

# Languages and Cultures

*Studies in Honor of Edgar C. Polomé*

*edited by*

Mohammad Ali Jazayery and Werner Winter

Mouton de Gruyter

Berlin · New York · Amsterdam 1988



# On the origins of the Indo-European dative-locative singular endings

Francisco R. Adrados

## 1. *\*-i*, *\*-ei*, old final elements of stems

The reconstruction of a locative singular ending *\*-i* and a dative singular one *\*-ei* is traditional. However, like other scholars,<sup>1</sup> I am of course of the opinion that dative and locative were not distinguished in Indo-European, and that the distinction in Hittite of a locative and a directive or terminative, insofar as it existed, is secondary, an intent that never managed to prevail at best. That is, that the distribution of *-i* and *-ei*, their use in the different languages, is also secondary. In any case, this does not take us to the heart of the matter for it is a question of one and the same ending in two different degrees of alternance.

The problem is as follows. It is well known that there are noticeable remains of athematic pure stems, which among other things, function as locatives or dative-locatives in different languages; alongside these forms, there are those others which add *\*-i* or *\*-ei* (or both things alternatively) to the stem. Where, then, do these *\*-i*, *\*-ei* endings come from?

There is a traditional thesis which states that it is an agglutination onto the stem of an adverbial or pronominal element. A similar explanation is usually given to endings in *\*-oi/\*-ei* and in *\*-ō* of nouns, too (second declension), whilst the dative singular in *\*-ōi* of said stems are habitually interpreted as derivatives of *\*-o-ei*.<sup>2</sup> According to this view, we are faced with postpositions which would later have been agglutinated.

I believe that this thesis has a series of drawbacks and that one can formulate another that enables us to explain simultaneously the cases of the athematic declension with *\*-i*, *\*-ei* as endings; cases of athematic inflexion in *\*-i* with non-desinential *\*-ēi*, *\*-ei*, these being part of the stem; cases of the second declension with *\*-ōi*, *\*-oi/\*-ei* and *\*-ō* (dative, locative, and instrumental, according to the usual classification); and finally, others of the inflexion in *\*-ā* either with

this form or with the form *\*-āi*, which, among others, performs the functions of dative-locative. In principle, an explanation that affects a maximum of problems at the same time and which is simpler, is also more plausible. The one I am going to put forward on the one hand affects several stems; on the other, it affects cases such as the dative, locative, and instrumental, regarding which there is a tendency today to consider them as secondary specializations on the basis of an old Indo-European case which was the fifth along with the nominative, vocative, accusative, and genitive, and which, either with a pure stem or with the above-mentioned forms, indicated several relationships of the local or adverbial type. If we manage to prove that the forms of these cases in the different stems and different languages are the result of secondary specifications on the basis of older unitarian forms, we shall doubtless have progressed along the course we have marked out.

My starting point is as follows. We could without doubt accept that *\*-i*, *\*-ei* is an agglutinated element in the athematic declensions except for that in *\*-i* (in forms such as *\*pod-ei*, *\*pod-i*) if it were not that a) it is the same element that appears as a thematic one precisely in stems in *\*-i* and, b) this theory is faced with problems when it is applied to thematic stems of the second declension. I shall explain this further.

a) As examples of *\*-i*, *\*-ei*, and also *\*-ēi*, in dative or locative, Greek forms such as *póli*, *pólei*, *pólēi*, can be put forward, the details of which I am not going to go into here, but which are sufficiently clear. Likewise, there are forms from other languages: OInd. *agnāy* (*-ī*), Goth. *anstai* (< *\*-ēi*), OCS *pōti*, *nošti*, Lat. *ouī*, etc. (< *\*-ei*), Lat. *oue* (< *\*-i*). One should add forms such as *šuppai*, *šuppi* in Hittite, as likewise parallels in other languages of Asia Minor. One should also explain that *šuppai* certainly comes from *\*-āi*, as perhaps does Goth. *anstai* and without doubt, *gasta* (from *gasts* < *\*ghostis*), see below. In all these cases, it is a question of forms with a pure stem, parallel to others in *-r*, *-n*, *-s*, etc., recently studied by Neu. Alongside these forms, others of the type of OInd. *agnāye* (< *\*-eī-ei*), *pātye*, *dhiyē*, Hitt. *šuppaia* (also forms in *-ija*) are obviously recharacterized forms: *-ei* was taken as an ending that was added to the diverse athematic stems and, finally, to the same stems in *-i*. The same should be thought of the *-a* of Hittite, most certainly derived from *\*-āi*: *šuppaia* from *\*-āi-ā(i)*.

