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The *ezāfe*-like construction in Old Iranian:
A reassessment*

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ABSTRACT

This paper addresses the origins of the (proto-)*ezāfe* in Old Iranian, challenging traditional analyses that have classified the '*ezāfe*'-like structures in Avestan and Old Persian as adjectival formations. This hypothesis is primarily based on the case agreement between the relative pronoun and the head noun. This paper presents an alternative interpretation, proposing that these constructions should be viewed as relative clauses (RCs) with omitted copulas. From this perspective, the omission of the copula triggers the so-called *attractio relativi*, a phenomenon observed in various Indo-European languages, thus challenging prior claims. The idea that RCs may have served as precursors to the Persian *ezāfe* and potentially contributed to the formation of definite articles in some Middle Eastern Iranian languages remains compelling. However, in earlier stages, these structures are best understood as reduced RCs, lacking an explicit copula.

KEYWORDS: relative clauses, Iranian languages, relative pronoun, copula

1. *Introduction*

In Avestan and Old Persian the relative pronoun (= RP) – i.e. Av. *ya-*, OPers. *haya-/taya-*[1] – is frequently used to join a nominal group to

a head noun[2]. From this perspective, the RP is claimed to be as a sort of 'article'[3] or 'quasi-article'[4] giving rise to the so-called *ezāfe*[5]. However, these formations tend to closely parallel relative clauses (= RC) and the status of the RP is still a question of interpretation. This paper aims to address this issue. In Section 2, I shall discuss the data in order to provide an overview of the several collocations involving a RP plus a nominal in Avestan and Old Persian. In Section 3, I shall assess the evidence of both Avestan and Old Persian '*ezāfe*'-like constructions. In Section 4, I shall put forward a possible historical scenario to account for the emergence of the article in some Eastern Middle Iranian from this special use of the RP in Old Iranian. Finally, I shall summarise the results in Section 5.

in glosses follow Leipzig Glossing Rules (https://www.eva.mpg.de/lingua/pdf/Glossing-Rules.pdf). Abbreviations used for the Avestan texts are as follows: A = Āfrīnagān; Aog = Aogəmadaēcā; AZ = Āfrīn-ī Zardušt; FrW = Fragment Westergaard; H = Hāδōxt Nask; N = Hērbedestān and Nērangestān; P = Pursišnīhā; Vd = Vīdēvdād; Vr = Vīspered; Y = Yasna; Yt = Yašt. I shall refer to the Avestan and Old Persian texts available on TITUS database (https://titus.uni-frankfurt.de/indexe.htm) based on GELDNER (1886-96)'s and KENT (1953)'s and SCHMITT (1991)'s edition respectively. For convenience, I quote examples after KENT, but with the current reading of the relative as *haya*, not *hya*, and so on (see fn. 2 below).

[1]   Etymologically, the Old Persian stem – graphically written <hᵃ-yᵃ> and <tᵃ-yᵃ> – is of course not identical to that of Avestan (and Vedic), since the latter goes back to Proto-Indo-European $*i̯o-/i̯eh_2$-. It is generally assumed that Old Persian *haya-/taya-* results from the univerbation of the pronominal stem $*ha-/ta-$ with $*ya-$ (KENT 1944; ADIEGO LAJARA 2000; SCHMITT 2014: 192-193; BRUST 2018: 194). Conversely, MEILLET & BENVENISTE (1931²: 191-192, 195-196) argue for an extension of Indo-Iranian *sa-* by means of a suffixal $*-^iya-$ (cf. Ved. *s(i)ya-*), which should later be reduced to $*-ya-$. Interestingly, in Young Avestan a string *təm yim* (Aog. 77), parallel to Old Persian *tayam*, is found once. But it is disputed whether this formation is due to a persianism or rather to a mere misspelling (KELLENS 1974: 51-52).

[2]   CALAND (1891: 17-28); DELBRÜCK (1900: 303-314); BARTHOLOMAE (1904: cols. 1221-1222); REICHELT (1909: 370-371); KENT (1953²: 84-85); SEILER (1960: 53-206); KELLENS & PIRART (1990: 62-63); SKJÆRVØ (2009: 100-101, 2018a: 163-165, 2018b: 98, 2020: 91-92); WEST (2011: 82-83); JÜGEL (2017: 557-558); MAGGI & ORSATTI (2018: 14-15).

[3]   DELBRÜCK (1900: 303-310, 314); KENT (1944, 1953²: 84-85); JÜGEL (2017: 557).

[4]   WEST (2011: 82).

