GAv. *uziraidyāi* and *rārəša-*

Appendix: Skt. *irajyáti; ṭnakṣati, ānáśa,* ἐνεγκεῖν

1. GAv. *uziraidyāi*, Y 43.12c and 14d, is derived from the stem *ṭra-*, which is found in *ṭratū* in 53.8d (BENVENISTE, Infinitifs 79; HUMBACH, Gathas II 51). Mrs. MONNA (The Gathas of Zarathustra. A Reconstruction of the Text. Diss. Leiden 1978, 43) follows this interpretation. However, in this position *ə* can hardly represent *a* in Gāthā-Avestan as we shall see, and we must look for another interpretation. Here it may be pointed out that elsewhere GAv. *-əidyāi* represents [*-dyāi*] and that [*-adyāi*] is found as *-aidyāi*. For the latter we have *diwžadyāi* and *jaidyāi*, whereas the normal development after *y* is seen in *vərəzyeidyāi*. The form *θrāyōidyāi*, which must represent [*θrāyadyāi*], has *a* > *ō* as if it was final. (This proves, by the way, that *ya* was not yet *ye* in the original text.) With *-əidyāi* we have *dərəidyāi* and *mərəngəidyāi*, where it is evident that they continue [*dr̥dyāi*] and [*mr̥ngdyāi*] (the thematic form for the latter would have had the stem *mərənca-*).

In sections 5-7 we shall shortly review the GAv. forms with *ə* that might represent *a*.

2. *Uzirəidyāi* occurs 43.12c and 14d, before the caesura, where four syllables are usual. As it occurs twice, it is not probable that it would not conform to the rule.

The manuscripts have a variant *uzərəidyāi*, which might confirm that *-(ə)rə-* represented [*r̥*]. An athematic present occurs in Gāthic in 44.12d *paiti.ərətē*, which must be [*patiṛtai*]. It is well known in Late Avestan (AirWb. 183). BARTHOLOMAE too takes this form as athematic (Wb. 410). Vedic has *iyarti*, med. *ṭrte*, which shows that the root has a laryngeal in anlaut (**Hi-Her-ti, *Hi-Hr̥-toi*). This gives a simple solution: the

form must be read [*uziṛdyāi*] < **-Hi-Hṛ-dyāi*[1]. A parallel with the same root is *frōrəti-*, which must be read [*fraṛti-*]. Here too we see that the first *ə* of *ərə* which normally represents [*ṛ*] is not written after a vowel[2].

3. Maybe another difficulty can be solved in the same way. The stem *rārəšya-* occurs in 47.4a *rārəšyeintī* and 32.11c *rārəšyąn*. When read [*rāršyanti, rāršyaan*] both verses are one syllable too short. It is not probable that they were spoken [*rāršiya-*], as Sievers' Law does not effect *-ya-* of *ya*-presents (MONNA 1978, 105). HUMBACH (Gathas II 36) suggests [*rāršaya-*], but without evidence or justification. The problem becomes more urgent, and more clear, when we see that the adjective *rārəšō* 49.2b would bring the verse to its normal form when it would be trisyllabic. The problem is more urgent as 2b is the only line in Yasna 49 that would have less than seven syllables (though some might have eight). It becomes more clear as it shows that the solution cannot be found in the suffix *-ya-*. When we assume that the root *rah-* had an initial laryngeal, this would give **Hrā-Hṛs-ya-*, [*rāṛšya-*], and **Hrā-Hṛs-a-* for the adjective (cf. Skt. *tā-tṛp-i-*, GAv. *mąnari-* if from **mā-mr-i-*).

MAYRHOFER (1954) suggested an etymology which, though not evidently correct, is in all respects possible. He connected it with ἀρνέομαι 'to deny, to decline'. Semantically a connection between 'to desert' (abtrünnig sein, abfallen) (*rārəšya-*) and 'to deny' (verleugnen, leugnen) seems quite possible. (He adduces OP *drauga-* which means both 'lie' (Lüge, Trug) and 'treason, defection' (Verrat, Abfall)). He analyses ἀρνέομαι as ἀρ-ν-εσ-(ο-), cf. κυνέω, and reconstructs **ṛ-n-es-(ti)* and **rē-rs-ie-(ti)*. A laryngeal is phonetically possible in this reconstruction (**h₂ṛnes-*) and morphologically probable (nasal presents as a rule have two consonants before the *-n-*), though not necessary. This reconstruction gives an easy solution to all problems[3].