My conclusion is therefore the following: the diverse endings with *-i* are originally final ones of pure stems in dative-locative singular use (and at times in other uses, too). Grammaticalized as endings, they later became widespread.

b) I add here that which concerns the stems in *\*-o*, which I shall attempt to explain briefly. In fact, there is no room here, even as a working hypothesis, to suggest the possibility of an agglutination. For forms of the types of *\*ped* or *\*pod* 'foot', *\*kuon* or *\*kun* 'dog', *\*nebhes*, *\*nebhos* 'cloud', were Indo-European words subject to the secondary addition of endings of whatever origin they might be; *\*egni* 'fire', *\*oui* 'sheep', *\*ghosti* 'guest' were also Indo-European words which from a certain date onwards were susceptible to usage either as pure stems or with the addition of endings. Yet *\*deiwo*, *\*u<sub>h</sub>lk'o*, etc., were never Indo-European words.

What Specht and others had already deduced from diverse data — the recent nature of the Indo-European thematic inflexion — has been confirmed by the data of Anatolian. We know that a nominative singular in this language can be *keššar* or *keššaraš* 'hand', that in the accusative it was *keššar* or *keššaram*, etc.<sup>3</sup> The forms in *-o/-e* are mere abstractions and nothing else: As against oppositions of the type of nominative *-s*/vocative *-Ø* (*\*-is/\*-i*, *\*-ds/\*-d*, etc.) beside the nominative *-os*, a vocative *\*-o* was created (and *\*-e*, to attain greater characterization with the aid of vocalic alternance).

It is thus impossible to postulate a dative *\*-ōi* < *\*-o-ei* or a locative *\*-oi*, *\*-ei* < *\*-o-i*, *\*-e-i*: from forms which never existed. The authentically old forms are those in *\*-os* and in *\*-om*, of which lengthened forms *\*-ōs* and *\*-ōm* were used to secondarily characterize the nominative plural and genitive plural.<sup>4</sup>

Where then do the forms in *\*-ōi*, *\*-oi*, *\*-ō* come from? This latter could perhaps be considered as a form abstracted from the others, like that of the vocative, lengthened for the purpose of differentiation. Yet it is rather a variant of *\*-ōi*, secondarily classified as an instrumental: see what I say below on the variants *\*-āi/\*-ā*. We have, in fact, forms in *\*-i* preceded by the thematic vowel (*\*-ōi*, *\*-o/\*-ei*) which cannot be explained by either agglutination or by secondary extension of the *\*-i* to a pre-existent form: there was in fact no such form.



## 2. *\*-ā(i)*, an old thematic element: *\*-ōi*, analogical to same

My hypothesis is the following: *\*-ō(i)* is analogical to *\*-ā(i)*; there was, as is well known, all manner of reciprocal influence and interference between the two declensions in *\*-ā* and *\*-o* from an early date. As regards *\*-o/ei*, this is a second analogical form: in this ending, the usual short quantity of the thematic vowel prevailed (above all in the singular: *\*-os*, *\*-om*, *\*-e*); in *\*-ōi* the fact that the model had a long vowel prevailed. I have already said that *\*-ō* is simply a variant of *\*-ōi*.

I am not unaware that it is traditionally postulated that this is a case of three different forms, one for the dative, one for the locative, and another for the instrumental. Yet I have said that the dative and locative should be accepted as originally having one single form. Of course, certain languages tended to specialize *\*-ōi* as against *\*-oi* (and *\*-ei* as against *\*-i*) as the dative against the locative. But this is a secondary phenomenon.<sup>5</sup> Likewise, the instrumental in *\*-ō*, which is only to be found in thematic nouns and is doubtless analogical to the instrumental in *\*-ā* and *\*-ē* of stems with these long vowels.

