Pluralized Collectives in Young Avestan: 
A Morphosyntactic Explanation of the Replacement of the YAv. nom.-acc.pl.n. Endings -ā̄ and -ī̆ by -āiš, -ā and -iš

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Abstract

This article studies Young Avestan forms in -āiš (formally instr.pl.m./n. of a-stems), -ā (formally nom.-acc.pl.f. of ā-stems) and -iš (formally nom.pl.f. of ĩ-stems) that are used in contexts where neuter nom.-acc.pl. / collective forms in -ā (a-stems) and -i (consonant-stems) are expected. It is argued that these forms in -āiš, -ā, and -iš are secondarily created pluralizations of original neuter collectives in reaction to the syntactic change according to which their original singular verbal concord is in Young Avestan times changed to plural verbal concord. The choice for forming these newly pluralized collectives with the endings -āiš, -ā, and -iš lies in the fact that these are the plural variants of the singular endings -ā (instr.sg.m./n. of a-stems), -ā (nom.sg. of ā-stems) and -i (nom.sg. of ĩ-stems), respectively, which are formally identical to the collective neuter endings -ā (a-stems) and -i (consonant-stems). The ‘collective plural’ forms in -āiš, -ā, and -iš can thus be explained through a simple four-part analogy.

Keywords

Avestan, Non-Canonical Instrumental Plurals, Gender Transfer, Pluralization, Collectives, Indo-European

1. INTRODUCTION

In Young Avestan we find two generally recognized, relatively widespread phenomena regarding the nom.-acc.pl.n. ending -ā of a-stem nouns, adjectives and pronouns. On the one hand, we find that this ending is being replaced by the instrumental plural m./n. ending -āiš. This so-called ‘non-canonical use’ of instrumental plural forms has recently received a thorough treatment by De Vaan (2018), who argues for a semantic basis for its origin. On the other hand, we find that the nom.-acc.pl.n. ending -ā is be-
ing replaced by the feminine nom.-acc.pl. ā-stem ending -ā̀, which is often regarded as the result of a gender transition of the word in question. This phenomenon has recently been extensively treated by Hock (2014), who, too, assumes a semantic basis for explaining its distributional peculiarities.

As far as I am aware, the two types of replacements have always been regarded as two distinct phenomena that are unrelated to each other. In the present article I will argue, however, that they in fact can be explained as two parallel morphological reactions to a single syntactic change that took place within the Young Avestan period. Moreover, I will argue that a third enigmatic YAv. ending, -iš as found in nāmānīš ‘names’ and ašaōniš ‘righteous (ones)’, is in fact a replacement of the nom.-acc.pl.n. consonant-stem ending -i and may be explained along similar lines.

2A. NON-CANONICAL INSTRUMENTAL PLURALS: THE PROBLEM

As mentioned above, in a recent article, Michiel de Vaan offers a thorough treatment of the fact that in Young Avestan we occasionally find instrumental plural forms in contexts where we normally would expect the usage of a nominative or accusative plural case (De Vaan 2018). Compare, for instance, Ny 1.1 nāmāsō tē ahura mazda ściśčīt parō anīīāš dāmān ‘Homage to you, O Ahura Mazda, even three times before other creatures’ (De Vaan 2018: 22), where instr.pl.m./n. anīīāš ‘other’ is adnominal to acc.pl.n. dāmān ‘creatures’ instead of an expected acc.pl.n. form *anīīa. Although this so-called non-canonical use of instrumental plurals is well-known and relatively often discussed, ‘there appears to be no agreement on the explanation of the phenomenon or even the exact delimitation of the text passages showing it’ (De Vaan 2018: 21).

One aspect that had been noted before, and which is confirmed by De Vaan (2018: 31), is that this non-canonical use of the instrumental case is only attested for neuter nominative-accusative plural forms. This raises the following four questions:

1. Why is this phenomenon only found with neuters?
2. Why is it only found in the plural?

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3. Why is it found with both the nominative and the accusative case?
4. Why has the instrumental case been chosen as a replacement of these nom.-acc.pl.n. forms?

One can only agree with De Vaan that any solution to the rise of these non-canonical instrumental plurals should be able to answer all these questions.

2B. DE VAAN’S PROPOSAL FOR A SEMANTIC ORIGIN

According to De Vaan, the non-canonical use of the instrumental plural case has a semantic origin. He notices that for the majority of contexts in which this case replaces an expected accusative case, we are dealing with prepositional phrases expressing ‘extension’, ‘limitation’, or ‘respect’, and with direct objects with a reduced grade of affectedness. Noting that “[t]he instrumental defines means, measure, and duration as expressions of a trajectory, whereas the accusative, when it is not used to indicate a prototypical direct object, defines the extent to which an action partially affects an entity”, he concludes that “[w]hen expressing extent and limitation, therefore, the instrumental and accusative are semantically very close” (2018: 34). The contexts in which the instrumental case replaces an expected nominative case “all concern intransitive verbs, in which the logical subject is by definition not agentive” (2018: 34). Although De Vaan does not make this explicit, his line of reasoning seems to be that the non-agentivity of these subjects is semantically close to the reduced grade of affectedness of the non-canonically used instrumentals instead of accusatives, and that therefore these nominatives could be replaced by instrumentals as well.

According to De Vaan, this semantic analysis helps to understand why the usage of the non-canonical instrumental is restricted to neuters and plurals. The correlation with neuter gender is explained by the idea that “[t]he instrumental is more typically used to convey partial affectedness with inanimate nouns (means, trajectory, circumstance)”, whereas in animate nouns it “is preferably used for comitatives”. And the correlation with the plural is explained by stating that this number “is by nature less definite and therefore more liable to express partial affectedness than the singular” (2018: 34).
De Vaan (ibid.) concludes his semantic analysis by claiming that “the difference between unattested tarašātō *aniia dāmən [with nom.-acc.pl.n. aniiia, AK] and attested tarašātō aniiāičiš dāmən [with instr.pl.n. aniiāičiš, AK] may have corresponded to the difference between ‘who is superior to all other creatures’ and ‘who is superior to some/many of the other creatures’”.