[5]   HAIDER & ZWANZIGER (1984); HAIG (2011); KORN (2020: 488-489).

2. *Avestan and Old Persian*

2.1. As is well-known, both Avestan and Old Persian attest full-fledged copulaless RCs behaving as attributive adjectives[6]:

OAv. (1) *tąm*   *daēnąm*   ***yā***
          DEM.ACC.SG.F   religion(F).ACC.SG   **REL.NOM.SG.F**
          hātąm   *vahištā*
          being.GEN.PL   best.NOM.SG.F
          'That religion which (is) the best of the beings'   (Y 44.10)

     (2) *ahūm*   ***yō***   *vaŋhōuš*
          existence(M).ACC.SG   **REL.NOM.SG.M**   good.GEN.SG.N
          manaŋhō
          thought(N).GEN.SG
          'The existence which (is) of good thought'   (Y 53.5)

YAv. (3) *miϑrəm*   ...   ***yō***   *āsunąm*
          Miϑra(M).ACC.SG   **REL.NOM.SG.M**   swift.GEN.PL.M
          āsuš
          swift.NOM.SG.M
          'Miϑra [...] who (is) swift among the swiftest'   (Yt 10.65)

     (4) *maṯ*   *vīspābiiō*   *ašaonibiiō*
          together_with   all.ABL.PL.F   righteous.ABL.PL.F
          frauuašibiiō   ***yā̊***
          Fravaši(F).ABL.PL   **REL.NOM.PL.F**
          mainiiauuanąm   *yazatanąm*
          spiritual.GEN.PL.M   god(M).GEN.PL
          'Together with all the righteous Fravašis which (are) of the spiritual gods'   (Y 23.2)

OPers.(5) *Dārayavaum*   ***haya***   *manā*
          Darius(M).ACC.SG   **REL.NOM.SG.M**   mine
          pitā
          father(M).NOM.SG
          'Darius who (is) my father'   (XPf 23)

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[6] CALAND (1891: 17-28); KENT (1953²: 84); BENVENISTE (1958: 47-48); WEST (2011: 4); SEILER (1960: 53-206).

(6) *hacā*   *Sakai̯biš*   **tayai̯**   *para*
     from   Saka(M).INS.PL   **REL.NOM.PL.M**   beyond
     Sugdam
     Sogdiana.ACC.M
     'From the Sakas who (are) beyond Sogdiana'   (DPh 5-6)

In these instances, the RP serves to introduce a predicated nominal, though syntactically independent: the RP is in the nominative, as is expected for a subject of a copular clause, while the head is in the case governed by either the main clause verb or by adposition. However, copulaless RCs are not only attributive, but they also involve possession[7] and perhaps location, such as in (7) (8) and (9), respectively[8]:

OAv. (7) *mīždəm*   *mazdā*   **yehiiā**
          reward(N).NOM.SG   Mazdā(F).VOC.SG   **REL.GEN.SG.N**
          tū   *daϑrəm*
          you   gift(N).NOM.SG
          'The reward, Mazdā, of which you (are) the gift'   (Y 34.13)

YAv. (8) *ahurāi*   *mazdāi*   ...   **yeṅ́hē**
          Ahura(M).DAT.SG   Mazdā(F).VOC.SG   **REL.GEN.SG.M**
          gāuš   *ašəm*   *yeṅ́hē*
          cow(F).NOM.SG   truth(N).NOM.SG   **REL.GEN.SG.M**
          raocā̊
          light(N).NOM.PL
          'To Ahura Mazdā to whom (belongs) the cow, to whom the truth, to whom the lights'   (Y 12.1)

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[7] Avestan and Old Persian typically use the genitive as possessor in possessive predication (BENVENUTO & POMPEO 2020: 55-61; MOHAMMADIRAD 2020). For Avestan, EDEL'MAN (1975: fn. 3) notices that both the genitive and the dative encode the possessor, but the genitive is understood to refer to 'belonging', while the dative to 'destination'.

[8] It is notable that copulaless RCs involving either possession or location are attested in Vedic (e.g. VITI 2007: 74-75; JAMISON 2022: 179-180), such as in *índraḥ svā́hā pibatu yásya sómaḥ* 'may Indra drink, hail! whose (is) the soma' (RV = Ṛgveda 3.50.1) and *gíro yásminn anavadyā́ḥ samīcī́r víśvā índrāya táviṣīr ánuttāḥ* 'in whom the flawless hymns (are) united: all powers belong to Indra' (RV 3.31.13).