In any case, the problem of the secondary distribution of the forms — their chronology, dialectal distribution, differences according to the stems — is not of particular interest to me here. What I am interested in is that just as I explain *\*-ei*, *\*-i* on the strength of the stems in *\*-i* because they are forms of some and not of the rest, I likewise explain *\*-o(i)*, *\*-o/ei* on the strength of *\*-ā(i)* (and stems in *\*-ē(i)*, *\*-ō(i)*, with a long vowel) because in these stems the forms in question are well explained, while those of the second declension are not.

In principle, the explanation of *\*-āi* could be sought along the lines of agglutination. Given that a root or stem in *\*-ā* (and *\*-ē*, *\*-ō*) was indeed at the same time an Indo-European word that could be used either with its pure stem or with endings, it could be postulated that *\*-āi* comes from *\*-ā-ei*: the traditional explanation, as is well known. If we accepted this theory, it would obviously be on the basis of asserting the origin of this *\*-ei* in *\*-i* stems.

But I do not think the explanation should be accepted. I believe that the forms in *\*-ā* and *\*-āi*, like those in *\*-a* and *\*-ai*, are simply

pure stems, later classified and specialized in several functions (nominative, dative-locative, and vocative singular above all, and also nominative-accusative-vocative plural neuter). In a form like *\*g<sup>h</sup>nāi* 'woman' or *\*potniāi* 'lady' the final *\*-āi* corresponded respectively to the root and the stem (neither more nor less than the *\*-ā* or *\*-a* of *\*g<sup>h</sup>nā* and *\*potnia*, derived from *\*potni<sup>o</sup>H* in certain languages, whilst others syllabized *\*potniH*, whence OInd. *patnī*). However, a desinential *\*-āi* was to be seen here which analogically, as I said above, gave rise to the forms *\*-ō(i)*, *\*-o/ei* mentioned above in the nouns of the second declension.

That *\*-āi* and *\*-ā* were, as I suggest, two variants of one originally identical form, presents not great problem. It would be a case of a fact parallel to the existence of variants *\*-ā/\*-āu*, *\*-ō/\*-ōu*, *\*-ē/\*-ēu*, a well-known fact, whatever the explanation given for it (of the type of OInd. *jajñā/jajñau*, *aṣṭā/aṣṭāu*, etc.). For example, it could be thought that in principle *\*-āi* and *\*-ā* (as in the parallel case I have just mentioned) were combinatory variants, the former before a vowel and the latter before a consonant: cf. Hitt. *šuppaia* with *-ai* before a vowel. But both were generalized later, thus in Hittite there is both *šuppa* and *šuppai*. Moreover, they were later reclassified to mark different functions. Neither is there any problem in the interpretation of the form with a short vowel, *\*-a*. On the other hand, some have an infrequent form *\*-āi*, see below.

The fact is that the stems in *\*-ā* (and those in *\*-ē* and in *\*-ō*) have highly noticeable connections. It is enough to recall that I have just quoted as a parallel to the *\*-āi/\*-ā* opposition that of Hittite forms of a stem in *\*-i*, *šuppi*. Now, it is well known that Hittite mixed up the two older declensions in *\*-os* and in *\*-ā* into one. A form *annaš* 'mother' may come from a stem in *\*-ā*, for example. On the other hand, as *\*a* and *\*o* are confused in Hittite *a*, either for phonetic or graphic reasons, we cannot find here any differences between original forms in *\*-ā(i)* and *\*-ō(i)*, and I think that this is one of the basic reasons for the fusion of the two declensions in one, for most forms coincide.<sup>6</sup>

