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## 'Narten' Roots from the Avestan Point of View

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1. At the 1993 Copenhagen meeting of the Indo-European society, Jochem Schindler presented a new theory about the origin of the so-called (acro)static root present. In his own words (Schindler 1994: 398): "Verbalen Nartenformationen entsprechen *systematisch* Nominalbildungen mit analogen Ablautverhältnissen. Das läßt auf zwei ursprüngliche Wurzeltypen schließen, Standard- und Nartenwurzeln." His theory implies the existence in PIE of a separate category of roots which inherently show 'upgraded' ablaut with respect to other roots: lengthened grade where other roots have full grade, and full grade where others have zero grade.

Schindler illustrates his theory by means of twelve very short notes. The first three of them intend to show that the 'upgraded' ablaut occurs with all three tenses, viz. present, perfect and aorist. Subsequently, Schindler offers reconstructed forms from nine different PIE roots which seem to show 'upgraded' ablaut. He distinguishes between verbal (A) and nominal (B) forms. He illustrates most of the reconstructions with one or two attested forms. In numbers, these are divided as follows: Vedic Sanskrit 12 forms (to 7 roots), Avestan 13 (5), Greek 9 (5), Latin 3, Old Irish 2, Old Church Slavonic 1, Lithuanian 1, Old High German 1, English 1. Whereas it is not unusual to find a numerical preponderance of Indo-Iranian and Greek in a list of examples, the fact that Avestan outnumbers Sanskrit is striking.

Schindler himself admits: "Für das Material bestehen natürlich z.T. Alternativerklärungen". The key word here is 'partly': how much of the evidence can be explained *only* by means of PIE 'upgraded' ablaut? If an alternative solution is proposed for a limited number of the adduced forms, this does not affect the general picture: the usefulness of the concept of PIE 'Narten' roots remains intact. Yet if credible alternative solutions exist for many of the forms which Schindler adduces, his theory will lose much of its attraction. It is the aim of this paper to test the validity of the Avestan evidence adduced by Schindler.

## 2.

- PIE *\*ueǵʰ-*: Av. pass. *vaxiia-*, ptc.pf.med. *vauuaxāna-*, adj. *vāxišta-*, ptc.pf.pass. *vašta-*.

*Vaxiia-* appears in the OAv. pres.ptc.med. *vaxiāmna-* 'getting married' (of girls). The meaning matches the Rigvedic use of *vah-* 'to carry; to marry (of a man)', the passive of which is attested in *paryuhyāmānā* 'who is being carried around' = 'who gets married'. This suggests that IIr. *\*ujʰ-ia-* 'to be conveyed' had already acquired the meaning 'to get married'.

Usually, the Avestan passive in *\*-ia-* < PIE *\*-iē/ó-* takes the zero grade of the root. Exceptions occur in Avestan when the root vocalism shows no synchronic alternation, viz. in the case of *āfiia-* 'to be reached' (Skt. *āpyá-*), and of YAv. *ḍaiia-* 'to be put, to be given' < *\*dā-ia-*, with YAv. analogical shortening of *\*ā* (cf. de Vaan 2003: 147). Another root which does not display zero-grade formations in Avestan is *yaž-* 'to worship', and accordingly we find the pres.pass. *yeziia-* < *\*iaj-ia-* 'to be worshipped'.

The two remaining passives with full grade of the root are *vaxiia-* 'to marry' (Skt. *uhyáte*) and *bairiia-* 'to be carried' (Skt. *bhriyáte*). Schindler regards *vaxiia-* and *bairiia-* as archaisms with PIE 'upgraded' root vocalism in front of the suffix *\*-iē/ó-*; they would have escaped the introduction of a zero grade. However, it is perfectly possible that *vaxiia-* and *bairiia-* are due to an innovation on the Avestan side, introducing the full grade in order to make the passive more similar to other verbal formations (Kellens 1984: 128).