2C. PROBLEMATIC ASPECTS OF DE VAAN’S SEMANTIC APPROACH
Although De Vaan’s analysis of all relevant passages is admirably thorough, I have doubts whether his semantically driven scenario for the rise of the non-canonical use of instrumental plurals can explain all aspects that need to be explained. For instance, although it may be true that the plural number is “more liable to express partial affectedness than the singular” (De Vaan 2018: 34), does this really explain why non-canonical instrumentals are never found in singular forms? Another problem regards examples like tarašātō aniiāičiš dāmən ‘who is superior to the other creatures’ (passim in YAv.): if the choice for the instr.pl. adjectival form aniiāičiš is really semantically driven, why would its head noun dāmən ‘creatures’ not be in instr.pl. either, i.e., dāməbišiš? Moreover, is it really convincing to assume that the epithet tarašātō aniiāičiš dāmən, which in e.g., Yašt 2.1 is used to describe the supreme deity Ahura Mazda himself, would have the meaning ‘who is superior to some/many of the other creatures’ instead of ‘who is superior to all other creatures’? In the following, I will therefore argue for a different mechanism to explain the rise of non-canonical instrumental plurals in Young Avestan, namely one that is based on a morphosyntactic scenario.

2D. FORMAL CONSIDERATIONS
An interesting observation made by De Vaan is that the non-canonical instr.pl. is most clearly found in several pronouns and pronominal adjectives (aniia- ‘other’, ya- (rel. pron.), ka- (interrog.pron.), višpa- ‘all’, x’a- ‘his/her/their own’), as well as in some non-pronominal adjectives (ašairi.zašma- ‘under the earth’, upairi.zašma- ‘on the earth’, spoŋto.dāta- ‘made by the beneficial one’, sraēśta- ‘most beautiful’, sriša- ‘beautiful’). As De Vaan rightly states, the data point to “attributive function as the more original one of the non-canonically used instrumentals, and subject func-
tion is rare” (2018: 21). Although De Vaan regards this distribution as a semantic one, also on a morphological level this distribution is interesting. All pronouns and adjectives where we find non-canonical instrumental plurals inflect according to the a-stem inflection. This means that in all these cases we are dealing with a single formal replacement, namely that of the nom.-acc.pl.n. ending -ā (e.g. anii ‘other’, yā ‘which’, etc.) by the instr.pl.m./n. ending -āis (aniiāiš, yāiš, etc.). Another morphologically interesting phenomenon that all these pronouns and adjectives share is that their nom.-acc.pl.n. forms in -ā are formally identical to their corresponding instrumental singular forms, which end in -ā, as well (e.g. instr.sg.m./n. *anii; instr.sg.m./n. yā, etc.): see the following table for a complete overview (unattested forms with an asterisk; “≈” means ‘which is formally identical to’).

<table>
<thead>
<tr>
<th>instr.pl.m./n.</th>
<th>nom.-acc.pl.n.</th>
<th>instr.sg.m./n.</th>
</tr>
</thead>
<tbody>
<tr>
<td>aniiāiš</td>
<td>replaces anii</td>
<td>= *anii</td>
</tr>
<tr>
<td>yāiš</td>
<td>replaces yā</td>
<td>= yā</td>
</tr>
<tr>
<td>kāš</td>
<td>replaces kā</td>
<td>= kā (also kana)</td>
</tr>
<tr>
<td>vispāiš</td>
<td>replaces vispa</td>
<td>= *vispa</td>
</tr>
<tr>
<td>xšašiš</td>
<td>replaces *xšā</td>
<td>= xšā</td>
</tr>
<tr>
<td>ašaiš,azmāšiš</td>
<td>replaces *azīma</td>
<td>= *azīma</td>
</tr>
<tr>
<td>apaiš,azmāšiš</td>
<td>replaces *azīma</td>
<td>= *azīma</td>
</tr>
<tr>
<td>spašto,dātašiš</td>
<td>replaces *dāta</td>
<td>= *dāta</td>
</tr>
<tr>
<td>sraetiš</td>
<td>replaces *sraēšta</td>
<td>= sraēšta</td>
</tr>
<tr>
<td>srīrašiš</td>
<td>replaces srīra</td>
<td>= srīra</td>
</tr>
</tbody>
</table>

To my mind, this peculiar fact can hardly be coincidental. In fact, I think that any solution to the rise of the non-canonical use of instrumental plurals should take this formal identity between the nom.-acc.pl.n. and instr.sg.m./n. forms in these lexemes into account. I therefore want to propose a scenario that does precisely that.

2E. A MORPHOSYNTACTIC SCENARIO

We may assume that at a certain point in the prehistory of Young Avestan, the nom.-acc.pl.n. and instr.sg.m./n. forms of the a-stem pronouns and adjectives mentioned above, which were formally identical to each other (for instance, nom.-acc.pl.n. yā ‘which (ones)’ and instr.sg.m./n. yā ‘by whom, by which’), were also paradigmatically viewed as a single form, which just happened to have two meanings. At first sight, this may seem odd, however: why would a plural form paradigmatically fuse with a sin-
gular form? To my mind, the answer could be that at this moment in time the form that we traditionally call the nominative-accusative of the neuter plural in fact functioned as a singular noun: when this form is the subject of a sentence, it shows concord with a singular verb form, e.g. sax'arə ... yā.zī vāuwərzōī [3sg.] ... yācā varaštītē [3sg.] ‘the verses that have been produced and that will be produced’ (GAv.; Y 29.4). This specific concord, which can also be found in other ancient Indo-European languages like Greek and Hittite, has been interpreted by some scholars as indicating that the category that is usually called neuter plural in fact was of a different number, which is sometimes called ‘collective’ or ‘comprehensive’ (e.g., Eichner 1985). Although semantically this ‘collective’ number denoted a notion that could imply plurality, when it comes to verbal concord, it behaved as a singular. It is for this reason that the homonymy between e.g. nom.-acc.’coll.’n. yā and instr.sg.m./n. yā may have caused these two forms to be paradigmatically viewed as a single form.