However, regardless of the presence of forms with original *\*o* in certain words of the first Hittite (and Anatolian) declension, the fact is that in the dative-locative (also taking the forms of the so-called directive), we find both in nouns in *-aš* (beneath which those in *\*-ā* are concealed) and in those with a stem in *-i* and in *-ai* (including the neuters), dative-locative forms such as those mentioned above: that is, in *-i*, *-iia*, *-a*, *-ai*, *-aia*. It may be said that in

this respect there is no difference between these declensions. On the other hand, the very forms I have just mentioned went over to the dative — locative of the other declensions: as they are thematic forms (except for the *-a* of *-īa*, *-aīa*, as I have said) in the declensions in *\*-ā* and *\*-i* and not so in the others, this confirms what I said before on the spreading of said forms, interpreted as endings. The attribution of diverse forms among these to different declensions is based on recent classifications, as well as on the kinship of the forms in question with others in *\*-a* and *\*-ai* of the nominative-accusative-vocative plural neuter and with abstracts in *-ati(t)* of Luwian and corresponding forms in other languages.<sup>7</sup>

To sum up, wherever it is a question of thematic elements, and, likewise, wherever there are desinential elements abstracted analogically from the former, we find forms with *\*-āi* or *\*-ā* alongside others with *\*-i*; obviously they must have been present also with *\*-ē(i)*, *\*-ō(i)* in words with stems in *\*H<sub>1</sub>* and *\*H<sub>3</sub>*, also in alternance with *\*-i* (of the type of Gk. *peithō(i)*, OInd. *rāyās* < *\*rēi-*), etc. The abstracting of a declension in *-i* without long vowel forms (except in the dative-locative in *\*-ēi*), is doubtless a recent phenomenon.

As a matter of fact, the old relationship between these stems has been examined several times, but has been lost from sight on many other occasions. To give an example, it is usual to postulate that forms of the Gothic dative-locative such as *anstai* (from *anstis*, fem.) or *gasta* (from *gastis*, masc.) come, respectively, from the analogy of the stems in *\*-a* (< *\*-os*) and in *\*-ō* (< *\*-ā*).<sup>8</sup> The only thing that is clear here is that both the old stems in *\*-ā* and those in *\*-i* have identical dative-locative with secondary distribution in the latter of the two complementary forms *\*-ai/-a* between the feminine and masculine. The form of the thematic ones doubtless comes from the analogical form *\*-ō(i)* which we already know. All this proves that the non-distinction of the above-mentioned inflexions, at least as far as the dative-locative is concerned, is not exclusive to Anatolian; it is an older phenomenon. Only that stage of Indo-European which I have called IE III or post-Anatolian carried out the separation of the inflexions with the aid of a greatly renovated system of vocalic alternances, and even then, not completely.

In any case, certain data should be added on the relationship between forms in *\*-ā* and forms in *\*-āi* in order to show that my attribution of a single origin for the nominative singular in *\*-ā* and the dative-locative in *\*-āi* is not arbitrary. On the one hand, as I



have already said, an older complementary distribution of  $*-\bar{a}$  and  $*-\bar{a}i$  can be postulated; that is, there is no phonetic problem. On the other, there is nothing strange about the fact that a pure stem should be specialized as either nominative or dative-locative (and also as vocative and as nominative-accusative-vocative plural neuter): This phenomenon is to be re-encountered in the athematic declensions. But it so happens that besides this, the identity of  $*-\bar{a}$  and  $*-\bar{a}i$  forms is not only shown indirectly through their alternance with  $*-ei$ ,  $*-i$  forms, as I have demonstrated so far. It is also an obvious and tangible fact.

### 3. $*-\bar{a}$ , $*-\bar{a}i$ , $*-a$ , $*-ai$ , $*ei-$ , $*-i$ as older variants

In fact, in the inflexion of the stems in  $*-\bar{a}$ , these forms are closely intermingled with those in  $*-a$  (there is no need to give examples), and also with those in  $*-\bar{a}i$  and those in  $*-ai$ . Among the former, one should not only count those which appear as variants of pure stems in  $*-\bar{a}$ , but also forms in which the stem is followed by an ending.

Thus, it is well known that in the Indian inflexion of the stems in  $-\bar{a}$ , we not only have forms of a pure stem in  $-\bar{a}$  (which function in this language also as instrumental) and others with  $-\bar{a}$  followed by a consonantal ending, but also forms in  $*-ay$  followed by a vocalic ending.

