. Gr.; *ἔγγελυν* has *-voς*) would be difficult to explain, but Ionic also has *-εος* from nouns in *-ευν* (Thumb-Scherer 2.273—hardly after the *s*-stems—; Hdt. generally). I see no means to decide the question.

5a. For a supposed subtype with long *v*, *πέλεκυν*, see 7a.

6° *ῆδύς*, *-έος*. In principle *-ευ-* may originate in both types. It is hard to decide. Beside the well-known type *πλατός*, Skt. *prthú-*, we find full grade of the root in *ῆδύς*, Skt. *svādú-*, perhaps in *πολύς* (**polh₁-*), in Lat. *brevis*, *levis*, in Arm. *melk*. It is probable that this full grade had the accent, as might still be found in *θῆλυν* and perhaps in *Πλάταια* in spite of its zero grade (the plural *Πλαταιαί* indicates a shifting accent). However, full grade of the root and shifting accent, occurring in both declensions, do not give a clue. The dialectal forms of adjectives like *μανός*, *στενός*, *ξένος*, *μόνος* show a group *-νῖ-*. This might, of course, have come from a (PD) nominative-accusative stem *-νν-*, but it will rather be an old group *-νυ-* and so indicate a HD inflection. In *κενός*/*κεινός* beside *κενεός*/*κενευῖος* we probably have forms *-ν-* and *-ευ-* of that declension side by side.⁸) Cf. sub 11° on *νίος*.

The oblique stem *-εῖ-*, then, may well be of hysterodynamic origin, as in *πῆχυν -εος*. But we have no right to exclude the possibility that there were also adjectives of the other type. (Cf. 4° on *εἶος*.)

⁸) Furnée, *Vorgr.* 221A 5, 226, 382, considers these adjectives as pre-Greek. I do not consider this as proven, but it merits serious consideration. He adduces *βανόν*· *λεπτόν* beside *μανός*. Note *σάνει*· *〈σ〉τείνεται* Hsch. For *ξένος* the *ξ* points to pre-Greek origin.

7° *πίπυς*, *-υος*. Cf. above on 5° and 7°. Kuiper considers them as continuing a HD type with the zero grade of the suffix of the oblique cases (*-υ-os*, *-υ-si*, etc.) generalized, comparing Skt. *krátuḥ* *krátvaḥ*. For *ρέκυς* (on the long *v* see below) the Avestan acc. *nasāum* proves this beyond doubt. However, one might also suppose that the stem of the nominative and accusative of a PD type was the starting point.⁹⁾ In fact both explanations may well hold good, some words being of one, others of the other origin. (Also many foreign elements have come in, since most words are probably not of IE origin.)

7a. *ρέκυς*, *-υος* and *πέλεκυς*, *-εος*. As Av. *nasāum* and Skt. *paraśvā* show, these words are of HD origin. However, the nominative makes difficulty. Kuiper (*Notes* 5, 37, 47–50), following Pedersen, connects *-υς* with *-ēus*. As a phonetical development *ēu* > *ū* is of course impossible, we must assume that *ēu/u* was replaced by *ū/v*. Such a transformation, however, is of a different kind from those we normally find. One might compare *-vū-μi/-vυ-μεν* for *-neu-/nu-*, but here we do not have *-ēu-*, and we probably have a normal kind of analogy after *-vā-/va-* from *-neh₂-/-nh₂-*, i.e. *va : vā = vū : x¹⁰⁾*.

⁹⁾ A sure instance of the last is *γουνός*, *δουρός* < **γouF-os*, *douF-os* (for PIE **ǵn-eu-s*, **dr-eu-s*) with the stem form of the nominative, *δόρυ*.

