'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 *u̯eĝʰ-: Av. pass. *vaziia-*, ptc.pf.med. *vauuazāna-*, adj. *vāzišta-*, ptc.pf.pass. *vašta-*.

Vaziia- appears in the OAv. pres.ptc.med. *vaziiamna-* '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 *paryuhyámānā* 'who is being carried around' = 'who gets married'. This suggests that IIr. *uȷʰ-iá-* 'to be conveyed' had already acquired the meaning 'to get married'.

Usually, the Avestan passive in *-iá-* < PIE *-ié/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. *δaiia-* '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 *yaz-* 'to worship', and accordingly we find pres.pass. *yeziia-* < *iaȷ-ia-* 'to be worshipped'.

The two remaining passives with full grade of the root are *vaziia-* 'to marry' (Skt. *uhyáte*) and *bairiia-* 'to be carried' (Skt. *bhriyáte*). Schindler regards *vaziia-* and *bairiia-* as archaisms with PIE 'upgraded' root vocalism in front of the suffix *-ié/ó-*; they would have escaped the introduction of a zero grade. However, it is perfectly possible that *vaziia-* 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 *vaziia-*[1] and *bairiia-* continue regular IIr. passive presents *uȷʰ-iá-* and *bʰr̥-iá-*, which analogically introduced the root forms *vaz-* and *bar-* on the model of the full grade in the present stems *vaza-* '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: *kiriia-* 'to be made' < *kr̥ia-* (pres. *kərənu-*), *piriia-* 'to be confiscated' < *pr̥ia-* (pres. *pərənu-* and *pāra-*), *miriia-* 'to die' < *mr̥ia-* (no active present attested), *°uuōiriia-* 'to be covered' < *Hur̥ia-* (pres. *vərənu-*), *striia-* 'to be thrown down' < *str̥ia-* (pres. *stərənu-*)[2]. Only the passives *bairiia-* and *xᵛairiia-* 'to be consumed' (pres. *xᵛara-*) occur beside a full-grade thematic present.

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[1] It has been tentatively assumed that OAv. *vaziiamna-* represents a denominative to YAv. *vaziia-* '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 *vaziaia-*), it would disturb the idiomatic agreement between Sanskrit and OAv.

[2] The only exception is *°yairiia-* 'to be greeted' (pres. *°gərən-*), which belongs to the root PIr. *garH-*. The form is a hapax in Yt 13.50 *kahe nō iδa nąma āyairiiāt* 'By whom now will our name be greeted?'

Apart from *vaziiamna-* there is one other, alleged occurrence of *vaziia-* 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. *ūḍhá-*. The passage tells that when two armies clash, the army which is the first to invoke Vərəθrayna will prevail. I give the text according to Geldner's edition, with my own translation of the less controversial parts:

14.43	*āat̰ mraot̰ ahurō mazdā̊*	Thus spoke Ahura Mazdā:
	yat̰ spāδa haṇjasåṇte	When the armies come together,
	spitama zaraθuštra	oh Spitāma Zarathustra,
	ˣrāštəm rasma katarascit̰	each of them an orderly battle-rank;
	vaštåŋhō[3] *ahmiia nōit̰ vaziiåṇte*[4]	
	jatåŋhō ahmiia nōit̰ janiiåṇte	
14.44	*cataŋrō pərənā̊ viδāraiiōiš*	You must spread out four feathers
	auui paθqm katarascit̰	towards each of the roads[5];
	yatārō ⁺paouruuō frāiiazāite	the one of them both which is the first to worship [Vərəθrayna],
	(…)	(…)
	atārō vərəθra ˣhacāite.	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 *vaziiåṇte* and *janiiåṇte* may or may not depend on *yat̰*, like *haṇjasåṇte*. 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 *rāštəm 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 *vaštåŋhō ahmiia nōit̰ vaziiåṇte*, under the assumption (expressed in Geldner 1882: 80) that the double use of the verb *jan-* in the second line presupposes the double use

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[3] V.ll. F1 *vaštåŋhō*, Ml2 *vištåŋhō* · J10 *varštåŋhō* · E1 *varštåŋhō*, K16 *varštåŋhō*, s.m. *vaståŋhō* · Pt1.P13.O3 *varaståŋhō*, L18 *varaštåŋhō* · L11 *varštåŋhō*, M4 *vaštåŋhō* · Jm4 *varaštåŋhō* · K38.36 *vištåŋhō*.