They are forms of the type of *prajay-ā* (and *-ai*, *-ās*, *-ām*, *-os*) which are obviously recharacterized forms to mark the different cases more clearly than with the mere pure stem in  $*-\bar{a}i$ . For this is a case of a pure stem in  $*-\bar{a}i$ ; that much is quite clear: the desinential elements in the above-mentioned forms are  $-\bar{a}$ ,  $-ai$ , etc., and not  $*-yā$ ,  $*-yai$ , etc. This is also shown by the fact that there are forms in  $*-\bar{a}i$  in diverse languages. There are also forms in  $*-ai$ : they are obviously pure stems in a relationship of vocalic alternance with the equally pure stems in  $*-\bar{a}i$  and have been grammaticalized either as vocative singular or as nominative-accusative-vocative dual (OInd. *prāje* and *prajā* respectively).

This form which occurs in the stems in  $*-\bar{a}$  also occurs in the so-called roots in a long diphthong of the type of *rās* / *rāyās*. It has its parallel in data from other languages: within the declension in  $*-\bar{a}$ , cf. for example, OCS *ženojō*, Lith. *rañkoje*. We also find forms of a pure stem in  $*-ai$ , for example, in the duals (OCS

*ženě*, etc. and, some think in Gk. *khōrai*). Another noteworthy example is the Greek vocative *gúnai* from *gunē* (cf. also the cases with *gunaik-*).

The following principle could be formulated: there are pure stems in *\*-ā*, in *\*-āi*, in *\*-a* or in *\*-ai*; and there is also the fact that when these pure stems have a consonantal ending added to them, they appear in the form of *\*-ā*, and when a vocalic ending is added, they appear in the form of *\*-āi*. I have elsewhere come to the subsequent conclusion that derivatives (nominals, adjectivals or verbals) with *\*-i*o/e of stems in *\*-aha* must be interpreted as simple derivatives with *\*-o/e*, the thematic vowel: the yod is part of the nominal stem. Thus, in cases such / as Gk. *gunaîos*, *mna(i)omai* from the root *\*g<sup>h</sup>nā* / *\*g<sup>h</sup>nāi* or OInd. *dhyāyati*. Among numerous other examples we could point to Lithuanian nominal and adjectival stems in *-ājo*, *-ējo*, *-ōjo*, etc.<sup>10</sup> The opposition between Gk. *tīmāmi* and Aeolian Gk. *tima(i)ō* (and other similar ones in diverse languages) is thus to be explained by the mechanism studied above.

I do not wish to stress these data, which I have studied elsewhere. What I do wish to show here is that if the declension in *\*-ā* presents only forms with *\*-ā*, *\*-āi* or *\*-ai* and not with *\*-ei* or *\*-i*, and the declension in *\*-i* in turn presents, save rare exceptions, forms in *\*-i* or *\*-ei*, but not in *\*-ā*, etc., this cannot be interpreted unless it be as the result of a regularization. We have in fact found bridges between the two series in Anatolian languages and also in Gothic. These bridges are also to be found elsewhere, and in particular, in stems in *\*-ō* and in *\*-ē* which preserve alternances of the type of OInd. *sakhā* / *sakhāyam* / *sakhibhis* / *sakhye*, *pānthās* / *pānthibhis* (cf. OCS *pqtī*), Gk. *peithō* / *peithōūs* < *\*peithoios*, Lat. *nubēs* / *nubium*, *nubibus* (cf. *uates/uatis*, *uolpēs* and *uulpis*), Lith. *žvakė* (cf. Lat. *facēs*) / *-jū* (cf. also *bitīs* and *bitē*, *upis* and *ùpė*, etc.).

Examples such as these, which are perfectly comparable to others of similar alternances either in verbal inflexion, or in nominal and verbal derivation, confirm my idea of the close connection of stems in *\*-ā(i)*, *\*-ē(i)* and *\*-ō(i)*, and those in *\*-i*; and, of course, of the two series of endings which I am studying here: *\*-ā*, *\*-āi*, *\*-ā*, *\*-āi* (and parallel forms of other timbres); and *\*-i*, *\*-ei*. Both series, as I have said, were specialized in different stems: there are above all those in *\*-ā* (with a tendency to drop the final *\*-i* except in the dative-locative singular) and those in *\*-i*. But I have said that this specialization, which is absent from Hittite and presents lacunae here and there in other languages, looks very much as if it is recent.