4. These forms are not without importance. They show that there was still hiatus after the loss of the laryngeal, if the laryngeal was not still there itself. These forms have $r_{\circ}$ following the laryngeal. In this respect they differ from the instances hitherto known, collected by Mrs. MONNA, 1978, 97-103. (Though *frōrəti-* should have been mentioned beside *paiti.ərətē*, p.98.) As far as I know no such forms are known in Vedic. Though in $-ir_{\circ}-$ a glide might have developped ($-iyr_{\circ}-$) which made the form more stable, in $-ar_{\circ}-$ this was not possible: it cannot have been retained long after the disappearance of the laryngeal. This would also prove that, if not in Zarathustra's own time, then shortly before him, the laryngeal was still present at the beginning of the roots *ar-* and *rah-*.

If we must read [$rār_{\circ}š$-], category A 10 a of MONNA 1978, 105 looses one of its two exceptions. The other one, *sîždya-* 32.4b, can be read [*sižd̥ya-*] (not [*sižd̥iya-*]), as a 7-8 line is no problem in Y 32.

5. It is well known that *ə* can represent older *a*: before a nasal; before *vi*; before *h*; and when the diphthong *au* is represented by *āu*. There are two or three forms where *ə* stands for original *ā* (see § 7). In other cases *ə* < *a* is very doubtful.

It has been assumed for *hācā* in 46.1c, which HUMBACH derives from *hac-* 'to follow'. For the active he points to *scantū* 53.2a. This argument may not be decisive, as the imperative originally stood outside the genus verbi-distinction (WATKINS, Idg. Gr. III 177). INSLER, Gāthās 263, assumes a perfect **ha-haca*. This would normally appear as **haŋhacā*. One would have to assume a kind of haplology.

Quite dubious is *bāəduš* 53.4c.

Y 51.22c *nāmənt̂š* has often been corrected into **nāmabt̂š* (recently by KUIPER, The Language of Zarathustra, to appear in the Med.Kon.Ned.Akad.v.Wet.). In any case it was *an* that regularly changed into *ən*.

33.5a *vt̂spā.mazištəm*, too, has *əm* < *am*.

29.6a *āvaocaṯ* has been taken as an augmented form. Given the scarcity of augment in the Gāthā's and the improbability of *ə* < *a*, another explanation is welcome. HUMBACH takes it as [*ah*], nom.sg. of the pronoun *a-*, which is perfectly possible, though without parallel. INSLER (Gāthās 152) posits **atā*, which, however, is not known from elsewhere in Iranian.

For *fsəratu-*, 33.12c and 51.4a, [*fsartu-*], [*fsaratu-*] and [*fsratu-*] have been proposed. Even if it would go back to [*fsartu-*], it does not simply have *ə* < *a*, but *əra* instead of *arə*.

A few other forms require more discussion.

6. The forms *jānərąm xrūnərąm* 53.8c contain the genitive plural of *nar-* 'man'. In LAv. this genitive is *narąm*, but this has the generalized full grade. Originally this form had zero grade, as is usual with the hysterodynamic inflexion. (From *nar-* itself the gen.pl. is not attested in Gathic.) Therefore these forms should be read [*janrām/aam*] [*xrŭnrām/aam*]. This seems to be HUMBACHs interpretation too, as he indicates 8/10 syllables for this part of the verse (twice *-aam* giving 10 syllables). He does not say so explicitly in IF 63(1958)209-11. BARTHOLOMAE too read *-nr-* (IIR. **jhanrā-*) here.