(9)   *miϑrəm*   ...   **yahmi**   *viiāne*
      Miϑra(M).ACC.SG   **REL.LOC.SG.M**   soul(N).LOC.SG[9]
      daēnaiiāi   *srīraiiāi*
      religion(F).GEN.SG   beautiful.GEN.SG.F
      pərəϑu.frākaiiāi   *maza*
      of_broad_outlook.GEN.SG.F   greatness.NOM.SG.N
      amauua   *niδātəm*
      powerful.NOM.SG.N   laid_down.NOM.SG.N
      'Miϑra ... in whose soul the powerful greatness has been laid
      down for the beautiful religion of broad outlook'   (Yt 10.64)[10]

Therefore, it seems plausible that copulaless RCs might result from copular RCs by copula ellipsis in a similar way as main clauses[11], even if RCs with overt copula are not unattested[12]:

YAv.   (10)   *xvarənō*   *mazdaδātəm*
              xvarnah(N).ACC.SG   created_by_Mazdā.ACC.SG.N
              yazamaide   ...   **yaṯ**   *asti*
              worship.IND.PRS.1PL   **REL.NOM.SG.N**   be.IND.PRS.3SG
              ahurahē   mazdā̊
              Ahura(M).GEN.SG   Mazdā(F).GEN.SG
              'We worship the xvarnah created by Mazdā [...] which belongs
              to Ahura Mazdā'   (Yt 19.9)

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[9] For *viiāne* as 'soul', see BENVENISTE (1935: 37-38). Instead, BARTHOLOMAE (1904: col. 1478 s.v.) interprets it as an infinitive 'auszubreiten, zu verbreiten'.

[10] This stanza is not easy to interpret and different translations are possible: WOLFF (1910: 208) 'in den machtvolle Erhabenheit zur Ausbreitung der schönen Religion, der weithin sich verbreitenden, niedergelegt'; LÖMMEL (1927: 74) 'in dessen Seele für die schöne, weitverbreitete Religion (machtvolle Große?) niedergelegt ist'; GERSHEVITCH (1959: 103) 'in whose soul (there is) a great, powerful pledge to the beautiful, far-spreading Religion'; SEILER (1960: 94) 'in dessen Seele ... machtvolle Große (?) niedergelegt ist'; SKJÆRVØ (2007: 97) 'in his *lineage mighty* greatness has been laid down, for the daēnā, beautiful, of broad outlook'; LECOQ (2016: 434) 'en qui a été déposée une grande force pour la propagation de la religion belle, qui s'étend au loin'.

[11] BARTHOLOMAE (1904: cols. 1221-1222); REICHELT (1909: 365); WEST (2011: 3-4). Note also that in other ancient Indo-European languages, such as Vedic and Homeric Greek, copulaless RCs are clearly attested (e.g. LONGOBARDI 1980; KURZOVÁ 1981).

[12] SEILER (1960: 67). Tentatively, HAIDER & ZWANZIGER (1984: 142-143) state that copula ellipsis is constrained, since the copula is used as 'dummy verb' only in possessive predication. However, copula ellipsis seems to be also admitted for possessive predication.

2.2. Besides copulaless RCs, for the most part RPs involve agreement in case, at least in Young Avestan and Old Persian, leading to the '*ezāfe*'-like construction, where the RP is a sort of connecting particle[13]:

YAv. (11) *daēuuō*   ***yō***   *apaoṧō*
demon(M).NOM.SG   REL.NOM.SG.M   Apaoša(M).NOM.SG
'The demon Apaoša'   (Yt 8.21)

(12) *vīspəm*   *imaṯ*   ***yaṯ***
all.ACC.SG.N   DEM.ACC.SG.N   REL.ACC.SG.N
juiiō   *aŋhuš*
living.M.NOM.SG   existence(M).NOM.SG
'This entire living existence'   (H 2.2)

(13) *aoi*   ***yąm***   *astuuaitīm*   *gaēϑąm*
against   REL.ACC.SG.F   bony.ACC.SG.F   world(F).ACC.SG
'Against the material (lit. bony) world'   (Y 9.8)

(14) *raocōbīš*   …   ***yāiš***   *vahištāiš*
light(N).INS.PL   REL.INS.PL.N   best.INS.PL.N
ahurahe
Ahura(M).GEN.SG
'With the best lights of Ahura Mazdā'   (Y 58.6)

OPers.(15) *Gaumāta*   ***haya***   *maguš*
Gaumāta(M).NOM.SG   REL.NOM.SG.M   magian(M).NOM.SG
'Gaumāta the magian'   (DB 1.44)