¹⁰⁾ There is one other case where *ū* is thought to have replaced original *eu*, 2 pl. imperative *κλῦτε* (from which *κλῦθι* would have its long *v*) for **kleute* indicated by Ved. *śrótā*, Av. *sraotā*. This explanation too seems to me improbable. The long *v* might be simply due to metrical lengthening in Homer (in both forms; e.g. Strunk, *Nasalpräsentien* 83f.), but I think that the form is rather analogical. Chantraine, *Gramm. hom.* 1.379, suggests as origin “racines dissyllabiques comme *δῶθι*”. I think that disyllabic roots are not involved in any special way (though *δῶθι* might be called one from a PIE point of view). The fact is that *-θι* occurs 1. in the presents *ἴθι*, *ἴσθι*, *φάθι* and Hom. *δίδωθι*, *ἰληθι*, *ῥμνῦθι*, *ῥρνῦθι*; 2. in perfects *ἴσθι*, *ἀνώχθι*, *πέπ(ε)ισθι*, *δείδιθι*, *ἔσταθι*, *τέθναθι*, *τέτλαθι*; 3. in aorists *στῆθι*, *-βῆθι*, *τλήθι*, *γνώθι*, *δῶθι*, *πίθι* and the type *φάνηθι*, *σώθητι*. This means that *-θι* occurs after short vowel only in three presents (*ἴθι*, *ἴσθι*, *φάθι*; of which the first two verbs are outside the general system in several ways) and in perfects that have reduplication. Homer indeed has *ῥμννθι* *ῥρ-*, but these are trisyllabic forms (as those of the perfect). All disyllables (*ἴθι*, *ἴσθι* and *φάθι* again excepted) have a long vowel (and nearly all trisyllables a short vowel) before *-θι*, and to this group belongs not only *δῶθι* but also *πίθι* that stands beside *ἔπιον* as *κλῦθι* beside *ἔκλυον*. *Κλῦθι* therefore is most probably analogical (with *κλῦτε* following it). (*Σύθι*· *ἐλθέ* Hsch. might contradict it, but what is the value of the accent?)

Nor is there enough reason to consider *ῥομεν* as continuing **eǵ-o-* (e.g. Schwyzler 674). It has long *i* in Homer only at the beginning of a verse (Chan-

If, then, \bar{v}/v in these words must be explained, it must be after the types 8, as $\delta\phi\rho\bar{\upsilon}\varsigma$, $-\acute{\upsilon}\omicron\varsigma$. This influence might be explained by the fact that some words may have had feminines in $-\mu\bar{e}h_2-s$ (the type 8a₂), as was established by Kuiper (*Notes* 57), who pointed to $*medh-\bar{e}u-s$ $*\eta\bar{d}h-\mu\bar{o}s$ (Ved. *mádhuh mádhvah*) with $*medh-\mu\bar{e}h_2-s$ $*\eta\bar{d}h-u-h_2-os$ (*madhuḥ* AS 7.56,2b). (We may have such a couple in $\chi\epsilon\lambda\acute{\epsilon}\upsilon\varsigma$ ($*ghel-\bar{e}u-s$) — $\chi\acute{\epsilon}\lambda\bar{\upsilon}\varsigma$ ($*ghel-\mu\bar{e}h_2-s$), but see sub 2°.)

It should be remarked also that for $\pi\acute{\epsilon}\lambda\epsilon\kappa\upsilon\varsigma$, $-εος$ a replacement $\bar{e}u/u$ by \bar{v}/v seems impossible.

The basic problem, however, is whether the long *v* existed at all. The words here relevant (that can be shown to have been HD) are $\nu\acute{\epsilon}\kappa\upsilon\varsigma$, $\pi\acute{\epsilon}\lambda\epsilon\kappa\upsilon\varsigma$ and $\gamma\acute{\epsilon}\nu\upsilon\varsigma$. The last word has long *v* only twice in Euripides (*El.* 1214, *Fr.* 530,6), but the same author also uses the short ending (*Ph.* 63 and ($\gamma\acute{\epsilon}\nu\upsilon$) *Andr.* 1181). It is most probable, then, that this is simply a metrical licence, as is generally assumed (LSJ, Frisk, Chantraine, *Dict. étym.*). ($\Sigma\tau\acute{\alpha}\chi\upsilon\varsigma$, which has $-\bar{v}\varsigma$ in Euripides (*HF* 5) but $-\bar{v}\nu$ in Callimachus and Ap. Rh., does not seem of importance, but that it provides a parallel for $\gamma\acute{\epsilon}\nu\upsilon\varsigma$.) $\Pi\acute{\epsilon}\lambda\epsilon\kappa\upsilon\varsigma$ has long *v* only in Homer, $-\bar{v}\nu$ P 520 and $-\bar{v}\varsigma$ I' 60. In the last case it stands before $\bar{\omega}\varsigma$, before which a short syllable is very often lengthened ($\sigma\upsilon\delta\omicron\varsigma$ $\bar{\omega}\varsigma$, $\sigma\acute{\upsilon}\epsilon\varsigma$ $\bar{\omega}\varsigma$, $\pi\acute{\alpha}\iota\varsigma$ $\bar{\omega}\varsigma$, $\kappa\alpha\kappa\omicron\nu$, $\Delta\iota\bar{\iota}$, $\kappa\acute{\upsilon}\nu\epsilon\varsigma$, $\theta\epsilon\omicron\nu$ etc. etc.). It seems, therefore, that the one remaining instance is rather due to metrical licence too. Conclusive evidence provides the accent: $\pi\acute{\epsilon}\lambda\epsilon\kappa\upsilon\varsigma$ must have short *v*. (The accent is perhaps confirmed by $\pi\acute{\epsilon}\lambda\epsilon\kappa\kappa\omicron\nu$.) $\nu\acute{\epsilon}\kappa\upsilon\varsigma$ seems more difficult. It has very often $-\bar{v}\varsigma$, $-\bar{v}\nu$ in Homer (eight times), but again only in Homer. Here it occurs mostly before the bucolic caesura, where it is often followed by a consonant ($\nu\acute{\epsilon}\kappa\upsilon\nu$ $\phi\acute{\epsilon}\rho\omicron\nu$ three times, etc.). In the present context, then, it seems most probable to me that this is also only a licence of the epic language. In the classical language we find $\nu\acute{\epsilon}\kappa\bar{\upsilon}\varsigma$, $-\bar{v}\nu$ in Eur. *Or.* 1585, *Supp.* 70, Simon. 114,5, A.R. 4, 480, Bion 1,71 (twice), *AP* 7,1 (Alc. Mess.) (cf. Kühner-Blass 1.439, LSJ, Frisk). Already in the *Grundriß* (II 1.210) it was assumed that this *v* was long, but on the