It is a pity that the metre gives no clear indication here, as we arrive at 8/10-7-5, while most lines have 7-7-5. BARTHOLOMAE proposed to leave out *xrūnərąmcā*. KUIPER thought *jānərąm* was a gloss, in which case *cā* has to be deleted too. Both suggestions would give a 5/6-7-5 line, of which there is no second

instance. As 10-7-5 has no parallel either, 8-7-5 is preferable, which must also be accepted for 3d (I don't think it is acceptable to change *aθā* into *aṯ*) and 7c (striking *cā* after *parā* is not necessary); also there is 8-5 in 2a (striking *cā* is not necessary). This means that the gen.pl. ending was *-ām* here. This would give 7-5 in 3b with [*dugdrām*] (though 8-5, with [*dugdraam*], would be no problem). To put it otherwise, reading *-ām* gives in 3b 7-5 instead of 8-5, in 8c 8-7-5 instead of 10-7-5, which makes *-ām* very probable. If this is correct, there remain only three problematic forms in the gen. pl. (cf. MONNA 1978, 100), *ōmavatąm* and *ṫšanąm* (both in verses that present other difficulties too) and *strōm*, which is discussed in the next section.

7. That *ō* stands for *ā* in *hyōm* is certain. It is pointed out in MONNA 1978, 103 that this form is always disyllabic, as is *dyąm*, while the other persons do have a monosyllabic stem (*hyāṯ*, *hyāmā*, etc.). As Sievers' Law does not affect initial groups *Cy-* (MONNA 106), this form must be read [*hyaam*]. This is what we expect from PIE **si̯eh$_1$-m$_o$* (against *hyāṯ* < **si̯eh$_1$-t*).

Another instance is *strōm(cā)* 44.3c, gen.pl. of *star-* 'star'. The form we expect is *str-ąm* [*straam*]. This form is found in LAv. Y 1.16 and Yt 13.57. The word was hysterodynamic, as is shown by the long vowel in the nom.sg. in Indo-Iranian (generalized in Ved. *tāraḥ*, LAv. *stār-*), Greek and Latin (Fr. *étoile* proves that). Therefore *strōm-* must represent *strąm* < **strām* < **straam*.

There is a varia lectio *starōm(cā)*. INSLER adopts this form, because of the parallel LAv. *narąm* and LAv. gen.sg. *stārō* ("for *starō*"). Of course, the form must not have been identical with that of a different word in a different dialect of a later date. *Narąm* has its full grade from other cases. Above

(§ 6) we have seen that Gathic still had zero grade in the gen.pl. of *nar-*. As to *star-*, Late Avestan everywhere has *stār-* except in the nom.pl. *staras-*. The long *ā* was evidently generalized (as in Ved. *tāraḥ*). The forms with *star-*, including the varia lectio *starəm-* in Y 44.3c, will therefore have *a* shortened from *ā* in the third syllable from behind: we have *starascā* and *starəmcā*. Therefore the form *starəmcā* stands for **stārəmcā* and has *stār-*, the normal form in Late Avestan, substituted for *str-* in *strəm(cā)*.

The manuscript evidence is strongly in favour of *strəmcā*. The only important manuscript with *starəmcā* is K_5, but J_2 (the oldest manuscript of the same family) has *strəmcā*. In general K_5 is less reliable than J_2. Against the evidence of Pt_4 - Mf_1 and S_1 - J_3 (and J_2) this is irrelevant. (The notation *-a(rə)-* may be just one of the unimportant variations of the manuscripts, for which it is not necessary to find an explanation as the one given above.)

My colleague KORTLANDT, too, adopts *starəm-*, which he interprets as [*staram*], with the old ending *-am* (Lingua 45(1978) 293f). He thinks that the full grades of Greek and Armenian point to a proterodynamic word (later transferred to the dominant hysterodynamic type). I think that the long vowel of the nom.sg. proves hysterodynamic origin, and that Hom. ἄστρα, though a collective of unknown date, proves zero grade for the inflection of this word. As there is a good explanation for all forms, I think it is not allowed to consider *starəmcā* as evidence for a very archaic form. (*əmavatąm* 43.10c may well be corrupt, as the next line ends in *əmavantəm*.)

HUMBACH's suggestion (Gathas I 32 n. 47) that it could be [*st̥̄m*] seems not probable. Ved. *n̥̄n* is an Indo-Aryan innovation. A long vocalic *r̥̄* has not been demonstrated for Iranian. The form would also make the verse one syllable too short (*dāṯ* cannot be [*daat*] here).