(16) *avam*   *kāram*   ***tayam***
DEM.ACC.SG.M   army(M).ACC.SG   REL(M).ACC.SG
hamiçiyam
rebellious.ACC.SG.M
'That rebellious army'   (DB 2.25-26)

(17) *xšāyaϑiya*   *dahyūnām*[14]   ***tayaišām***
king.(M).NOM.SG   land(F).GEN.PL   REL.GEN.PL.N
parūnām

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[13] Kent (1953²: 84-85); Seiler (1960: 53-206); Haider & Zwanziger (1984); Skjærvø (2009: 100-101, 2018a: 163-165, 2018b: 98, 2020: 91-92); Jügel (2017: 557-558).

[14] Notably, the term *dahyu-* acquires technical meaning in Old Persian (Gnoli 1993), and is best rendered as either 'land, country' (Mancini 1984; Schmitt 1999b) or 'people' (Lecoq 1997: 136-137). Following Schmitt (2009: 117), I here translate *dahyu-* as 'land'.

many.GEN.PL.N
'King of many lands'   (DPe 3-4)[15]

(18) **tayanā**   *manā*   *dātā*
REL.INS.SG.N   mine   law.INS.SG
'According to my law'   (DB 1.20)

The RP is postposed, such as in (11), (12), (14), (15), (16) and (17), but can also be preposed, such as in (13) and (18), regardless of whether or not the RP is contiguous to the head. As is clear from (12) and (16), a correlative pronoun can co-occur, indirectly providing evidence for non-restrictive reading. In addition, this formation is not obligatory. The same expression can occur without the RP:

YAv. (19) a.   *miϑrəm*   **yim**
Miϑra(M).ACC.SG   REL.ACC.SG.M
vouru.gaoiiaoitīm
of_wide_pasture-grounds.ACC.SG.M
                                                                (Yt 10.1)

b.   *miϑrəm*   *vouru.gaoiiaoitīm*
Miϑra(M).ACC.SG   of_wide_pasture-grounds.ACC.SG.M
                                                                (Yt 10.7)
= 'Miϑra having wide pasture-grounds'

The same formation is thought to have already taken place in Old Avestan[16], despite some caution[17]:

OAv. (20) *tə̄ṇg*   ...   **yə̄ṇg**   *aṣ̌ahiiā*
DEM.ACC.PL.M   REL(M).ACC.PL   truth(N).GEN.SG
važdrəbṇg
conveyor(M).ACC.PL
'Those conveyors of truth'   (Y 46.6)[18]

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[15] It is noteworthy that *tayaišām* (N) and *parūnām* (N) apparently do not agree in gender with *dahyūnām* (F) (KENT 1953²: 68), perhaps because of the loss of gender distinction in the class of pronouns (SCHMITT 1999a: 30-32).

[16] WEST (2011: 82-83).

[17] KELLENS & PIRART (1990: 62-63); SKJÆRVØ (2018a: 163-165).

[18] I translate following HUMBACH (1991: 168), while INSLER (1975: 81) translates as 'the draft oxen of truth' together with the form *gå̄* 'oxen' of the following line. On the

(21) **yə̄m**   *mazdą̄m*[19]   *ahurəm*
      REL.ACC.SG.M   wise.ACC.SG.M   Ahura(M).ACC.SG
      'The wise Ahura (= Ahura Mazdā)'   (Y 45.8)

(22) *tāiš*   *šiiaoϑənāiš*   **yāiš**
      DEM.INS.PL.N   action(N).INS.PL   **REL.INS.PL.N**
      vahištāiš
      best.STR.PL.N
      'By these best actions'   (Y 35.4)

Now, it is commonly assumed that agreement in case should be restricted to the nominative – such as (11), (12) and (15) – accusative – such as (13), (16), (20) and (21) – and instrumental – such as (14), (18) and (22) – as being *Nennkasus* 'case of quotation'[20] or 'structural cases'[21,22]. But in Old Persian agreement in case is also found in the genitive, such as in (17)[23]. Nevertheless, these formations seem not to be attested outside Old Iranian languages[24].

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other hand, KELLENS & PIRART (1988: 159) translate 'alors que ce sont les conducteurs de l'Harmonie' pointing to a pseudo-relativization (1991: 203), though not convincingly.

[19] Following KELLENS-PIRART (1990: 283), I assume that *mazdā-* is a *nomen agentis* deriving from *maz°/mə̄ṇg* 'mind' and ¹*dā-* 'to put' used here as epithet of *ahura*.