traine, *Gramm. hom.* 1.457) and it behaves like a 'runover word' (though it is perhaps not exactly one), on which see Hoekstra, *Hom. Modifications*, spec. 121–23 (further see the index). (Even less, of course, is $\Delta\iota\phi\iota\lambda\omicron\varsigma$ a reality.)

As to the well known problems $*s\check{u}n\upsilon s$ and $*\mu\check{i}r\omicron s$ I can only say that it is remarkable that both roots contained a laryngeal. Therefore I would suppose that in $*seuH-n-/suH-n-$ and $*\mu eiH-r-/ \mu iH-r-$ at some time a laryngeal disappeared, but the conditions cannot yet be determined.

basis of a supposed ablaut $\bar{e}u/u$ (with $\bar{e}u$ in Av. *nasāum*). Such an ablaut can no more be accepted, and the basis for accepting the Homeric long v as a reality therefore disappears. If one would nevertheless consider the \bar{v} as a reality, one would have to assume that $\bar{e}u/u$ was replaced by \bar{v}/v (which is not possible for $\pi\acute{\epsilon}\lambda\epsilon\kappa\nu\varsigma$, $-\epsilon\omicron\varsigma$) after an existing type \bar{v}/v , but that it was after Homer again brought over to the class $-\bar{v}\varsigma$, $-\nu\omicron\varsigma$, which is an improbable construction.

All taken together it means that the long v cannot be accounted for and that the evidence itself for long v is unreliable. I think, therefore, that there is no type $-\bar{v}\varsigma$, $-\nu\omicron\varsigma$ or $-\bar{v}\varsigma$, $-\epsilon\omicron\varsigma$ continuing a HD paradigm.¹¹⁾

7b. As a subtype of the preceding group could be considered the nouns in $-\tau\acute{\omicron}\varsigma$, $\acute{\alpha}\kappa\omicron\nu\tau\iota\sigma\tau\acute{\omicron}\varsigma$, $\acute{\epsilon}\delta\eta\tau\acute{\omicron}\varsigma$ etc. (see e.g. Chantraine, *Formation* 290–92). They are mostly deverbatives. Kuiper has convincingly demonstrated HD origin for their Indian cognates (*Notes* 53, on the basis of the gerunds in $-tv\acute{a}$) and therefore supposed that the long v replaced $-\bar{e}u-$. In the light of the preceding I think that this idea must be given up, but I cannot give a convincing alternative. As compared with $\nu\acute{\epsilon}\kappa\nu\varsigma$ etc. it must be observed that the nouns in $-\tau\acute{\omicron}\varsigma$ are feminine, and are oxytona. All words in $-\bar{v}\varsigma$ are feminine oxytona (except $\iota\chi\theta\bar{v}\varsigma$), and we might therefore suppose that the fact that the words in $-\tau\acute{\omicron}\varsigma$ were feminine caused the introduction of the long u . One might also suppose that PIE knew feminines in $-t\bar{u}-\bar{e}h_2-s$ beside masculines in $-\bar{t}\bar{e}u-s$, and that these were generalized in Greek. Both suggestions, however, cannot be substantiated.