Difficult is *xšnōm* 48.12b, 53.2b, where the manuscripts also have *xšnūm*. While KELLENS (Noms-racines 196f) concludes that "les leçons sont assez équivalentes", I think that the manuscripts allow of a definite conclusion. In 48.12b Pt_4 - Mf_4 - Mf_1 with J_2 with *ō* have more authority than K_5 and J_3 (which often joins K_5). In 53.2b Pt_4 - Mf_4 - Mf_1 (with J_3) decide against J_2. Considering both places together, the Sanskrit-Yasna (J_3 *ū* : *ō*) and the indian Pehlevi-Yasna (J_2 *ō* : *ū*, K_5 *ū* : *ū* corrected in *ō*) are unreliable, but the persian Pehlevi-Yasna has *ō* throughout. In such a situation the latter decides. While the persian Vendidad-sade has *ū*, the indian one has *ō* while the Yasna-sade too has *ō*. This clearly shows *ō* in the stronger position. HUMBACH objects to a root noun *xšnu-*, because we would expect *xšnut-*, which indeed occurs. From a root noun *xšnā-*, however, we would expect [*xšnaam*] < *-aH-m̥*, but this would make the verse too long in both places (in 53 this would not be impossible, but in 48 this is decidedly to be rejected). (This objection holds also for [*xšnuvam*] < *-uH-m̥*, but there is no evidence for a set-root.) From a thematic */xšnH-a-/* I would expect **xšn̥Ha-* > **xšana-*, not **xšna-*. Probably we have to accept *-aH-m̥* > *-ām*, just as in the acc.sg. of the *ā*-stems. But this requires further consideration.

Appendix: The Sanskrit type *iraj-yáti*; *ínakṣati*, *ānáśa*, ἐνεγκεῖν

There are four forms of this type, *irajyáti*, *irasyáti*, *iradhanta* and *ínakṣati*. In Development 236 I suggested a new interpretation with the help of the laryngeal theory, assuming a form **$H_e$reĝ-* > *iraj-*. However, I have since rejected the existence of a PIE phoneme $_e$. The laryngeal theory gives an easy solution of Sanskrit forms of this type: they could represent **r̥Hes-* > *iras-*. In the case of *irasyáti* this is a probable explanation, but for *irajyáti* and *ínakṣati* this is not possible.

irasyâti

With Skt. *irasyâti* 'to be angry, to be malevolent', *irasyâ* 'malevolence' are generally connected *tṛṣyati* 'to be envious', *tṛṣyâ* 'envy, jealousy', though 'anger, malevolence' and 'envy' must not have the same root. If the connection is correct, *iras-/tṛṣ-* proves *$\underset{\circ}{r}$Hes-/*$\underset{\circ}{r}$Hs-.

In Avestan we have two words with the basic meaning 'envy', which are generally connected with Skt. *tṛṣ-*: *arəšyant-* and *aras-ka-*. The first may continue *$\underset{\circ}{r}$Hs-, but also *erHs-. *Aras--ka-* however presupposes *$\underset{\circ}{r}$Hes-, the form that must underly Skt. *iras-*.

The meaning of Hittite *arsanai-/-iɨa-* 'to envy, to be irritated' strongly resembles that of the Sanskrit forms. It could represent *$\underset{\circ}{r}$Hs-, but also *($h_{1/3}$)erHs-. If this is correct, it would mean that the laryngeal (between *r* and *s*; the same is true of a possible initial laryngeal) was not h_2, as this would have given Hitt. [*arhs-*].

Further connections are uncertain. As to Greek ἀρειή 'menacing words, threats', a form *$\underset{\circ}{r}$Hes- would have given two identical vowels in Greek: ἐρεσ-, ἀρασ- or ὀροσ-. It seems that ἀρειή must be derived from an *s*-stem *ἄρος, *ἄρεσ-, which must not necessarily be the one word ἄρος we know; see CHANTRAINE, Dict.étym. s.v. ἀρή. (In any case this Greek word cannot be cognate with the Hittite form cited, because Greek requires an h_2.) Connection with ἐρεσχη/ελέω 'to talk lightly, to be jocular' is uncertain, because the analysis of this word is not clear. The interchange η/ε might point to non-IE origin (FURNÉE, Vorgriech., see the index; but the variant ἐρι- could be due to folk-etymology).