I thus assume that *vaxiia*<sup>1</sup> and *bairiia* continue regular IIr. passive presents *\*ujʰ-ia-* and *\*bʰr-ia-*, which analogically introduced the root forms *vax-* and *bar-* on the model of the full grade in the present stems *vaxa-* 'to convey' and *bara-* 'to carry'. In the case of *bairiia*, this assumption can be supported by the following observation. Wherever we find a zero-grade passive present of roots in *\*-ar(H)*, the corresponding active present also has the zero grade, or at least it never has the full grade: *kiriiia-* 'to be made' < *\*kṛ-ia-* (pres. *kərənu-*), *piriia-* 'to be confiscated' < *\*pṛ-ia-* (pres. *pərənu-* and *pāra-*), *miriia-* 'to die' < *\*mṛ-ia-* (no active present attested), *°uuōiriia-* 'to be covered' < *\*Huṛ-ia-* (pres. *vərənu-*), *striia-* 'to be thrown down' < *\*stṛ-ia-* (pres. *stərənu-*)<sup>2</sup>. Only the passives *bairiia-* and *\*airiia-* 'to be consumed' (pres. *\*āra-*) occur beside a full-grade thematic present.

<sup>1</sup> It has been tentatively assumed that OAv. *vaxiāmna-* represents a denominative to YAv. *vaxiia-* 'burden, load' (Humbach 1956: 74f. 'auf der Hochzeitsfahrt befindlich', Kellens 1984: 20 'se trouver sur le chariot de noce'); apart from the fact that this would require haplology to have taken place (from *\*vaxiāja-*), it would disturb the idiomatic agreement between Sanskrit and OAv.

<sup>2</sup> The only exception is *°yairiia-* 'to be greeted' (pres. *°garən-*), which belongs to the root PIr. *\*garH-*. The form is a hapax in Yt 13.50 *kahe nō ida nāma āyairiiaē* 'By whom now will our name be greeted?'

Apart from *vaxiāmna-* there is one other, alleged occurrence of *vaxiia-* which is reported to have the passive meaning 'to be conveyed'. We find it in Yašt 14.43-44 together with the (alleged) form *vašta-* 'conveyed', which would also show a full grade as opposed to Skt. *ūdḥá-*. The passage tells that when two armies clash, the army which is the first to invoke Vərəθraϑna will prevail. I give the text according to Geldner's edition, with my own translation of the less controversial parts:

14.43	<i>āaṭ mraoṭ ahurō mazdā</i> <i>yaṭ spāda hanjasānte</i> <i>spitama xaraduxtra</i> <i>*rāstəm rasma katarasciṭ</i> <i>vaštāñhō<sup>3</sup> ahmiia nōiṭ vaziiānte<sup>4</sup></i> <i>jatāñhō ahmiia nōiṭ janiūānte</i>	Thus spoke Ahura Mazdā: When the armies come together, oh Spitāma Zarathustra, each of them an orderly battle-rank;
14.44	<i>catayrō pərənā viḍāraiūōiš</i> <i>auni paḍqəm katarasciṭ</i> <i>yatārō *paouruūō frāiiazāite</i>  (...) <i>atārō vərəθra *hacāite.</i>	You must spread out four feathers towards each of the roads <sup>5</sup> ; the one of them both which is the first to worship [Vərəθraϑna],  (...) that one will acquire the victory.

The problem lies in the last two lines of 14.43. Firstly, their meaning in the context is unclear. The loc.sg. *ahmiia* 'in it' can only refer to *rasma* 'battle-rank'; the subjunctive forms *vaziiānte* and *janiūānte* may or may not depend on *yaṭ*, like *hanjasānte*. A literal translation runs: '(when) the *v.* in it will not be *v.*, (when) the slain ones in it will not be slain.' Bartholomae assumes that this refers to an undecided outcome of the battle, which is possible; but it might also be a description of *rāstəm rasma*, i.e. refer to the situation before the battle. Secondly, and this is most relevant to the present problem, the reading of the penultimate line is disputed. In his edition, Geldner (1886-96) gives this line as *vaštāñhō ahmiia nōiṭ vaziiānte*, under the assumption (expressed in Geldner 1882: 80) that the double use of the verb *jan-* in the second line presupposes the double use

<sup>3</sup> Vll. F1 *vaštāñhō*, M12 *vištāñhō* · J10 *varštāñhō* · E1 *varštāñhō*, K16 *varštāñhō*, s.m. *vastāñhō* · Pt1.P13.O3 *varastāñhō*, L18 *varaštāñhō* · L11 *varštāñhō*, M4 *vaštāñhō* · Jm4 *varaštāñhō* · K38.36 *vištāñhō*.