[4] V.ll. F1.E1 *vaniiåṇte* · J10.M4 *vaniiåṇti* · Pt1+, L11.O3 *vaziiåṇti* · Jm4 *janiiåṇte* · K38 *vaniiåṇte*, K36.Ml2 *vanaiiåṇti*.

[5] 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. *paθqm* for the acc.sg. (originally *paṇtqm*, later *paṇtānəm*), and the use of the nom.sg. *katarascit̰* as an accusative of goal. My translation implies only one anomaly, viz. the nom.sg. *kataras-cit̰* being governed by the preposition *auui*, which normally governs the acc.

of a single verb in the first line too. However, neither *vašta-* nor *vaziia-* 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 ˣ*raštəm*, spelled *raštəm* in all mss. including F1). The mss. K36 and K38 spell *vištåŋhō*, but since we expect **višt-* to yield *vīšt-* in the archetype (cf. de Vaan 2003: 223ff.), it is likely that they too go back to *varštåŋhō*. The verb form is given as *vaniia-* in most mss., and *vaziia-* can be due to a simple scribal mistake of *z̧* for *n*, both letters being very similar in the Avestan alphabet (if one assumes that *vaniiåṇte* originally contained the letter *ń*, the similarity is even greater). Thus, the original version seems to have been *varštåŋhō ahmiia nōiṭ vaniiåṇte*. 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 *yaθa azəm aom spāδəm vanāni ... yaθa azəm aom spāδəm 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. °*uuaršta-* '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 *vaziia-* are probably ghost words.

The form *vauuazāna-* is also a hapax: Yt 10.124 *frauuazaite 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. *vaoz̧e* 'he has conveyed' and 3p. *vaoz̧irəm*. 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-uuazaite* in the same line.

The superlative *vāziš̌ta-* 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 *vāziš̌ta-* must first of all be compared with Av. *uz̧əma-* (Yasna 44.7) 'respectful', maybe for **ūz̧ma-*, and with YAv. *aša.vāz̧ah-*, which can mean 'having respect for the truth'. Iranian *vāz-/*ūz̧-* can be connected with Skt. *vāhas-* 'respect' (RV *r̥tásya vāhas* matching Av. *aša.vāz̧ah-*) and the superlative *vāhiš̌tha-*, which Insler separates from *vāhiš̌tha-* and translates as 'most respectful'. According to Insler, the Skt. verbal forms *ūhé, ápyūhe, ūhiṣe* 'I respect' and *ūhyāthe* 'you two respect' may belong to the same root, although he leaves their relationship to *óhas-* etc. undiscussed. In any case,

the connection of Av. *vāz̧ah-* and *vāziš̌ta-* with Skt. forms in *vāh-/ūh-* implies an IIr. reconstruction as **ųaHȷ́ʰ-*, which must be separated from PIE **ųeȷ́ʰ-*.

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

For the passive present *bairiia-* (Skt. *bhriyáte*), 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 **bár-tar-* would be **bašar-*, Schindler reconstructs IIr. *ā in **bʰár-tar-*. However, *bāšar-* can be counted among a small number of words with an unexpected sequence -*āš-* < *-*árt-*, cf. Hoffmann 1986: 847. In all cases, the consonant preceding -*ā*- is a labial: *xᵛāša-* 'food' < **suárta-*, *xᵛāšar-* 'drinker' < **suár-tar-* and *vāša-* 'vehicle' < **uárt-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 **h₃reĝ-*: nom.acc.n. *rāz̧arə* : ins.sg. *rašn-*.