Arm. *heṙ* 'anger' is less certain because it belongs to *eṙam* 'sieden, wallen'. There is no reason to connect the group

Skt. *árṣati* 'to flow', but OHG *irri* 'to err', OS *irri* 'angry' might be cognate; they could continue *$*(h_1)erHs$-.

iradhanta

On *iradhanta* (see also n.2 above) we can be short. The connection with ἐρέθω (KUIPER, Nasalpräs. 59) is quite possible but not certain enough. It would point to a root *$*h_1redh$-. Assuming *$*h_1(e)rh_1$-*edh*- is a mere guess.

irajyáti, ínakṣati

A root of the type *HReC* seems certain for *irajyáti* and *ínakṣati*. A variant *HR̥H-eC*- to explain *iraj*- etc. seems out of the question. Attempts at explanation are discussed by BRUGMANN, IF 32(1913)58-63. His own suggestion, which is not very clear (*ir*- < *r̥r*- with influence(?) of 'Attic' reduplication) is now impossible. KUIPER, Nasalpräs. 58, assumes a root *r̥r*- with an enlargement (*-edh*- etc.). Maybe we have to abandon the connection with ὀρέγω.

Addendum. I did not expect to find the suggestion that *irajyáti* might have to be separated from ὀρέγω realized so soon. SIHLER, JIES 5(1977)221-46, spec. 234ff (which I received just now), posits *$*rh_1e\hat{g}$- for it, from the root *$*reh_1\hat{g}$- in Lat. *rēx* etc. I only note that, if ἀρήγω is cognate (as S. believes), the root must have been *$*h_2reh_1\hat{g}$-, with *$*h_2r̥h_1e\hat{g}$- for *iraj*- (which I would not consider impossible; but Gmc. **erkan* cannot be connected with this root: if *$*h_2erh_1\hat{g}$- occurred, it would have given *a*-.).

As to *ínakṣati*, it is generally considered a desiderative. Loss of *n*- in **ni-nakṣa*- gives no explanation. I have only one suggestion to make, though without much confidence. For a desiderative we expect *$*Hi$-*$Hn̥\hat{k}$-*so*- > *$*i(y)akṣa$-. In this form an -*n*- could have been introduced from *nakṣati* to give *ínakṣati*.

ānáśa, ἐνεγκεῖν

There are many problems with the supposed cognates of Skt. *náśati*, *aśnóti*. First two groups must be distinguished: forms meaning 'to bear' (ἐνεγκεῖν, OCS *nesti*, Lith. *nèšti*) and those meaning 'to reach' (Skt. *aśnóti*, *nákṣati*, OIr. *ro-icc*, Lat. *nancisco*r, Goth. *ganah*; other words are doubtful). The distinction was made e.g. by KUIPER, Nasalpräs. 50, presently by FRISK. It seems not to have been observed that there may be a formal distinction too. For the first group ἐνεγκεῖν points to h_1-. For the latter h_1 has been assumed only on the basis of ἐνεγκεῖν, which cannot now be used as evidence. On the other hand OIr. perf. *ro-ánaic* rather points to h_2-, as was also observed by COWGILL, Evidence for Laryngeals 154 n.22. Of course COWGILL is right in explaining this form and Skt. *ān-(aṁśa)* from **He-Hno(n)k̂-*. The older reconstruction **ǒn-onk̂-* was merely a transposition of the sound pattern of these forms into PIE; at the time this was the only possibility. (He draws, however, the conclusion that ἐνεγκεῖν was assimilated from **ἄνεγκ-*, for which I see no reason.) In Greek I think we must separate ποδηνεκής etc. from ἐνεγκεῖν, as the root here clearly means 'to reach'. Then we might expect η- < ᾱ-, and this is indeed found in διᾱνεκής. Its ᾱ was explained as artificial but on the assumption that it was cognate with ἐνεγκεῖν.