<sup>4</sup> Vll. F1.E1 *vaniiānte* · J10.M4 *vaniiānti* · Pt1+, L11.O3 *vaziiānti* · Jm4 *janiūānte* · K38 *vaniiānte*, K36.M12 *vanaiiānti*.

<sup>5</sup> Bartholomae 1904: 894 translates "vier Federn sollst du verteilen auf den Weg nach beiden Seiten hin". This implies two anomalies, viz. the use of the gen.pl. *paḍqəm* for the acc.sg. (originally *pantəm*, later *pantānəm*), and the use of the nom.sg. *katarasciṭ* as an accusative of goal. My translation implies only one anomaly, viz. the nom.sg. *katarasciṭ* being governed by the preposition *auni*, which normally governs the acc.

of a single verb in the first line too. However, neither *vašta-* nor *vazīia-* are secured philologically. The reading *vašta-* appears in F1, but most other mss. have *var(a)šta-*; since there is no word in the context from which *-r-* could have been adopted, it seems that F1 *vašta-* has lost *-r-* (maybe due to *\*rāštəm*, spelled *raštəm* in all mss. including F1). The mss. K36 and K38 spell *vištāṇhō*, but since we expect *\*višt-* to yield *višt-* in the archetype (cf. de Vaan 2003: 223ff.), it is likely that they too go back to *varštāṇhō*. The verb form is given as *vaniia-* in most mss., and *vazīia-* can be due to a simple scribal mistake of *z* for *n*, both letters being very similar in the Avestan alphabet (if one assumes that *vaniiaṇte* originally contained the letter *ñ*, the similarity is even greater). Thus, the original version seems to have been *varštāṇhō ahmīia nōit vaniiaṇte*. A passive *vaniia-* ‘to be conquered’ would admittedly be a hapax, but it would nicely match the meaning of *janiia-* ‘to be slain’. The juxtaposition of *van-* and *jan-* in connection with warfare returns in this same hymn: Yt 14.58 *yaḍa azəm aom spāḍəm vanāni ... yaḍa azəm aom spāḍəm nijanāni* ‘so that I may conquer that army, ... so that I may strike down that army’. The meaning of *varšta-* is less clear. We may compare the past ptc. *°unaršta-* ‘made, done’, but this does not yield a cogent meaning. Kellens’ judgement of the passage is clear (1984: 127): “Le Yt 14,43, vraisemblablement très corrompu, n’offre aucune garantie.” The safest assumption to be made about it is that the alleged stems *vašta-* and *vazīia-* are probably ghost words.

The form *vauuazāna-* is also a hapax: Yt 10.124 *frauuazāite miθrō ... vāšəm srīrəm vauuazānəm*. Kellens (1984: 409) argues that the original form may have been nom.sg. *\*vauuazānō*, referring to *miθrō*. The translation would then be: ‘Mithra drives forth his beautiful chariot, which he has driven’ (or ‘been driving’). Of course, a form *\*vaozāna-* < *\*ua-uz-āna-* would have been perfectly possible, cf. 3s.pf.ind. *vaoze* ‘he has conveyed’ and 3p. *vaozirəm*. But instead of regarding a participle of the perfect middle as a very archaic form with ‘Narten’ ablaut, it seems more likely that *vauuazāna-* has adopted the full grade from other verb forms of *vaz-*; note the occurrence of *fra-uuaḡaite* in the same line.