On the other hand, even within the above-mentioned inflexions, the specializations in question are a recent phenomenon. We find *\*-ā* in the nominative singular, but also sometimes in other cases: in the instrumental singular of Vedic, in certain nominative-accusative-vocative plural neuters, in the so-called instrumentals of the type of Gk. *krúpha*. Their adscription to the feminine is, as is known, secondary.<sup>12</sup> On the other hand, we have already seen that *\*-āi*, in principle present in the dative-locative singular, is the basis for a series of derived cases (and the same goes for *\*-ā*). In turn, *\*-a* appears in the nominative, accusative, and vocative of the stems in *\*-iā/ia*, but outside these it is to be found in the nominative and vocative singular, and in the nominative-accusative-vocative neuter plural, above all. As for *\*-ai*, we have found it in the vocative singular and in nominative-accusative-vocative dual. It is also found in the nominative-accusative-vocative of the neuter in the singular and plural (Hitt. *haštai*, etc.). Finally, the proposition that *\*-ei* was originally a dative ending and *\*-i* a locative one, cannot be upheld if, as there is a tendency to believe today, there was only one dative-locative case. The distribution of the two forms is secondary: either one or the other is chosen according to the stems and dialects, or else both are maintained and are opposed with diverse functions.

Naturally, the multiplicity of forms is better maintained in less regularized languages such as the Anatolian ones, in which, as we have seen, we find a dative-locative singular either in *-i* or in *-a* or *-ai* (plus the recharacterized form in *-aia*) and we find more or less the same forms in the nominative-accusative-vocative neuter plural and even elsewhere. Yet a distribution such as Greek makes between various dialects (*-ei*, *-i*, *-ēi*) presupposes a similar older stage; and recharacterized forms as in OInd. *agnaye* mean that they co-existed for a certain time alongside non-recharacterized forms (pure stems) of the *agne* type.

#### 4. The phonetic origin of the endings in question

So far, I have established the morphological origin of the endings we are dealing with here: they are the ends of pure stems which later, at times, became independent and were applied to other stems; sometimes they were even applied to the original one by means of the regularizations I have discussed. As far as *\*-ō(i)*, *\*-o/ei* in the

second declension are concerned, they represent a mere analogical imitation.

But let us now turn to the phonetics of the matter. Here, to judge by what we have seen so far, we may state the following:

a) *\*-ā/-āi* (and, we suppose, *\*-a/-ai*, *\*-ō/-ōi*, *\*-ē/-ēi*) may be considered, originally, as variants conditioned by syntactic phonetics, before a consonant and a vowel respectively. They would later have been distributed according to morphological criteria, becoming grammaticalized in different functions.

b) *\*-ā/-āi*, *\*-ō/-ōi*, *\*-ē/-ēi* should be considered as full grades of diverse stems, originally ending in laryngeals of the three timbres. As for *\*-a/-ai*, this may in principle be a zero degree corresponding to any of the former full degrees, but in practice it appears to respond always to *\*-ā/-āi*.

c) *\*-ei/-i* are in normal relation as full and zero grades.

The basic problem posed is, as may be seen, that of the original relationship of these two forms with the rest. It is not that there are no other problems: there are exceptional cases in which we have *-ā* before a consonant (OInd. *rās*) and *\*-āi* before a vowel (Hitt. *zahḫaiš*), there is the problem of the relationship of *\*-ā/-āi* and above all, there is the general problem of the relationship of the long diphthongs to the forms of the simple long vowel, which I believe I have shown elsewhere can only be solved with the aid of the laryngeal theory — a theory that takes into account palatal and labial laryngeals.