8° Some words originally had u followed by a laryngeal. In PIE they were, therefore, not u -stems.

¹¹⁾ As the Greek evidence for \bar{v} probably disappears, the Indian facts compared (*Notes* 49f.) must probably be interpreted otherwise. This evidence was *dámūnas*- ‘householder, master’, *ḡjūnas*- ‘gradnasig’ (the two words in any case of very different structure), *parśūh* ‘rib’, beside *párśu-*, in Gaṇa-pāṭha 244, 11) and *agregūh* (\bar{u} given by Patañjali and in the Candravṛtti). I cannot explain these forms. Perhaps for the first two lengthening (of short u) must be considered (cf. *párinās*- < **pelh₁nes*-). It has been supposed that Lith. *namūnaitis* ‘Sohn des Wirts’ derived from **namūnas* = Skt. *dámūnas*. Lithuanian further has a word *viršūnė* of this type. Latin has *pecūnia*, *fortūna*, *Portūnus*, *Neptūnus*. These suffixes have not been explained, but they rather point to an old $-\bar{u}n$ - < $-\bar{u}Hn$ -.

Kuiper pointed out (*Zarthoshti Madressa Centenary Volume*, Bombay 1967, 123–29) that the Gath.-Avestan nom. sg. *ahū* (Y 27.13) must be an old asigmatic hysterodynamic nominative, but it is not sure whether the $-u$ was long or short.

8a₁. Πληθύνς (beside Lat. *plēbēs*) seems to derive from **pleh₁dhu-ēh₁-s*, -*dhu-h₁-os*, with -*uh₁*- generalized (Pedersen, *Cinquième déclinaison* 62f.).

8a₂. The parallel form with *h₂* will have been more frequent than the preceding, but it is mostly not possible to distinguish between the two. Here may belong δρῦς, from **dér-*u-ēh₂-s** **dru-h₂-ós* (see KZ 86, 1972, 36).

8b. Ὀφρῦς must have been a root noun, **h₃bhrēuH-s* **h₃bhruH-os* (Notes 9).¹² Here may belong ἰχθῦς.

In general it is difficult to decide to which of the three classes a given word belongs.

9° *ναῦς*, *νηός* must represent **neh₂us* **neh₂uós* (which points to a HD paradigm, i.e. an original **neh₂-ēu-s* **nh₂-u-ós*), Notes 39f.

10° *γρηῦς*, gen. Att. *γρᾶός* cannot have had the same form as *ναῦς*, since *γρηός* is mostly disyllabic in Homer. There must have been a consonant between *h₂* (of **greh₂-*) and *u*, which can only have been *ǵ* (*H* or *u* are improbable as it would imply a group of two identical consonants; hiatus from *H* or *s* would not have been preserved so long). A nominative **greh₂ǵus* gives no problem, but **gr(e)h₂-ǵu-os* would have given **γραιος* (with -*ι*- retained down to the classical period; cf. on *νίος* below); was the -*ι*- removed after the nominative? As a PD gen. **greh₂-ǵeu-s* is even more difficult, we must probably accept HD origin; Notes 51.

11° A few words may be added on *νίος*. Kuiper, Notes 50f., assumed HD origin, but thought that the oldest Greek inflection had no -*ε*- and that *νίεα* was an innovation, adding *νίεα*: *νίεος* = *εὐρέα*: *εὐρέος*. This would mean, however, that *νίεα* was formed on the basis of *νίεος*, which must then be old. (Also *εὐρέα*, being an isolated creation of the epic language for the sake of the metre, cannot have played a part.) Schwyzler explained the -*ε*- as due to influence of *ῥόδός* (p. 574), but it can hardly be seen why the adjectives would have influenced this one substantive. A study of the forms in Homer seems to suggest that the forms without *ε* are older, cf. *νίος*: *νίεος* = Il. 10: 1, Od. 3: 5. Also in one case we are almost sure that *νίεος* stands for older *νίεσ*: B 518 *νίεες Ἰφίτρον μεγαθύμον Ναυπολίδαο* for *νίεσ Φιφίτροο μεγαθύμοο* N. (cf. Hoekstra, *Hom. Modifications* 24). The great majority of *νίεσ* and *νίας* occur in the verse final *ὦ. Ἀχαιῶν*. It

¹² For another word of this type see *Orbis* 22, 1973 (**krēuh₂-s*, Av. *xrū*, Dutch *rauw* etc.).