The superlative *vāzišta-* probably does not belong to the root *vaz-* ‘to convey’. Insler 1996 has argued that its meaning can hardly be ‘most conveying’ as was proposed by Bartholomae 1904: 1417 and many scholars afterwards, but must rather be ‘most respected’. This means that *vāzišta-* must first of all be compared with Av. *uzəma-* (Yasna 44.7) ‘respectful’, maybe for *\*ūzma-*, and with YAv. *aša.vāzah-*, which can mean ‘having respect for the truth’. Iranian *vāz-*/*\*ūz-* can be connected with Skt. *vāhas-* ‘respect’ (RV *ṛtasya vāhas* matching Av. *aša.vāzah-*) and the superlative *vāhiṣtha-*, which Insler separates from *vāhiṣtha-* and translates as ‘most respectful’. According to Insler, the Skt. verbal forms *ūhē*, *āpyūhe*, *ūhiṣe* ‘I respect’ and *ūhyāthe* ‘you two respect’ may belong to the same root, although he leaves their relationship to *ōhas-* etc. undiscussed. In any case,

the connection of Av. *vāzah-* and *vāzišta-* with Skt. forms in *vāh-/ūh-* implies an IIr. reconstruction as *\*uaHjʰ-*, which must be separated from PIE *\*ueǵʰ-*.

- PIE *\*bʰer-*: pass. *bairiia-*, agent noun *bāšar-*.

For the passive present *bairiia-* (Skt. *bhriyāte*), see above. YAv. *bāšar-* ‘rider’ represents an IIr. agent noun with the suffix *\*-tar-*, a formation type which usually contains the full grade of the root. Since the expected reflex of *\*bār-tar-* would be *\*bāšar-*, Schindler reconstructs IIr. *\*ā* in *\*bāšar-tar-*. However, *bāšar-* can be counted among a small number of words with an unexpected sequence *-āš-* < *\*-ārt-*, cf. Hoffmann 1986: 847. In all cases, the consonant preceding *-ā-* is a labial: *xʷāša-* ‘food’ < *\*suārta-*, *xʷāšar-* ‘drinker’ < *\*suār-tar-* and *vāša-* ‘vehicle’ < *\*uārt-a-*. We may posit phonetic lengthening of IIr. *\*a* in stressed initial syllable in front of *š* < *\*rt*, conditioned by a preceding labial (cf. de Vaan 2003: 54-56).

- PIE *\*h<sub>3</sub>reg-*: nom.acc.n. *rāzara-*: ins.sg. *rašn-*.

Schindler refers to a footnote in Strunk 1987: 390, who writes: “Schindler (by oral communication) compares OAv. *rāzara-* (n.) ‘statute, order’, instr. sg. *rašnā* with alternation of lengthened and full grade in an acrostic heteroclitc noun of the same root.” However, it seems doubtful whether *rašnā* is compelling evidence for IIr. ablaut. Firstly, we find also the gen.sg. *rāzāng* and the gen.pl. *rašnam* attested in OAv., with the same long vowel as in *rāzara-*. Secondly, there is a number of Avestan forms in which *\*ā* was shortened to *a* in front of *ā* in the next syllable, such as *paiti.zanāt* (Yt 13.50) ‘knows’ as against *paiti.zānənti* to *zāna-*, pres.subj.act. *fraḍāt* and med. *fraḍataēca* to *fraḍa-* ‘to flourish’, or acc.sg. *āsnatāram* to *ā-snātar-* ‘washer’. In OAv., such a shortening may explain the acc.pl. *saxʷārē* to the noun *\*sāh-uar-* ‘command’, cf. ins.sg. *sāxʷəni*. It is possible that the same shortening is responsible for our form *rašnā* < *\*rāšnā*. In that case, all forms of the noun *\*rāz-ar/n-* originally possessed the long vowel which we also find in the causative *rāzaiia-* and in the verbal adj. *rāšta-*, but not in other derivatives (*rasman-*). This *\*ā* may ultimately stem from the root noun *\*h<sub>3</sub>reg-s* and/or from the root present (Skt. *rāṣti*), although the Skt. present stands isolated within Indo-European.

- PIE *\*uerǵ-*: *varəzimācā*, root noun *°unarəz-*, past ptc. *°unaršta-*.