Interestingly, in Avestan, the verbal concord of ‘collectives’ is changing over time. In Gāthā Avestan all nom.-acc.pl.n. forms (= ‘collectives’) show singular verbal concord, but this is no longer an absolute rule in the Young Avestan corpus: besides some passages where we still find the original situation (e.g. varziuṭam [3sg.]=ca iḍā vohu vāstrii ‘and let good pastures be produced here!’, Vr 15.1), we also find many examples of nom.-acc.pl.n. forms that show plural verbal concord (e.g. kuua tā dāšra ba-uuainti [3pl.] ‘where will the gifts be?’, Vd 19.27). In other words, within the Young Avestan period the ‘collective’, which originally grammatically functioned as a singular (i.e., caused singular verbal concord), was on the basis of its semantics reinterpreted as a real plural, and therefore was assigned plural verbal concord.

To my mind, it is exactly this shift from singular to plural verbal concord for collectives that explains the rise of non-canonical instrumentals. If it is indeed true that originally a form like yā was regarded as a single form that had both nom.-acc.’coll’.n. and instr.sg.m./n. meaning, its corresponding plural form was yāiš, the instr.pl.m./n. form. So, when the collective as a category became grammatically ‘pluralized’, the forms in -ā, for which a formal plural in -āiš was available, occasionally started to be replaced by this latter, specifically plural, form. For instance, nom.-acc.’coll’.n. yā was thus replaced by the plural form yāiš, which now func-
tioned as the specifically nom.-acc.’coll.’ plural neuter form. In this way, such forms should not be interpreted as “non-canonical instrumental plurals”, but rather as newly made ‘collective plurals’, according to the following four-part analogy:

\[
\text{instr.sg.m./n.} \rightarrow \text{coll. with singular verbal concord} \rightarrow \text{instr.pl.m./n.} \rightarrow \text{coll. with plural verbal concord} \rightarrow X
\]

in which X was solved as -āiš.

2F. ADVANTAGES OF THIS SCENARIO

Above, we have seen that there were four questions that one could ask regarding the peculiarities of the so-called non-canonical use of instrumentals:

1. Why is this phenomenon only found with neuters?
2. Why is it only found in the plural?
3. Why is it found with both the nominative and the accusative case?
4. Why has the instrumental case been chosen as a replacement of these nom./acc.pl.n. forms?

On the basis of De Vaan’s collection of data, a fifth question may now be added:

5. Why is it only found in a-stems?

What speaks in favor of my scenario is that it at once answers all these questions. Its crucial basis is that in these a-stem words (answer to question 5) the nom.-acc. form (answer to question 3) of the collective/plural (answer to question 2) of neuter gender words (answer to question 1) was formally identical to the singular of the instrumental (answer to question 4).

Moreover, my scenario explains why in a phrase like taraḏātō aniiāš ɗāmŋ ‘superior to the other creatures’ (passim in YAv.) only aniiāš ‘other’ shows the instrumental plural form, whereas ɗāmŋ ‘creatures’ shows the nom.-acc.pl.n. form. Only in the a-stem adjective aniiia- ‘other’, a homonymy between nom.-acc.pl.n. (aniiia) and instr.sg.m./n. (*aniiia) existed, which triggered the replacement of nom.-acc.pl.n. aniiia by the instr.pl. form aniiāiš, whereas in the paradigm of the consonant stem dāmana- ‘creature’ there was no such homonymy (nom.-acc.pl.n. ɗāmŋ is formally distinct from instr.sg. *dāmna).
2G. Spread of Instr.Pl. Endings Beyond a-Stems

It should be noted, however, that we occasionally find that the use of non-canonical instrumental plurals is extended beyond a-stems to other stems as well. As De Vaan (2018: 22-3) convincingly argues, the phrase upairi aniiāiš srauuāiš ‘above other words’ (Vd 5.22) is the result of precisely such an extension. Since the preposition upairi ‘above’ usually takes the accusative case, we would expect to find anii- ‘other’ and srauuah- ‘word’ to be in the acc.pl. case, which in the case of the neuter as-stem noun srauuah- should have been srauuā. Instead, we find the form srauuāiš, however, which superficially looks like an instr.pl. form, but which cannot be regular: the expected instr.pl. forms of as-stem nouns should end in -ābiš: *srauuabīš. Moreover, we cannot explain the form srauuāiš as being secondarily formed on the basis of the instr.sg. form of this word, (GAv.) srauwayhā, which would predict an instr.pl. form **srauwayhāiš. De Vaan (2018: 23) is therefore surely right that in this passage, “somewhere during the text transmission”, the ending -āiš of the a-stem form aniiāiš ‘other’ (which is a ‘regularly’ pluralized form of original nom.-acc.’coll.’n. aniiā) was transferred to ‘words’, creating a new form srauuāiš. However, grammatically this form should not be booked as an instr.pl. form, but rather as a newly made ‘collective plural’ form.

Nevertheless, we occasionally also find real instr.pl. forms being used instead of nom.-acc.pl.n. forms. For instance, in Vd 6.49 the instr.pl. form azdibīš ‘bones’ is used as an acc.pl.n. form (cf. De Vaan 2018: 28), and has thus replaced an expected nom.-acc.pl. form astī. Since this latter form is not formally identical to instr.sg. *astā, its replacement by instr.pl. azdibīš cannot be directly explained according to the mechanism outlined above: it must have been created in analogy to ‘collective plurals’ / non-canonical instrumental plurals forms of a-stems in -āiš, which shows that the phenomenon was slowly spreading outside of its original locus.²

3A. The Replacement of Neuter Plurals in -ā by Forms in -ā

My scenario for the rise of “non-canonical instrumental plurals” may also elucidate the Young Avestan phenomenon that nom.-acc.pl.n. forms of a-