should be stressed, however, that in itself this does not prove that the form, and the formula, is very old. However, the ε forms are (beside the thematic ones) the only forms of Attic,^{12a)} and decisive seems that in Crete (where $\acute{\nu}\acute{\iota}\nu\varsigma$ and $\acute{\nu}\acute{\iota}\nu\upsilon$ are also preserved) the Laws of Gortyn oppose $\acute{\nu}\acute{\iota}\varepsilon\varsigma$ to acc. $\acute{\nu}\acute{\iota}\nu\varsigma$ (Chantraine, *Morph.*² 95). This proves, I think, that ε is old at least in this form. However, our problem is not settled by it, for it seems that both the PD and the HD inflection had this nominative (*Notes* 30 and 36). But the form $*sui\grave{\alpha}-$, to be assumed for the ε -less forms, which could be explained as the generalized nom.-acc. stem of a PD type, is rather of HD origin: even Cretan $\acute{\nu}\acute{\iota}\nu\varsigma$ $\acute{\nu}\acute{\iota}\varepsilon\varsigma$ $\acute{\nu}\acute{\iota}\nu\upsilon$ suppose a form $*sui\grave{\alpha}-$ as the origin of the $-i-$. On this assumption the oldest Greek and the PIE inflection may have been:

$\acute{\nu}\acute{\iota}\nu\varsigma$	$\acute{\nu}\acute{\iota}\varepsilon\varsigma$	PIE	$*s\acute{\epsilon}u-\acute{\imath}\acute{\epsilon}u-s$	$-\acute{\imath}\acute{\epsilon}u-es$
$\acute{\nu}\acute{\iota}\nu$ ($\acute{\nu}\acute{\iota}\acute{\epsilon}a$?)	$\acute{\nu}\acute{\iota}a\varsigma$ (or $\acute{\nu}\acute{\iota}\nu\varsigma$?)		$*su-\acute{\imath}\acute{\epsilon}u-\eta$	$-\acute{\imath}\acute{\epsilon}u-\eta s$
$\acute{\nu}\acute{\iota}o\varsigma$	$\acute{\nu}\acute{\iota}o\upsilon$		$*su-\acute{\imath}\acute{\epsilon}u-\acute{o}s$	$-\acute{\imath}\acute{\epsilon}u-\acute{o}m$
$\acute{\nu}\acute{\iota}i$	$\acute{\nu}\acute{\iota}a\varsigma i$ (for $*\acute{\nu}\acute{\iota}\nu\sigma i$?)		$*su-\acute{\imath}\acute{\epsilon}u-\acute{\epsilon}i$	$-\acute{\imath}\acute{\epsilon}u-si$

(If $\acute{\nu}\acute{\iota}\varepsilon\varsigma$: $\acute{\nu}\acute{\iota}a\varsigma$ is old, the difference would have been extremely unpleasant for the epic poet, who would like to have forms of the same metrical structure; cf. $\acute{\upsilon}$. $\acute{\alpha}\chi\alpha\iota\acute{\omega}\nu$.)

The Attic type $\acute{\nu}\acute{\iota}\acute{\upsilon}\varsigma$ $\acute{\nu}\acute{\iota}\acute{\epsilon}o\varsigma$ is exactly $\pi\eta\chi\upsilon\varsigma$, $-eo\varsigma$, while $\acute{\nu}\acute{\iota}\nu\varsigma$ $\acute{\nu}\acute{\iota}o\varsigma$ parallels $\nu\acute{\alpha}\upsilon\varsigma$ $\eta\eta\acute{o}\varsigma$.

12° $\beta o\acute{\upsilon}\varsigma$, $\beta o\acute{o}\varsigma$ must, as against $\nu\acute{\alpha}\upsilon\varsigma$ $\eta\eta\acute{o}\varsigma$, represent a PD noun, probably $*g^u\acute{o}H-u-s$ $*g^uH-\acute{\epsilon}u-s$ (*Notes* 32f.).

Neuters

13°/1° The type $\gamma\acute{o}\nu\upsilon$ $\gamma\omicron\nu\nu\acute{o}\varsigma$, $\delta\acute{o}\rho\upsilon$ $\delta\omicron\nu\rho\acute{o}\varsigma$ is secondary for PD $*doru$ $*dreus$ (Ved. $d\acute{a}ru$ $dr\acute{o}h$, Av. $d\acute{a}uru$ $drao\acute{s}$); *Notes* 31.