Schindler refers to a footnote in Strunk 1987: 390, who writes: "Schindler (by oral communication) compares OAv. *rāz̧arə* (n.) 'statute, order', instr. sg. *rašnā* with alternation of lengthened and full grade in an acrostatic heteroclitic noun of the same root." However, it seems doubtful whether *rašnā* is compelling evidence for IIr. ablaut. Firstly, we find also the gen.sg. *rāz̧əṇg* and the gen.pl. *rašnąm* attested in OAv., with the same long vowel as in *rāz̧arə*. 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.z̧anāṭ* (Yt 13.50) 'knows' as against *paiti.z̧anāṇti* to *z̧āna-*, pres.subj.act. *fraδāṭ* and med. *fraδātaēca* to *frāδa-* 'to flourish', or acc.sg. *āsnatārəm* to *ā-snātar-* 'washer'. In OAv., such a shortening may explain the acc.pl. *saxᵛārə* to the noun **sāh-uar-* 'command', cf. ins.sg. *sāxᵛ ə̄nī*. It is possible that the same shortening is responsible for our form *rašnā* < *rāšnā. In that case, all forms of the noun **rāz̧-ar/n-* originally possessed the long vowel which we also find in the causative *rāz̧aiia-* and in the verbal adj. *rāšta-*, but not in other derivatives (*rasman-*). This *ā may ultimately stem from the root noun *h₃reĝ-s and/or from the root present (Skt. *rā́ṣṭi*), although the Skt. present stands isolated within Indo-European.

- PIE **ųerĝ-*: *varəz̧imācā*, root noun °*uuarəz̧-*, past ptc. °*uuaršta-*.

The 1p. aor.opt. *varəz̧imā-cā* (Y 35.3) of *varz-* 'to work' goes back to IIr. **uarȷ́-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, srəuuimā* and *z̧aēmā*. 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 *sākṣ-* (*sah-* 'to conquer'). Narten (1984: 99) observes that the same situation seems to apply to Av. *varz̥-*: 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 *vars̥-* has influenced that of the root aorist *varᵊzima°* which was used as its optative.

As evidence for 'Narten' vocalism, Schindler also adduces the root noun °*uuarᵊz̥-* 'working' which is used as the second member of a compound, e.g. in *ayāuuarᵊz̥-* 'who does evil' and *haiϑiiāuuarᵊz̥-* 'who makes real'. Kellens (1974: 66) ascribes the full grade of °*uuarᵊz̥-* to analogical influence of the nom.sg. °*uuars̥* < *-*ur̥j-s*, which has regular -*ar-* < PIr. *-r̥-* in front of *s̥*. This is one possible explanation. Alternatively, one may ascribe °*uuarᵊz̥-* to the analogical introduction of (what looked like) the full grade from other derivatives of *varz̥-*, such as the ptc. °*uuaršta-* 'done' and the adj. *varštuua-* '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. *sraošāuuarᵊz̥ō*, gen.pl. *vāstriiāuuarᵊzanąmca*, etc.

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

- PIE **ǵenh₁-*: noun *ni-z̥anta-*, *fra-z̥ainti-*.

Schindler compares Av. *niz̥anta-* with German *Kind*, and Av. *fraz̥ainti-* 'posterity, offspring' with Greek γένεσις. He posits PIE **ǵénh₁-to-* and **ǵénh₁-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 *niz̥anta-* is only attested in the hapax *niz̥antəm* (sic) occurring in Frahang-ī ōim, nr. 730. The Pahlavī translation glosses it as 'who is born in the house'. If the connection with *z̥an-* 'to engender' is correct, this would be the only combination of *ni* + *z̥an-* in Avestan; similarly, RV *janⁱ-* is not attested in combination with *ní*. In view of Skt. *jātá-* 'living being; son' and Av. *z̥āta-* 'born' < IIr. **ǵnHtá-* < PIE **ǵnh₁-tó-*, it is unlikely that *niz̥anta-* preserves archaic ablaut of the root

PIE **ǵenh₁-*. On the contrary, I would argue that *niz̥anta-* represents a more recent derivation of the root Av. *z̥an-*.

The word *fraz̥ainti-* < **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. **ǵénh₁tis*, gen.sg. **ǵnh₁téis*. 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.); SrS.; BhP. It is therefore possible that *prájāti-* is an inner-Sanskrit formation on the basis of Skt. *prajā́-* (RV+) 'offspring' and *prájāta-* (RV+) 'born, produced'. This would leave Av. *fraz̥ainti-* as the only IIr. descendant of **ǵénh₁-ti-*, which renders the explanation from an ablauting paradigm unnecessary (though not impossible). Instead, *fraz̥ainti-* may be due to the introduction of the full grade of the root *z̥an-* '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. *stáumi*. 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. *tā́ṣṭi* and *rā́ṣṭi*, 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 *tā́ṣṭi* 'fashions', *dā́ṣṭi* 'makes offering', then analogically in *mā́rṣṭi* 'wipes', *stáuti* '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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