² Or should we assume that azdibīš has replaced an intermediate form *astī, which was created from nom.-acc.pl. astī in the same way as nāmānīš ‘names’ and aṣaonīš ‘righteous ones’ were created on the basis of nom.-acc.pl.n. nāmānī and *aṣaonī (cf. section 6)?
stem nouns and adjectives, which originally show the ending -ā̄, can be found with the ending -ā as well. Compare, for instance, Y 65.2 yā vīspanqȩm arśnqm xšudrā̄ yaozдаā̄ti ‘who purifies the liquids of all men’, where the neuter noun xšudra- ‘liquid’ shows an acc.pl. form in -ā, which is innovative vis-à-vis the nom.-acc.pl.n. form in -a that is found in e.g. N 61 yā xšudra yat væ yazańti yat væ hqm.raēδβoṇti ‘which liquids, when they either offer or mix (them)’. Or compare Y 13.93 vīspā spōntō̄.dātā̄ dāmṇ ‘all creatures established by the beneficial one’, where nom.-acc.pl.n. dāmṇ ‘creatures’, here used as the subject of a sentence, is accompanied by the adjectives vīspā ‘all’ and spōntō̄.dātā ‘established by the beneficial one’, both showing the ending -ā instead of expected nom.-acc.pl.n. -ā (cf. De Vaan 2018: 32 for this example).

These nom.-acc.pl.n. forms in which their original ending -ā in Young Avestan have been supplanted by the ending -ā̄ have most recently been treated by Hock (2014), who shows that within the Avestan corpus we can find well over 100 examples of such forms in -ā̄, which belong to dozens of different nouns, adjectives and pronouns. He is therefore fully right to state that this is “kein marginales Phänomen” (op.cit.: 72).

3b. THE ORIGIN OF -ā̄: THE NOM.-ACC.PL. FEMININE ENDING

In previous literature, two possible origins of the ending -ā have been proposed: (1) the nom.-acc.sg. form of neuter as-stems (e.g., raocā ‘light’); (2) the nom.-acc.pl. form of feminine ā-stems (e.g. gāśā ‘songs’) (Hock 2014: 72, with references). This latter option seems to be preferable: compare the fact that in an example like Yt 14.44 catajrō̄ paraṇā viśārāioiōis ‘you should distribute four feathers’, the neuter a-stem noun paraṇa- ‘feather’ shows an acc.pl. form in -ā that is accompanied by the feminine acc.pl. form of the numeral ‘four’, catajrō. We may therefore equate the ending -ā in such nom.-acc.pl. forms of neuter a-stems with the nom.-acc.pl. ending of feminine ā-stems.

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3 From a PIE point of view, the nom.-acc.pl.f. ending -ā reflects two distinct endings, namely nom.pl.f. *-eh₂-es and acc.pl.f. *eh₂-ṃs. However, in Indo-Iranian, these endings have merged, through PIr. *aHas, into Av. -ā̄, which is the reason that, from a synchronic point of view, we can talk about a single, nom.-acc.pl.f. ending.
3C. A Gender Transfer?

On the basis of the equation of the ending -ā with the feminine nom.-acc.pl. ā-stem ending -ā, some Avestan handbooks have labelled the alternation between the endings -ā and -ā̆ a “Geschlechtwechsel” or a sign of “Mehrgeschlechtigkeit” of these neuters (Hock 2014: 70, with references): the idea is then that neuter a-stems are in their nom.-acc.pl. form transferred to the feminine ā-stem inflection. According to Hock (2014: 74) himself, these forms can therefore be regarded as a first indication that the distinction between neuter and feminine gender is being given up in Young Avestan. The fact that this merger of neuter and feminine gender is exclusively found in the plural is, according to Hock, typologically not that uncommon (“typologisch nicht allzu ungewöhnlich”), and he refers to German and Russian as languages that, too, show loss of gender distinctions in the plural (without giving any concrete examples, however). In this way, Hock attempts to provide a semantic explanation for this phenomenon.

However, Hock does not discuss the fact that in Avestan this merger between neuter and feminine gender is only found in the nominative and accusative case of neuter plurals, and not in their oblique cases. Moreover, we are not really dealing with a merger of neuter and feminine gender, since we never find original feminine ā-stem nouns that adopt the neuter nom.-acc.pl. ending -ā̆. Instead, we are dealing with a single, unidirectional spread of a specific ending, namely that of the nom.-acc.pl.f. ā-stem ending -ā̆ at the cost of the nom.-acc.pl.n. a-stem ending -ā. Hock’s explanation that this phenomenon is connected with a supposed overall loss of distinction between neuter and feminine gender is therefore unsatisfactory.

3D. An Etymological Approach: Tremblay’s Scenario

A more formal analysis of the replacement of nom.-acc.pl.n. -ā by -ā̆ was offered by Tremblay (1997), who, too, rightly notes that it is strange that
the supposed gender confusion between neuters and feminines is found neither in the singular nor in the plural oblique cases. He therefore states that this distribution must be tied to the specific origins of the nom.-acc.pl.n. case, for which he refers to Eichner 1985. As we saw above, it has sometimes been argued that the PIE nom.-acc. neuter plural originally was in fact a separate number, which Tremblay (following Eichner) calls the ‘comprehensive’ (often also called ‘collective’), and which was not restricted to neuter nouns, but could be used with non-neuters as well, cf. e.g., Gr. κύκλος ‘wheel’, pl. κύκλοι, compr. κύκλα. Formally, it could be formed by either deriving a stem in *(e)h₂ from the base word (e.g. compr. *h₂s-tér-h₂ next to sg. *h₂s-tér ‘star’), or by internally deriving a new stem from the base word by using a different ablaut grade (e.g., compr. *h₂s-tôr next to sg. *h₂s-tér ‘star’; examples by Tremblay 1997: 166). In Tremblay’s view, these formations should therefore be regarded as suppletively providing the comprehensive number to their base word. Semantically, these derivatives had collective or abstract meaning, which forms the semantic core of the ‘comprehensive’ number (e.g., compr. *h₂s-tér-h₂ ‘a group of stars’, which was distinct from pl. *h₂s-tér-es ‘(individual) stars’). Since neuter nouns systematically lacked the plural number, Tremblay argues, at a certain point in time (but post-PIE) the suppletively formed comprehensive derivative was grammaticalized as the neuter plural. Etymologically, the comprehensive suffix *(e)h₂ was identical to the feminine suffix *(e)h₃, which forms feminine nouns, and which is, among others, the origin of the Av. feminine ā-stem inflection. According to Tremblay, this implies that the forms in *(e)h₂ originally were non-neuter, which strengthens the idea that they were incorporated into neuter paradigms through suppletion.