14°/2° $\delta\acute{\alpha}\chi\rho\upsilon$, $-vo\varsigma$ (also $\mu\acute{\epsilon}\theta\upsilon$). Perhaps the same type as $\gamma\acute{o}\nu\upsilon$ $\gamma\omicron\nu\nu\acute{o}\varsigma$ with $-vo\varsigma$ instead of $-fo\varsigma$ in accordance with Sievers' Law ($-u\eta-$ after a consonant group. But $\mu\acute{\epsilon}\theta\upsilon$ is of HD origin: Skt. $m\acute{a}dhv\acute{a}h$ $m\acute{a}dhv\acute{a}$, *Notes* 41.

^{12a)} As Attic has generalized the e -forms and as these belong to a later level in Homer, they seem to be Attic-Ionic. This could imply that the e -less forms in Homer are Aeolic, which would agree with the explanation of the accent of $\acute{\nu}\acute{\iota}o\varsigma$ as Aeolic. May we conclude from B 518 $\acute{\nu}\acute{\iota}\varepsilon\varsigma$ $\acute{\nu}\acute{\iota}\rho\acute{\iota}\tau\omicron\omicron$ that Aeolic also knew genitives in $-oo$? (In Thessalian we find $-ov$, $-o$ as well as $-oio$, $-oi$, cf. Thumb-Scherer 2². 64f. If they indeed coexisted, $-ou$ cannot have developed from $-oio$.)

15°/3° Πῶν, -εος. Nothing definite can be said. As to ἄστυ, it is not certain that it is cognate with Skt. *vāstu/vāstu* (Greek *ἑασ-* is difficult; *υἷς*-? cf. *βαρά* as against *γυνή* from **g^u_n-*). Connection with the root **h₂ues-* is hardly possible for Greek (where we would expect *ἄσ-*). Furnée, *Vorgr.* 295 n. 15, 339 and 46 with n. 113 now adduces evidence for pre-Greek origin (Boeot. *αἴστυ*, the derivative *ἄστυρον*).

(16°/4°) A few words are evidently of non-IE origin, *βράθυ*, *μῶλυ*, *μῖσιν*, *νᾶπιν*, *σῶρον*. Some have variants in *-ι*.

§ 3. The *i*-stems of Greek present the following types.

1° *ῥις*, *οῖος* is of HD origin, as is Skt. *áviḥ avyáḥ*, because of the genitive in *-i-os*. Only *φθόις* follows the same pattern.

2° *πόλις*, *-ιος*. This type can be explained in different ways, as can *πίπυς*, *-υος* (see above). As in Ionic *πόλιος* is evidently later than *πόλῃος*, it is rather built on the nominative stem (*πόλι-ς*) than a generalization of a HD zero grade. Of course both processes may have occurred.

3° *πόλις*, *-ηος*/*-εως*, on which see below.

4° The type *πειθῶ*, *-οῦς* will represent the HD type *-ḍi*, *-i-os* found in Skt. *sákhā*, dat. *sákhye* (**sókH-ḍi*, **s(e)kH-i-éi*). This type has no *-s* in the nominative. (Note that here too no inherited forms can be shown. On the other hand we do have evidence for pre-Greek words in *-ω*, *καμινῶ*, *ληκῶ*, *Σαπφῶ*/*Ψάπφω* etc. Cf. Schwyzler 479.)

§ 4. The fact that *ῥις* was HD does not imply that the type *πόλις*, *-ηος*¹³) cannot have been so; cf. *πῆχυνς* and *-ευνς*, *-ηος*. That there is no trace of a PD *i*-inflection¹⁴) might be explained as follows. In the oblique cases the *i* of *-ei-* was lost early (probably

¹³) The emphasis is on *type*. *Πόλις* itself may be of pre-Greek origin, because of *πότλις*; see Furnée, *Vorgr.* 307–19.

¹⁴) An indirect trace is found in *ὄστέον*, which has *-εον* from *-ei-om*, of which *-ei-* is the oblique stem form of the nominative found in Skt. *ásthi* (Kuiper, *Notes* 63). But here Hitt. *hastai* suggests a HD paradigm. I cannot agree with Kuiper that *máhi* (beside *mahām*), *pásu* (beside *paśúh* from **pek-ēu-s*) proves that the Hittite type cannot be old, for in general Hittite seems to have preserved the distinction in the nominatives better than Sanskrit. But the neuters are still very difficult.

at the end of the Mycenaean period¹⁵) and the *-e-* must have been contracted with the following vowel early. This made the inflection less clear, which is why it was given up. One form, however, may have been taken over from a PD type, the dative *πόλει*. Whether *πόληι* (once in Homer and in a few inscriptions) is old or not, it cannot have given *πόλει* (*-ēi* remains as *-η* (*-ηι*), and certainly *-ēi-i* will have remained as *-ηι*). The original HD ending *-i-ei* can hardly be the origin of *-ei*, so that we must assume PD *-e_i-i* as its source.