Here, I shall concentrate on the following problem: according to the timbres, we have *\*-ā(i)*, *\*-ō(i)*, *\*-ē(i)* in the full degrees, and uniformly, *\*-ei* (also *\*-oi*, cf. Gk. *\*peithoios* > *peithoûs*). As I have said, in the  $\emptyset$  degrees we have either *\*-a*, *\*-ai* or *\*-i*. Naturally, there was a secondary distribution so that forms in *\*-ei*, *\*-i* correspond to a stem in *\*-i*, forms in *\*-a(i)* to a stem in *\*-ā*, etc. Yet I believe that it is quite clear that this is merely a secondary distribution. How, then, has this multiplicity of results come about? With the help of the theory of the long diphthongs, one may perhaps attempt to find a solution to the oppositions of the *\*-ā/-āi* type, although I have already said that I do not believe in this solution.



But neither with this hypothesis nor any other which starts from an original *\*-i* can the dualities I have just mentioned be explained.

I believe that only by resorting to the laryngeals with appendix, in this case with palatal appendix, can this question be solved. I have applied this solution in other publications, but I believe that in the present example, things are made much clearer. The solution, to exemplify with *\*H<sub>2</sub><sup>i</sup>* (the other cases are parallel), is as follows:

*\*-eH<sub>2</sub><sup>i</sup>* > *\*-ā(i)* / *\*-ei*: the first is a monosyllabic solution which in turn splits into two, usually according to a rule of syntactic phonetics already mentioned; the second is a disyllabic solution in which the timbre of the laryngeal does not color the preceding vowel and *\*H<sup>io</sup>* vocalizes in *\*i*.

*\*-H<sup>i</sup>* > *\*-ǎ* / *\*-ǎi* / *\*-i*: the three solutions depend on whether vocalization is anterior or anterior and posterior or just posterior: they are in general terms in relation to data of syntactic phonetics.

I am not going to go into the details of this theory here, but refer to two recent articles<sup>13</sup> besides my *Estudios sobre las sonantes y laringales indoeuropeas* mentioned above. However, I do wish to point out that, apart from the need to find a phonetic link between the above-mentioned endings, a link which I see no other way of establishing, there are even more data in favor of this theory.

These data are to be found in the forms in which, in Anatolian languages, the laryngeal before *\*-i* is still preserved, despite the fact, as is known, that the *\*h* was being dropped in these languages at the stage at which we know them.

From different points of view, I have elsewhere collected the data which concern us here.<sup>14</sup> These data are essentially as follows:

a) Abstracts and collectives of Luwian in *-ahi(t)*, parallel to those in *-(a)-a-i* (with ending *-š*) in Hittite; in this language forms are also found in *-ahhi*, *-ahi*, and also, simply, forms in *-hi* of the declension in *-i*.

b) Forms in *-a-ga* of the neuter plural in Palaic, obviously recharacterized forms with original *-ha*.

c) Forms in Lycian in *-ahi* (and in *-ehi*, derived from these), which not only function as adjectives but above all as pure stems mainly



in the function of genitive singular, but also of genitive plural and other cases (nominative, dative, accusative singular; and there are others with agglutination). In the neuter plural there is *-aha*, corresponding to the form mentioned in b). In my above-mentioned work I believe I have made quite clear the nature of pure stems of these forms and their case function with the noun and the adjective. Lycian sometimes used the *-ahi/ai* opposition to distinguish cases (genitive and dative singular above all), according to a well-known procedure.

Yet this does not only occur in Anatolian. Old Indic forms such as *sakhibhis*, *pathibhis* and others preserve in their voiceless aspirant a trace of the old laryngeal, in much the same way as *taṣṭhimā* and other forms. Forms such as *sakhā*, etc., have taken over the voiceless aspirant.

I end with this. It seems obvious that in IE III outside Anatolian, the stems in *\*-ā* were widely developed, being reduced to an inflexion without *\*-s* in the nominative singular (as against the Hittite type in *-aiš*) and with only monosyllabic treatments of the vowel-plus-laryngeal group (*\*-ā*, not *\*-ei*).<sup>15</sup> Besides, in the case of the  $\emptyset$  degree of the vowel, the solutions *\*-ā* and *\*-āi* (\*not *-i*) were favored: a certain type of "rhyme" was created. Conversely, in other stems, the  $\emptyset$  degree *\*-i* was favored and in the full degree forms which "rhymed" with the former (*\*-ei*). As is said above, there is a previous stage in Anatolian at which these types of forms are mixed with a certain freedom. Sometimes, this mixture survived here and there in the stems in *\*-ē* and *\*-ō*.