On the basis of these considerations, Tremblay (1997: 167) argues as follows. Since the nom.-acc. neuter plural (‘comprehensive’ or ‘collective’) in -ā originally is a non-neuter formation that later becomes the feminine, the fact that in Avestan it can appear with the feminine plural ending -ā is a remnant of this Indo-European suppletion (“est un vestige de cette supplétion indo-européenne”): the collective remains a (feminine) non-neuter but takes over the plural form (“le collectif demeurant un animé (féminin) mais prenant la forme plurielle”). However, Tremblay’s treatment still does not really make clear why the (etymological) formal equa-
tion between the neuter nom.-acc. ‘comprehensive’ / ‘collective’ ending -ā (< PIE *-eh₂) with the feminine nom. singular ending -ā (< PIE *-eh₂) would in Avestan trigger the taking over of the feminine nom.-acc. plural ending -ā (< PIE nom. *-eh₂-es and acc. *-eh₂-m̥s). Moreover, it is chronologically difficult that his solution is based on a (pre-)PIE formal phenomenon, whereas the development that needs to be explained is a recent, post-Gāthā Avestan one. Tremblay’s treatment cannot therefore be the whole story.

3E. A MORPHOSYNTACTIC SCENARIO

To my mind, the crucial factor that is missing in Tremblay’s scenario is the Young Avestan syntactic change according to which the neuter nom.-acc. ‘collective’ changed its verbal concord from singular to plural. As we have seen above, this apparently triggered in some speakers the wish to also formally ‘pluralize’ this collective form in -ā. One pathway of creating such a new ‘collective plural’ form was by adopting the plural variant of the instr.sg.m./n. ending -ā, with which the nom.-acc.’coll.’n. ending -ā of a-stems was homonymous, which yielded the ending -āiš (the ‘non-canonical instrumental plural’). I want to propose that a second pathway of creating a new ‘collective plural’ form existed that consisted of adopting the plural variant of the other case ending with which the nom.-acc.’coll.’n. a-stem ending -ā was homonymous, i.e. the nom.sg.f. ā-stem

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5 Tremblay (1997: 167) also states “Dès lors donc que le pluriel des thèmes féminins en -h₂ était interprétable comme un compréhensif, le compréhensif de ces thèmes en -h₂ devait être semblable au pluriel", but I do not fully understand this statement. It may be triggered by his idea that the ‘comprehensive’ of the noun *pent-h₂ ‘path’ is *pent-oh₂-s > Av. pantā (op. cit. 166). So, this would mean that, according to Tremblay, the ‘comprehensive’ of *h₂-stems ended in *-oh₂-s, and therefore yielded Av. -ā, with which it was formally identical to the plural of *h₂-stems, which was -ā (< PIE nom. *-eh₂-es and acc. *-eh₂-m̥s), as well. However, the Av. form pantā is generally interpreted as a singular, identical to Skt. nom.sg. pānthāḥ, so Tremblay’s interpretation of this form as a ‘comprehensive’ requires special pleading. This form cannot therefore be used as an argument. Note that Hock (2014: 74) paraphrases Tremblay’s ideas about the origin of nom.-acc.pl.n. -ā as having been caused by “eine Pluralisierung des uridg. Kollektivums”, but this is not really what Tremblay seems to argue. Moreover, Tremblay’s scenario is quite distinct from the pluralization of collectives that is argued for in the present article.
ending -ā. We therefore can set up a second four-part analogy by which this second ‘collective plural’ ending was created:

<table>
<thead>
<tr>
<th>nom.sg.f. -ā</th>
<th>nom.pl.f. -ā</th>
</tr>
</thead>
<tbody>
<tr>
<td>coll. with singular verbal concord -ā</td>
<td>coll. with plural verbal concord X</td>
</tr>
</tbody>
</table>

in which X was solved as -ā.

Since the taking over of the nom.pl.f. ā-stem ending -ā (note that this scenario would imply that it was specifically the nominative ending -ā that was used) is based on the same type of analogy by which the instr.pl.m./n. ending -āiš was taken over, it is clear that the crucial factor was the synchronic homonymy between the nom.-acc.’coll.’n. ending -ā and instr. sg.m./n. -ā and nom.sg.f. -ā, and not the possible etymological equation between PIE ‘coll.’pl. *-eh₂ and nom.sg.f. *-eh₂. Since the instr.sg.m./n. ending -ā etymologically reflects PIE *-eh, and thus was formally distinct from PIE ‘coll.’pl. *-eh₂ and nom.sg.f. *-eh₂, it is clear that the etymological homonymy between these latter two endings was irrelevant.

3F. ADVANTAGES OF THIS SCENARIO

There are two clear advantages of this scenario when compared to other, earlier proposals. First, this scenario explains at once why only the nom.-acc.n.pl. form was seemingly transferred to the feminine gender and none of the other cases of neuter nouns: it was only the ending of the nom.-acc.pl. case, -ā, that was formally identical to the nom.sg.f. ending -ā, and it was only this case that in Young Avestan changed its verbal concord from singular to plural and therefore was in need of a formal ‘pluralization’. The second advantage is that the Young Avestan replacement of the nom.-acc.pl.n. ending -ā by the nom.pl.f. ending -ā can be explained by the exact same mechanism according to which the nom.-acc.pl.n. ending -ā was in Young Avestan replaced by the instr.pl.m./n. ending -āiš: both are the morphological reaction to a syntactic change of verbal concord of the nom.-acc.pl.n. case from singular to plural.