The 1p. aor.opt. *varəzimācā* (Y 35.3) of *varəz-* ‘to work’ goes back to IIr. *\*uarj-iH-ma*. The combination of full grade of the root plus zero grade of the suffix is unusual for a 1p. optative form; however, a few other OAv. root aorist opt. forms also display a full grade of the root, viz. *mainimadi-cā*, *srauuimā* and *zaēmā*. Schindler apparently concludes that the roots in question have ‘upgraded’ their ablaut in the aorist optative. Yet the ablaut grade of these root aorist optative forms does not necessarily go back to PIE. Hoffmann (1967: 32f.) points out that in the oldest layers of Sanskrit, the *s*-aorist lacks active op-

tative forms: they are supplied by the root aorist, e.g. Skt. 23s.opt. *sahyās* to *s-aorist sāks-* (*sah-* 'to conquer'). Narten (1984: 99) observes that the same situation seems to apply to Av. *varx-*: most of the active aorist forms are *s-aorists*, but there is no *s-aorist* optative. Therefore Avestan, like Sanskrit, may have supplied the aor.opt.act. by means of the root aorist (cf. also Harðarson 1993: 125). In that case, it cannot be excluded that the ablaut grade of the *s-aorist* *\*varš-* has influenced that of the root aorist *varəzima<sup>o</sup>* which was used as its optative.

As evidence for 'Narten' vocalism, Schindler also adduces the root noun *°unarəx-* 'working' which is used as the second member of a compound, e.g. in *ayānuarəx-* 'who does evil' and *haiθiiānuarəx-* 'who makes real'. Kellens (1974: 66) ascribes the full grade of *°unarəx-* to analogical influence of the nom.sg. *°unarš* < *\*-urj-s*, which has regular *-ar-* < PIr. *\*-r-* in front of *š*. This is one possible explanation. Alternatively, one may ascribe *°unarəx-* to the analogical introduction of (what looked like) the full grade from other derivatives of *varx-*, such as the ptc. *°unaršta-* 'done' and the adj. *varštuna-* 'what must be done'. This scenario seems especially likely because the frequent thematization of the root noun in YAv. is always accompanied by the full grade of the root: nom.sg. *sraošaunuarəxō*, gen.pl. *vāstriiānuarəxanəmca*, etc.

Schindler adduces the past participle *°unaršta-* 'done, made' in Old Avestan *huunaršta-*, *dužnuaršta-* and *haiθiiānuaršta-* as evidence for a PIE *\*-tō-* formation with full grade in Avestan. In OAv., the vowel *-a-* is unexpected: Proto-Avestan *\*-rš-* regularly yields *-ərəš-* in Old Avestan, as opposed to *-arš-* in YAv. However, we find a number of OAv. forms which do contain *-arš-* < *\*-rš-*, such as *aršnaunant-* 'with a stallion', *daršti-* 'sight' and *paršta-* 'question'. These are probably due to YAv. influence on the OAv. texts: the OAv. sequence *\*-rš-* was replaced by YAv. *-arš-* in the speech of the YAv. text transmitters (thus Beekes 1988: 94 and Hoffmann-Forssman 1996: 91). We may regard *°unaršta-* as another instance of this YAv. influence on OAv.

- PIE *\*genh<sub>1</sub>-*: noun *ni-xənta-*, *fra-xənti-*.

Schindler compares Av. *nixənta-* with German *Kind*, and Av. *frazənti-* 'posterity, offspring' with Greek *γένεσις*. He posits PIE *\*gēnh<sub>1</sub>-to-* and *\*gēnh<sub>1</sub>-ti-*, i.e. full grade in two formations which usually show the zero grade of the root. However, the Avestan forms cannot be simply projected back into PIE. The stem *ni-xənta-* is only attested in the hapax *nixəntam* (sic) occurring in Frahang-ī ōim, nr. 730. The Pahlavī translation glosses it as 'who is born in the house'. If the connection with *xan-* 'to engender' is correct, this would be the only combination of *ni* + *xan-* in Avestan; similarly, RV *janī-* is not attested in combination with *nī*. In view of Skt. *jātá-* 'living being; son' and Av. *xāta-* 'born' < IIr. *\*gñHtá-* < PIE *\*gñh<sub>1</sub>-tō-*, it is unlikely that *nixənta-* preserves archaic ablaut of the root

PIE *\*gēnh<sub>1</sub>-*. On the contrary, I would argue that *nixənta-* represents a more recent derivation of the root Av. *xan-*.