§ 5. The stem *πολη-* can hardly be explained as due to influence of the nouns in *-εως*, *-ηος* or of *πρέσβως*, *πρεσβη-*. The last form is isolated, and *-εως*, *-ηος* can hardly have transformed *-ις* (*-εος*, if it was originally PD). The type *πῆχως*, *-εως* is only Attic, comprises only a few words and was rather itself formed after *πόλις*, *-ηος*. As far as I know it has never been supposed that this type (*πολη-*) was formed after another inflectional type.

§ 6. The generally accepted explanation (e.g. Chantraine, *Morph.*² 88) derives *πολη-* from an old locative with a lengthened grade stem. This would be understandable because of the meaning of the word *πόλις*. However, this can be no argument, as we are concerned here with a *category*, not with one word only, and there is no reason to suppose that the word *πόλις* was of central importance in the formation of the category.

When we would accept this explanation, it would imply a HD inflection, as this type of locative belonged only to the HD inflection (*Notes* 53–55). There is no reason to assume that this locative was generalized as was (that of the *u*-stems) in Old Indian and in Germanic (*anstai*, *sunau*).

But it is improbable that the locative was able to transform a whole category, specially in Greek, where this case was eventually given up and cannot therefore have been very important in the last period of its existence. This explanation was given for want of better, when the hysterodynamic inflection of *i-* and *u-*stems (*-ηF-* was likewise derived from a locative in *-ēu*) was not yet

¹⁵) In Mycenaean, therefore, PD *i*-stems might still be expected, in the form *-is*, *-e_ios* (*-i*, *-ejo*). However, they could not be distinguished from the type *πόλις*, *-ηος* (*-ηος*, *-ē_ios* also being noted *-ejo*). Unhappily we have no evidence for *i*-stem inflection. (In Chadwick-Baumbach's list I find only two *i*-stems—*kati* [*kāthis*] and *potipi* [*portiphi*]-, a surprisingly low figure.)

known, and was therefore more or less hesitatingly accepted. It should now be given up.

§ 7. The only other possibility of explaining πολῆ- is to start from a HD inflection *-ēi-s*, *-ī-os*, with *-ēi-* generalized, and I see no objection to it. It is not of the same type as *-εὐς*, *-ηος*, which would be **-εῖς*, *-ηος*.¹⁶) The type *-ις*, *-ηος* is parallel to Avestan *dainhuš*, *-āvō*, the nominative having probably been taken over from the PD type.

§ 8. The type is at least Ionic-Attic. Attic, which has only this type of *i*-stems (*δῖς* and *-ω* excepted), must have inherited a certain number, otherwise it could not have generalized this type of inflection. As it must have inherited them from Ionic-Attic, Ionic must have known the type.

In the oldest Ionic inscriptions there is some evidence for *-ηος*, *-εως* (Thumb-Scherer, *Handb. d. gr. Diall.* 2.272).

As to Homeric πόλῆος,¹⁷) it cannot be Attic, so it must be Ionic or older. Ruijgh, *Lg.* 21 (1968) 394f., considers (*-εὐς*) *-ηος* in Homer as an Aeolism, since in Ionic this form would already have been metathesized when the epic tradition reached Ionia. He rejects Hoekstra's thesis (*Hom. Modifications* 31–41) that metathesis occurred only shortly before the composition of the Iliad (as there are hardly any formulae with metathesized forms). I have no fixed opinion on these difficult problems, which cannot be discussed here.¹⁸) Of course, when *-ηος* < *-ηφος* was metathesized, then certainly was *-ηος* < *-ηῖος*, and πόλῆος would be Aeolic, if not 'Achaean'. (Though in this word one would then expect *ποτῆ-*, which does not fit the metre. But it could nevertheless have been

¹⁶) I think Schwyzler is right in rejecting the idea that *-ης* in ἀγκυλομήτης represents *-ē(i)s* (nor *-η-ς* with *η* from the oblique stem), tempting though it is; for *μηῆτις* compare below on *μάντις*.