3G. SPREAD BEYOND A-STEMS

Like in the case of the new ‘coll.pl.’ ending -āiš, we see that the new ‘coll.pl.’ ending -ā, too, was extended beyond a-stems to other stems. For instance, within the paradigm of the demonstrative pronoun aēta- ‘this’
we find the ‘coll.pl.’ form aētā (Vd 3.19) ‘these’, which cannot have been directly made on the basis of a homonymy of the original nom.-acc.’coll.’n. form aētā with its corresponding nom.sg.f. form, because this latter form is aēša, not **aētā. Likewise in the paradigm of the pronoun ima- ‘this’, where we find the ‘coll.pl.’ form imaš ‘these here’, replacing original nom.-acc.’coll.’n. ima: this latter form is not homonymous with its corresponding nom.sg.f. form, which was im, so our scenario does not apply. This means that these pronouns must have started using their nom.-acc.pl.f. forms aētā and imaš in the function of new ‘coll.pl.’ forms by analogy to other lexemes where the nom.-acc.pl.f. forms ending in -āš are used in this function, for instance the relative pronoun ya- ‘who, what, which’, which uses a new ‘coll.pl.’ form yaš (replacing original nom.-acc.’coll.’n. yā), which can indeed have been created from the nom.-acc.pl.f. form yāš on the basis of the four part analogy proposed above, i.e. through homonymy between nom.-acc.’coll.’n. yā and nom.sg.f. yā.

4. OPEN QUESTION: THE DISTRIBUTION BETWEEN -ĀIŠ AND -Â

The two scenarios proposed above for the creation of a new ‘coll.pl.’ ending both revolve around a homonymy of the nom.-acc.’coll.’n. ending -ā: on the one hand with the instr.sg.m./n. ending -â and, on the other, with the nom.sg.f. ending -ā. The question thus arises: when would a certain lexeme choose the four-part analogy involving the instr.sg.m./n. ending -â, which yielded the ‘coll.pl.’ ending -āiš, and when would it choose the four-part analogy involving the nom.sg.f. ending -â, which yielded the ‘coll.pl.’ ending -â? From the data collected by De Vaan (2018) for the forms in -āiš and by Hock (2014) for the forms in -â, it is clear that some lexemes employed both analogies. For instance, the relative pronoun ya- ‘who, what, which’ uses ‘coll.pl.’ yāiš as well as yā; the pronominal adjective višpa- ‘all’ is attested with both višpāš and višpā; the adjective xādaēna- ‘of the same belief’ is found with xā-daēnāiš as well as xā-daēnā (see section 6 for both forms). However, this is certainly not the case for all lexemes. In fact, the total number of ‘coll.pl.’ forms in -āiš gathered by De Vaan 2018 (which he calls “non-canonical instrumental plurals”) is not more than two dozen, which is a much smaller number than the more than one hundred examples of ‘coll.pl.’ forms in -â that have been gathered by Hock 2014. Moreover, as De Vaan has already noted, clear exam-
ples of the ‘coll.pl.’ ending -āiš are found in pronouns and adjectives only, not in nouns, whereas the ending -ā is found with all three word types.

It goes beyond the scope of this paper, however, to investigate the intricacies of the distribution between forms in -āiš and in -ā. Should we think of a grammatical distribution? A pragmatic one? A semantic one? Or a chronological one? Hopefully, future research will elucidate this.

5. THE STATUS OF THE NOM.PL.M. A-STEM ENDING -Ạ

As pointed out to me by Sasha Lubotsky, it is interesting that the nom.pl.m. a-stem ending -ã, which is fully homophonous to the nom.-acc.pl.n. a-stem ending -ā, does not participate in the analogical replacements as treated above. This is even more interesting given the fact that it is very often assumed that the nom.pl.m. ending -ā is etymologically identical to the nom.-acc.pl.n. ending -ā < *-eh₂.

According to Eichner (1985: 161) we must assume that the Av. ending nom.pl.m. -ā is the direct descendant of the PIE ‘comprehensive’ / ‘collective’ ending *-eh₂, which, as was mentioned in section 3d, is thought by Eichner to have been used both with neuter and non-neuter nouns. He therefore proposes that the PIE difference between pl. *deiyoś(es) and ‘compr.’ / ‘coll.’ *deiyeh₂ has been directly inherited into the formal difference between Av. nom.pl. daēuuāḥhō and daēuuā ‘gods’. If this were correct, one would expect that the ‘compr.’ / ‘coll.’ form daēuuā should take singular verbal concord, as in Greek is the case for e.g., ‘compr.’ / ‘coll.’ τά χύκλα that belongs with the masculine noun κύκλος ‘wheel’. However, in Avestan this is not what we find: the Av. nom.pl.m. form daēuuā ‘gods’ takes plural verbal concord, also in Gāthā Avestan (e.g. Y 44.20 huxšaθrā daēuuā āŋharā ‘were the gods good rulers?’, with the 3pl. imperf. form āŋharā). It therefore is unattractive to view the nom.pl.m. a-stem ending -ā as the direct outcome of the PIE ‘compr.’ / ‘coll.’ ending *-eh₂.

Another view is that the PIE nom.pl.m. a-stem ending *-o-es, which is attested as such in Skt. -āḥ and which in Iranian should have yielded PIR. *-ās > Av. -ā, has in the prehistory of Iranian⁶ been replaced by its corre-

⁶ Note that the nom.pl.m. a-stem ending *-ā is not only found in Avestan, but in all other Iranian languages as well (pers.comm. Sasha Lubotsky), and thus must be reconstructed for Proto-Iranian.
sponding neuter ending *-ā (< PIE *-eh₂) > Av. -ā (e.g., Hoffmann/Forssman 2004: 120). However, this is not easy to envisage: why would a perfectly transparent ending *-ās be replaced by a less transparent ending *-ā > Av. -ā (which is homophonous with both the instr.sg. and the nom.-acc.pl.n. ending -ā)? Moreover, as we have seen above, the nom.-acc.pl.n. ending -ā did not function as a plural (since it triggered singular verbal concord), so it is not self-evident that it should be taken over by the masculine plural forms.

Whatever be the true origin of the nom.pl.m. a-stem ending -ā, the question that is relevant for the present article is: why did it not join its homophonous nom.-acc.pl.n. ending -ā in being replaced by either the ending -āāš (through an analogy involving the instr.sg. and instr.pl. a-stem endings -ā and -āāš) or the ending -ā (through an analogy involving the nom.sg.f. and nom.pl.f. ā-stem endings -ā and -ā) during the Young Avestan period? The answer is relatively straightforward: because the nom.pl.m. ending -ā was unambiguously plural, since it took plural verbal concord. There therefore was no need to ‘pluralize’ this ending, and it therefore could be retained as such.