The inflexion in *\*-ā* has hardly left any traces in Anatolian, except in forms in *\*-ā* of the nominative-accusative-vocative neuter plural (although at times singular). In the declension in *-aš* of Hittite, certain forms of this inflexion are to be found securely integrated: as *\*o* was altered to *a*, the two inflexions were confused, with the exception of the nominative singular with  $\emptyset$  ending. In any case, it is likely that the diffusion of the inflexion in *\*-ā* was post-Anatolian: above all because it is really a parallel to the thematic inflexion, which in Hittite still displays non-thematic forms (nominative and accusative singular with  $\emptyset$  ending, of the *kurur* type alongside *kururaš*, *kururan*; dative singular in *-i*; nominative plural in *-eš*). Of course, there was still no difference in this language between masculine and feminine. On the other hand, certain influences of the stems in *\*-ā* on those in *\*-o* and vice-versa already belong to IE

III: I shall not go into this matter here; but it indicates the recent nature of both formations, even though they began in IE II.

These are the arguments that can be put forward in favor of the thesis I summarize here.  $*-\bar{a}$ ,  $*-\bar{a}i$  and  $*-ei$  are originally endings of pure stems with a final full degree, stems in  $*-H_2^i$ : they were later grammaticalized and spread variously through several declensions. The same goes for the endings of pure stems in  $*-\bar{e}$  and  $*-\bar{o}$ , and could also be said for the corresponding forms in the  $\emptyset$  degree, that is,  $*-a$ ,  $*-ai$  and  $*-i$ , which originated from the stems which ended in any of the three laryngeals.  $*-\bar{o}$ ,  $*\bar{o}i$ ,  $*-o$ , finally, are analogical forms.

### Notes

1. Cf. recently, Francisco Villar, *Dativo y Locativo en el singular de la flexión nominal indoeuropea* (Salamanca 1981) and E. Neu, *Studien zum endungslosen "Lokativ" des Hethitischen* (Innsbruck 1980).
2. Cf. above all the bibliography and discussions in F. Villar (1981: 2012 ff.).
3. Cf. my interpretation of these data in "Some archaisms of the Hittite nominal inflection" forthcoming in the *festschrift* to Schwarz.
4. See the above-mentioned work.
5. Cf. my *Lingüística indoeuropea* (Madrid 1975), 462 ff.
6. The other reason is that in Anatolian there was still no masculine: feminine opposition which was later formalized above all on the basis of opposing  $*-os/$   $*\bar{a}$ : the existence of two independent inflexions was not indispensable. Lycian, with its inflexion in  $-a$  (of the type of *lada* 'woman'), I think unified the two inflexions in a different way (although it is usually assumed that  $*-s$  was lost).
7. Cf. on all these forms *Emerita* 49, 1981, 240 ff., and also "Some archaisms ..." (cf. fn. 3).
8. Cf. for example, H. Krahe, *Germanische Sprachwissenschaft*<sup>2</sup> (Berlin 1948), II: 26, 29.
9. Cf. for example, *Estudios sobre las sonantes y laringales indoeuropeas*<sup>2</sup> (Madrid 1973), 347 ff.
10. Cf. Jānis Endzelīns, *Comparative Phonology and Morphology of the Baltic Languages*, transl. by W. R. Schmalstieg and Benjamin Jegers (The Hague/Paris 1971), 92 ff.
11. Cf. *Estudios*, 341 ff.
12. See data in "Some archaisms ...".
13. "Further considerations on the Phonetics and Morphologizations of  $H^i$  and  $H^o$  in Indoeuropean", *Emerita* 49, 1981, pp. 231–271; "More on the Laryngeals with labial and palatal Appendices", *Folia Linguistica Historica* 2, 1981, pp. 191–235.
14. I refer to "Further considerations ...", 241 ff., and to "Some archaisms ...".
15. I mean that in  $*-eH_2^i$  the laryngeal communicated its timbre to the vowel as it went in the same syllable; in  $*-e-H^o$ , this was not the case.