¹⁷) Πόλῆος (*Il.* 5, *Od.* 8) stands at the end of the verse with two exceptions, but there are few formulae. Ἐρμα πόλῆος (*π* 549, *ψ* 121 non-final) may be one. Ἐπ' ἀργοῦ νόσφι πόλῆος (*α* 185 *π* 383 *ω* 212, 308) need not be very ancient, but the (very) unusual long wordfinal syllable before the bucolic caesura may stand for **ἀργοο* (cf. Hoekstra, *Hom. Modifications* 24, on *μεγαθύμουν*). Another may be *προπαρόνθε πόλιος* (*B* 811, *Φ* 567) with πόλιος disyllabic, as this may have replace older πόλῆος, standing at the end of the verse as *ἐκάτερθε πόλῆος* (*ζ* 263). (This was replaced by *πρόσθεν πόλιος* (*X* 464, *θ* 524), which has the younger *ν*-epheleysticon.)

¹⁸) Ruijgh's thesis that *-ηφο-*, with the *F* present, suffered metathesis does not seem probable to me.

used, as were Ζάκωνθος, ἀθάνατος etc.) In general it seems to me that the form in Homer is older than Ionic, because it would be strange if Ionic had introduced only *this* form of the type. The following may give some slight confirmation for Aeolic origin.

The only other form of this type in Homer might be μάντηος, varia lectio in μάντιος, ἄλαοῦ κ 493 μ 267 (at the beginning of the verse). With μάντιος the metre is irreparable,¹⁹ with μάντηος it is correct if we read *Φαλαοι(ο). We have no evidence for *Ḥ*-, but also no evidence against it. (The fact that other occurrences in Homer show no *Ḥ*-, does not prove that the word did not have one, though this is still often thought.) *Φαλαος might have the same structure as τανάος. (Its PIE origin is difficult. If ταναός is **t_ēneṷ-*, *Φαλαος must be **u_ēleṷ-*. Of course the word could be non-IE.)

If μάντηος is old, μαντη- might explain the fact that the *t* of μάντις was not assibilated. (Πόσις, which most probably derives from a HD paradigm (Notes 66f.), has -σι-, but there is no evidence that this word ever had -(τ)η- in Greek.) Chantraine, *Formation* 276f., considers φάτις (and μῆτις?) as a Homerism. This can only mean that it is an Aeolic form (Boeotian and Thessalian preserving -τι-, while Arcado-Cyprian and Mycenaean assibilate). This explanation is more probable, as it could also explain βωτι-, Ὀρτι- (see on the whole complicated problem Schwyzler 270f., 464, 505 and Lejeune, *Traité* 54f.). Μάντις itself cannot be inherited, since **m_h-t-* would have given *ματ-. It is therefore of Greek origin. But this points to a time or place where a suffix -τις existed. In Homer μάντηος ἄλαοῦ is used of the Theban²⁰ Teiresias, which might also indicate that the form μάντηος is Aeolic as well. This agrees with Ruijgh's thesis.

§ 9. We can conclude that the type -ις -ηος can be demonstrated for Attic-Ionic and perhaps also for Aeolic, that the explanation from a locative in -*ēi* is improbable, while such a locative belonged to a HD inflection from which the type can be more easily derived (starting from the nominative). It differs from the type -εως, -ηος,

¹⁹ In any case the first *a* of ἄλαο- would have to be long, which it is nowhere else. I do not agree with Ruijgh, *l'Élément Achéen* 160: "s'il s'agit d'un στίχος λαγαρός, le caractère archaïque en est prouvé" (following Meillet, *Origines* 65). Since the study of Mycenaean and the formulaic technique it has proven that the oldest elements perfectly fit the dactylic hexameter.

²⁰ Note that Θηβαίων Τειρεσίαο (in fine) will stand for Θηβαίωο. In μ 267 both formulae occur together, but μάντηος Φαλαοι(ο) and Θηβαίωο Τειρεσίαο cannot be combined in one verse.

but *dainhuš*, *-āvō* in Avestan provides a parallel. The nominative must have been taken over from a PD inflection. In its turn this interpretation confirms that of *-εως*, *-ηος* as continuing an Indo-European paradigm.

Summary: All *i*- and *u*-stem inflections are discussed in the light of Pedersen-Kuiper's hystero- : proterodynamic theory (*-εως* of PIE origin; *πρέσβως* pre-Greek; *v̄* representing *ēu* denied; *νίος*). The Attic-Ionic type *πόλις*, *-ηος* is perhaps also Aeolic (also *μάντηος*) and did not develop from a locative in *-ēi*, but from a hystero-dynamic type with a nominative in *-ēis*.