6. Other Comparable Cases: The Ending -īš

In his 2018 article, De Vaan (2018: 24-26) provides a long discussion of the form nāmōnīš ‘names’, which in Y 51.22 occurs in the clause tā yazāi xʾāīš nāmōnīš ‘them I wish to worship by their own names’. Although attested in Y 51, which belongs to the Gāthās, De Vaan convincingly argues that this specific passage is a Young Avestan insertion (because of YAv. acc.pl. tā ‘them’ vs. expected GAv. tāng). Since the form nāmōnīš is accompanied by the (formal) instr.pl.m./n. form xʾāīš ‘their own’, previous scholars have attempted to explain nāmōnīš as an instr.pl. form as well, for instance by assuming that it is the outcome of an earlier *nāmabiš (Kuiper 1978: 84-5; Kellens 2007: 116; Skjærvø 2007: 323; see De Vaan 2018: 24-5 for these references), or by assuming the existence of an instr.pl. ending -ūš in n-stems (Tichy 1985; Skjærvø 2007: 323; cf. De Vaan 2018: 26). As De Vaan clearly shows, these explanations are unconvincing, however, and he therefore proposes a different interpretation. He points to the GAv. passage tūm at ahūriiā nāmōnī yazamaide (Y 37.3) ‘him we worship then by the godly names’, where yaz- ‘to worship’ is accompanied by a clear accusative of
respect ahūriā nāmōnī 'by the godly names'. This implies that in Y 51.22, too, we may assume the usage of an accusative of respect, which would imply that nāmōnīš should be interpreted as an accusative, not an instrumental (and x̍āīš should then be a "non-canonical instrumental plural", being used instead of expected nom.-acc.pl.n. x̍ā). Moreover, De Vaan points to the fact that in Yt 1.11-19 we find several attestations of the expression imā nāmōnīš ‘these names’, in which imā formally is a feminine acc.pl. form. De Vaan therefore concludes that “the obsolete [nom.-acc.pl. form] *nāmōnī was reinterpreted in Young Avestan as a feminine form, and provided with the ending -š of the i- and i-stems” (2018: 25). However, he is not explicit on the exact reason why this form was provided with the ending -š.

To my mind, we may explain the form nāmōnīš by a similar analogy as the ones described above for the forms in -āīš and in -ā. Since the ending -ī of the GA.v. nom.-acc.'coll.'n. form nāmōnī ‘names’ was formally identical to the nom.sg. ending -ī of feminine i-stems, when this original nom.-acc.'coll.' form needed to be ‘pluralized’, the following four-part analogy was used:

nom.sg.f. -ī : nom.pl.f. -š

coll. with singular verbal concord nāmōnī : coll. with plural verbal concord X

in which X was solved as nāmōnīš.

This implies that the YAv. clause tq yazāī x̍āīš nāmōnīš (Y 51.22) ‘them I wish to worship by their own names’ can be seen as the replacement of GA.v. *tōng yazāī *x̍āī *nāmōnī, with regular nom.-acc.pl.n. forms, and that the expression imā nāmōnīš ‘these names’ (Yt 1.11-19) replaces an earlier *imā *nāmōnī.

A similar scenario may explain the form aṣaonīš as attested in Vr 21.3 yaṭ asti antara x̍ā.daēnāīš aṣaonīš and P 35 antara x̍ā.daēnā aṣaonīš. This form clearly seems to belong to the paradigm of the adjective aṣauwān- ‘righteous’, but the interpretation of its ending -š is debated. As De Vaan (2018: 27; cf. also 2003: 272) rightly states, a comparison with Yt 10.2 x̍ā.daēnāt aṣaonat ‘from a righteous one who is a fellow believer’ implies that in both Vr 21.3 and P 35 we may assume that the forms of x̍ā.daēnā- and aṣauwān- are coordinated. Since in Vr 21.3 the form x̍ā.daēnāīš formally is an instr.pl., the form aṣaonīš is sometimes interpreted as an instr. pl. form as well (e.g., Hoffmann/Forssman 2004: 146, with a question
mark). However, in P 35 this form is preceded by nom.-acc.pl.f. \(x\'ā.daēnāš\), which would imply that \(ašaoniš\), too, is a nom.-acc.pl.f. form. As De Vaan (2018: 27) notices, since the preposition \(aṁtar\)'among' in principle has an accusative rection, the interpretation of \(ašaoniš\) as an accusative form seems preferable, and he therefore states that "\(ašaoniš\) can be a real accusative plural of the feminine". As a consequence, the form \(x\'ā.daēnāiš\) of Vr 21.3 "may then be an instrumental used as an accusative plural".

Although based on solid considerations, this interpretation still has some loose ends. First, the expected acc.pl.f. form of the adjective \(ašauwan-\) should have been *\(ašauwanō\), *\(ašauwanas-cā\) (or perhaps *\(ašaoniō\), *\(ašaonas-cā\)), but not \(ašaoniš\), which would only be a fitting acc.pl.f. form for an \(i\)-stem *\(ašaoni-\), which does not exist. Second, it is unclear why feminine gender would be used in P 35 and Vr 21.3 in the first place (as noted by De Vaan 2018: 27 himself: "the feminine gender is unclear"). Third, as was again noted by De Vaan, and which we have also seen above, non-canonical instrumentals are in principle only used as a replacement of neuter nom.-acc. plurals, not of feminine ones, as needs to be assumed by De Vaan for \(x\'ā.daēnāiš\) of Vr 21.3.