The word *frazənti-* < *\*pra-janHti-* is regarded as a possible old formation by Hoffmann 1986: 846, who connects it with Gr. *γένεσις* and Latin *gēns*. For these forms, Beekes 1969: 228 has suggested the possibility of a PIE ablauting paradigm nom.sg. *\*gēnh<sub>1</sub>tis*, gen.sg. *\*gñh<sub>1</sub>téis*. The zero grade in the root and suffixal accent might then be continued in Skt. *prájāti-*, although this does not occur in the oldest Skt. texts, and has a slightly different meaning 'generating or generative power, generation, production, bringing forth, delivery' (Br.); ŚrS.; BhP. It is therefore possible that *prájāti-* is an inner-Sanskrit formation on the basis of Skt. *prajā-* (RV+) 'offspring' and *prajāta-* (RV+) 'born, produced'. This would leave Av. *frazənti-* as the only IIr. descendant of *\*gēnh<sub>1</sub>-ti-*, which renders the explanation from an ablauting paradigm unnecessary (though not impossible). Instead, *frazənti-* may be due to the introduction of the full grade of the root *xan-* 'to give birth to'.

3. So far the Avestan evidence which was used by Schindler. There is another form which has often been regarded as evidence for 'Narten' ablaut in Avestan:

- OAv. *stāumī* (Y 43.8), 1s. pres.ind.act. of *stu-* 'praise'.

This form was discussed by Narten 1968: 17, who concluded that it might represent the Avestan counterpart of the lengthened grade in Skt. *stāumi*. However, instead of *stāumī* we must in all probability read Y 43.8 *staomī*, with the same full grade as in YAv. *staomi*. This is borne out by the variant readings: all mss. have *staomī* except for the Iranian Vīdēvdād sāde mss. Jp1, Mf2 and K4, which have *stāumī*. Although it is true that these mss. sometimes preserve an older reading than the other ms. classes, the sequences *-āum-* and *-aom-* tend to be mixed up by Jp1, Mf2 and K4, cf. De Vaan 2000; in particular, they tend to replace *-aom-* by *-āum-*. Thus, we must read Y 43.8 *staomī*.

4. It has become clear that the Avestan evidence does not support Schindler's theory; but there is more. A cornerstone of his system is formed by lengthened grades in acrostatic presents such as Skt. *tāṣṭi* and *rāṣṭi*, but an alternative explanation for these lengthened grades has been found in the simplification of original reduplication in roots of the type *\*TeK-*. This idea has been developed by Kortlandt 1999, who builds on a suggestion by Lubotsky (p.c.): "When lengthened grade superseded reduplication in the active singular of the static present, first in *TeK*-roots such as *tāṣṭi* 'fashions', *dāṣṭi* 'makes offering', then analogically in *mārṣṭi* 'wipes', *stāuti* 'praises', the long vowel became characteristic of this type of derived present" (Kortlandt 1999: 6). This explanation combines a simple observation on the phonological structure of roots

showing 'Narten' presents with the fact that the lengthened grade has spread especially in Indo-Iranian (and within IIr., especially in Indo-Aryan). Since it does not introduce an otherwise unknown phonological parameter for PIE, and since it is tailored to the languages which contain most or all of the disputed lengthened grade presents, Kortlandt's explanation carries more conviction than the theory of PIE 'upgrading' roots. The proposed origin of lengthened grade presents in reduplication also removes the apparent anomaly that some PIE roots would have formed both a root present and a root aorist (cf. Kümmel 1998). Finally, it has been argued by Harðarson 1993: 89 and by Kümmel 1998: 204 that lengthened grade root presents are characterized by an intensive or iterative (Kümmel also speaks of durative) meaning. Since one of the main functions of reduplication in PIE is to express repetition, this observation neatly fits Kortlandt's explanation.

5. We have seen in section 2 that none of the adduced Avestan forms remains as trustworthy evidence for PIE 'upgraded' ablaut; all of them can be explained as the result of phonetic development within Avestan or from morphological rearrangement. The conclusion seems to be justified that the Avestan pillar under the theory of 'Narten' roots has collapsed. Added to the attractive alternative explanation which exists for the acrostatic root presents in Skt., the concept of 'Narten' roots can be abandoned altogether.

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