The perfect in Vedic has four stems, sg. *ānaṁś-* (3x), *ānāś-* (1x), pl. *ānaś-* (passim), *āś-* (passim). The relation of these forms is difficult to establish. COWGILL seems to start from *ānāśa*, pl. *āśur*, BURROW, Skt. Lg. 1955, 341 assumes a system *ānáṁśa*, middle *ānaśé*. As *ānaṁś-*, pl. *ānaś-* is parallel to *ānañj- ānaj-*, this system will be young. COWGILL operates with a root **Hnenk̂-*, but I think we should try to do with **Hnek̂-* only. (A plural **He-Hnn̥k̂-* (> *ānaś-*) is hardly probable.) The 3 sg. *ānāśa* can have analogical *-ā-*, which would mean that the singular originally had *ānaś-* (3 sg. *ānāś-*). This would

leave *āś-* as the old plural stem, as COWGILL thought. As the *ā(n)-* reduplication must have started from the root *naś-*, its *ā-* must be explained from this root. This can only be done by assuming **He-Hnoḱ-*, which gives indeed *ānaś-*, as well as OIr. *-ánaic*. It should be remarked that this is not the 'Attic' reduplication one might expect (and which is attested in ἐνήνοχα); it seems that these perfects were formed in the separate languages. The plural then was **He-Hn̥ḱ-* > **aaś-* > *āś-* (COWGILL).

This brings us to the difficult problem of the formation of ἐνεγκεῖν (if it is indeed a different root, the morphological problems remain the same). COWGILL assumes a root **Hnenḱ-*, but - apart from the assumption of this root form - the fact remains that a thematic aorist (in Greek) has zero grade (ἤνεγκα is generally considered as recent and cannot be used as evidence for a root aorist; and even if it were, the thematic aorist should have zero grade). COWGILL rejects **Hne-Hn̥ḱ-o-*, because it has an unusual reduplication and because reduplicated aorists are rare. The latter does not imply that this could not be one, and Attic reduplication is certain. COWGILL allows a development **HneHn̥ḱo-* > **Hnenko-*: "intersyllabic *H* was probably lost before **n̥* became α". This brings us to GAv. *nąsaṯ*, Y 51.16a, 3. sg. inj. of *nas-* 'to reach', which is disyllabic. If the form would be of PIE date, we would expect **Hne-Hn̥ḱ-e-t-*, [*naasat*], written *nāsaṯ*. A development to **Hnenḱet* > *nąsaṯ* would confirm COWGILL's assumption. However, this is contradicted by [*-ir̥dyāi*] and [*rār̥š-*] (see the main text) and by **He-Hn̥ḱ-* > **aaś-* > *āś-* (see above). Therefore *nąsaṯ* must be analogical. The Greek form too cannot be a regular development of **Hne-Hn̥ḱ-*, which would have given **ἐνεεκ-*.

Notes:

1) Whether Ved. *tŕte* represents directly **HiHrtai* > **irtai*, the *i* being lengthened when *r̥* looses its syllabicity, or whether this length is analogical (from the 3 pl., or the subjunctive) I cannot decide. Cf. n.3.

2) Av. *-irəidyāi* has been connected with *irádhyāi*, RV 1.34.2. This seems difficult, as both **Hi-Hr-* before vowel and thematization of *tr-* would have given *tra-*. KUIPER, Nasalpräs. 59, thinks *irádhyāi* cannot be separated from *iradhanta*, RV 1.129.2, and therefore holds *irádhyāi* for a dative of a noun **iradhyā-* (rather than haplology of **iradhadhyāi*). Neither of these two forms have been definitely explained. On the type see the appendix.

3) I would hesitate to ascribe reduplications with long vowel to PIE. Outside Indo-Iranian there is no certain evidence. (W.MARCUS, Zur Bildung der Intensiva in den altarischen Dialekten und im Griechischen, diss. Heidelberg 1914, 20 and 66, cites τητάω and δηδέχαται. The first does not contain reduplication at all, the second is a conjecture for δειδ- on which see now FORSSMAN, Die Sprache 24(1978)3-24: it has intensive reduplication **dei-dik-*. Also in Avestan there is the general problem that a long *ā* might be only graphically long. There existed also presents with normal reduplication, zero grade and suffix *-i̯o-*: τιταίνω, τετραίνω (though this word is not clear), ἰάλλω < **h₂i-h₂l̥-i̯o-*. In Avestan *yaēšya-* 'to boil' and *yaēžya-* 'to venerate' must represent **ya-is-ya-* etc. (BARTHOLOMAE, IFAnzeiger 4, 1894, 12, who does not consider them therefore intensives). I see, then, two possibilities:

   1a. *Hra-Hr̥š-* > *rar̥š-* > *rarš-*, written *rārəš-*;
   b. " " *rārš-*;
   2. *Hrā-Hr̥š-* > *rār̥š-* > *rārš-*.