I therefore want to propose that \(ašaoniš\), like \(nāmōniš\) ‘names’, can be explained as a renewed ‘collective plural’ form that replaced an origin nom.-acc.’coll.’n. form *\(ašaoni\), which would be the regularly expected nom.-acc.pl.n. form in -\(uuan\)-stems. This interpretation would fit the fact that in Vr 21.3 \(yat\ asti aṁtar\ \(x\'ā.\)daēnāiš\ \(ašaoniš\) the subject of the clause is the neuter relative pronoun \(yat\). It therefore makes sense that the adjective \(ašauwan-\) here takes neuter gender as well: ‘what is among righteous (things) of the same belief’? In this way, the noun phrase \(aṁtar\)

\[\text{7} \text{Note that De Vaan (2003: 272) assumes that this relative clause is a postposed one, and that the antecedent of the relative pronoun consists of the two nouns appearing in the preceding clause: } frārāti vidīše yazamaide, \(yat\ asti aṁtar\ x\'ā.\)daēnāiš ašaoniš, \text{which he translates as } ‘we worship the charity and the distribution, which are among the righteous ones of the same belief’. However, as De Vaan notes himself, } frārāti ‘charity’ and vidīše ‘distribution’ are acc.du. forms, whereas \(yat\) and \(asti\) are both singular forms. \text{It may therefore be better to assume that the relative clause is in fact a preposed one, and that the antecedent of the relative pronoun is the neuter noun } nomō ‘prayer’ \text{that is found in the following clause: } \(yat\ asti aṁtar\ x\'ā.\)daēnāiš ašaoniš, nomō vohu ašauunām aṯbaeṣam yazamaide ‘which (prayer) is among the righteous ones of the same belief, (that) good prayer, undeceiving and unharful, we worship’.\]
\(x̄ā.daēnāsiš\) would have replaced an original \(antarā *x̄ā.daēna *ašaonī,\) with two regular nom.-acc.'coll.'n. forms. We may therefore assume the same in P 35 \(antarā x̄ā.daēnāsiš\), which would then have replaced an original \(antarā *x̄ā.daēna *ašaonī\) ‘among the righteous (things) of the same belief’, as well.\(^8\)

7. CONCLUSIONS

We may conclude that in Young Avestan the following linguistic changes took place. First, the original collective number, which is especially used with neuter nouns (and is usually referred to as the ‘nom.-acc.pl.n.’ case, but has in this article been referred to as the ‘nom.-acc.’n.‘ case) was semantically reinterpreted as a real plural, which caused a syntactic change: its original singular verbal concord was in the course of the Young Avestan period replaced by plural verbal concord. This apparently triggered in speakers of Young Avestan the wish to also formally characterize the neuter collective forms as specifically plural. There were three pathways of four-part analogy employed to create such new ‘collective plural’ forms.

First, on the basis of the formal homonymy between the nom.-acc.'coll.'n. a-stem ending -ā and the instr.sg.m./n. ending -ā, the following four-part analogy took place:

\[
\text{instr.sg.m./n. -ā} : \text{instr.pl.m./n. -āiš} \\
\text{coll. with singular verbal concord -ā} : \text{coll. with plural verbal concord X}
\]

in which X was solved as -āiš. This caused the rise of forms in -āiš (formally identical to instr.pl.m./n. forms in -āiš) which replaced original nom.-

\(^8\) The Pursišnīhā is a Pahlavi text in which questions posed in Pahlavi are answered in Pahlavi with reference to Avestan quotations (Jamaspasa/Humbach 1971: 5). Since these quotations are taken out of their wider context, it is not always easy to interpret them. In this specific quotation, \(frāṛūṭīšca vidīšāscə antarā x̄ādaēnā ašaonīš ‘charities and distributions among the righteous (things) of the same belief’, \) we find a gender discord between the feminine nouns \(frāṛūṭiś\) ‘charity’ and \(vidīša-\) ‘distribution’, on the one hand (with \(frāṛūṭiś\) and \(vidīša-\) being nom.-acc.pl.f. forms), and the neuter (nominalized) adjectives \(x̄ādaēnā ašaonīš\) (replacing original nom.-acc.'coll.'n. \(x̄ādaēna *ašaoni\) ‘righteous (things) of the same belief’, on the other. Since semantically \(frāṛūṭīś\) ‘charity’ and \(vidīša-\) ‘distribution’ express abstract notions, we may perhaps assume that this is the reason that in the prepositional phrase \(antarā x̄ādaēnā ašaonīs << antarā *x̄ādaēna *ašaoni\) ‘among righteous (things) of the same belief’ they were referred to by neuter adjectives.
acc.'coll.'n. forms in -ā. These forms are thus far usually referred to as "non-canonical instrumental plurals", but are better to be regarded as new 'collective plural' forms.

Second, on the basis of the formal homonymy between the nom.-acc.'coll.'n. a-stem ending -ā and the nom.sg.f. ā-stem ending -ā, a second four-part analogy took place:

\[
\begin{align*}
\text{nom.sg.f. -ā} & \quad : \quad \text{nom.plf. -ā} \\
\text{coll. with singular verbal concord -ā} & \quad : \quad \text{coll. with plural verbal concord X}
\end{align*}
\]

in which X was solved as -ā. This caused the rise of forms in -ā (formally identical to nom.-acc.plf. forms in -ā) which replaced original nom.-acc.'coll.'n. forms in -ā. These forms are thus far usually analysed as showing a transfer of neuter to feminine gender, but are better to be regarded as new 'collective plural' forms, as well.

Third, on the basis of the formal homonymy between the nom.-acc.'coll.'n. consonant-stem ending -ī and the nom.sg.f. ā-stem ending -ā, a third four-part analogy took place:

\[
\begin{align*}
\text{nom.sg.f. -ī} & \quad : \quad \text{nom.plf. -īš} \\
\text{coll. with singular verbal concord -ī} & \quad : \quad \text{coll. with plural verbal concord X}
\end{align*}
\]

in which X was solved as -īš. This caused the rise of forms in -īš (notably nāmōnīš ‘names’ and ašaonīš ‘righteous (ones)’), which replaced original nom.-acc.'coll.'n. forms in -ī (nāmōnī and *ašaonī). The interpretation of these forms has thus far been debated, but it is argued here that they, too, should be regarded as new 'collective plural' forms.

In this way, we can connect three at first sight seemingly different morphological phenomena and explain them as parallel analogical reactions to a single, semantic/syntactic change in Young Avestan, i.e., the pluralization of collectives.

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