[20] SEILER (1960: 164-165).

[21] HAIDER & ZWANZIGER (1984: 149-154). Traditionally, 'structural' cases are assigned for syntactic reasons, while 'inherent' cases are more closely aligned with semantics (e.g. BUTT 2006). But this distinction is perhaps too sharp, as NÆSS (2007: 211-213) rightly notices. Therefore, the instrumental is accounted for as a 'structural' case, being optionally used for objects and subjects in Avestan (e.g. OETTINGER 1986; BICHLMEIER 2011: 50-52; DE VAAN 2018).

[22] This claim is found in the literature. See, for instance, CALAND (1891: 17-28); SEILER (1960: 63-4, 68, 202-3); HAJNAL (1997: 53).

[23] In Avestan the only exception to this is at possibly Yt 12.8 *ahmi arəϑe yahmi gaēϑe* 'in this worldly lawsuit'. Indeed, *yahmi* is likely to agree in case with *arəϑa-* 'process, lawsuit', both forms being locative. Admittedly, the entire stanza is rather obscure (BARTHOLOMAE *apud* WOLFF 1910: 227, fn. 4; LOMMEL 1927: 99, fn. 5; LECOQ 2016: 473, fn. 8). As GOLDMAN (2015: 137) argues, the second-half of the line seems to be even more problematic, since the locative *yahmi* is hard to accommodate. GOLDMAN (2015: 137) suggests, thus, to emend *yahmi gaēϑe* to ˣ*ahmi gaēϑe* 'in this existence' or, more preferably, to *yaϑa gaēϑe* 'as in the existence' according to the testimony of F1. If the latter is true, the stanza should be asserting the Rašnu's ability to punish equally in the legal case and out in the material world. However, as Goldman himself acknowledges, it should be noted that *yaϑa* has been corrected *secunda manu* to *yahmi* against all extant manuscripts.

[24] CALAND (1891: 22, 1897) claims to have found just one occurrence of this type of construction at AVŚ (= Atharvaveda Śaunaka) 19.20.1: *paúruṣeyam* (ACC.) *vadhám* (ACC.)

Moreover, in Young Avestan the subordinate conjunction *yaṱ*[25], which is identical to the form of the RP in the neuter, is used in cases other than nominative, accusative and instrumental, but the following nominal agrees in case with the head[26]:

(23) *cuuaṱ*   *aētaŋhdā̊*   *āpō*   **yaṱ**
      how_much   DEM.GEN.SG.F   water(F).GEN.SG   **COMP**
      armaēštaiiā̊
      standing.GEN.SG.F
      'How much of this standing water?'   (Vd 6.30)

(24) *aēibiiō*   *yazataēibiiō*   **yaṱ**   *aməṣaēibiiō*
      DEM.DAT.PL.M   god.(M).DAT.PL   **COMP**   Aməša(M).DAT.PL
      spəṇtaēibiiō
      Spəṇta(M).DAT.PL
      'To these deities, (i.e.) the Aməša Spəṇta'   (Vr 9.4)

(25) *āpō*   **yaṱ**   *vairiiaiiā̊*
      water(F).ABL.SG   **COMP**   rain.ABL.SG.F
      'From rain water'   (Vd 6.50)

(26) *ahmi*   *aŋhuuō*   **yaṱ**   *astuuaiṇti*
      DEM.LOC.SG.M   existence.M.LOC.SG   COMP   bony.LOC.SG.M
      'In this material (lit. bony) existence' (Vd 5.39)

As Caland (1891: 23-26) claims, *yaṱ* is found in place of di- and polysyllabic forms of the RP[27], such as genitive (23), dative (24), abla-

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yám (ACC.) 'death caused by a man', parallel to AVŚ 1.30.1 *paúruṣeyo* (NOM.) *vadhó* (NOM.) *yáh* (NOM.) 'id.'. However, as I understand from JAMISON (2022: 177, fn. 24), the verse is metrically irregular, so it might be a mere mechanical transposition of AVŚ 1.30.1.

[25] MEYER (2017: 216) states that in Old Persian the same allegedly occurs with *taya*. However, there is no more than one occurrence involving *taya* <t-y> instead of the expected *tayām* <t-y-a-m> in A2Sc, being a late Achaemenid inscription. Therefore, SCHMITT (1999a: 112-113) accounts <t-y> *taya* as a misspelling for <t-y-a-m> *tayām* (FEM.SG). Alternatively, FATTORI (2022) convincingly suggests that the misspelling is rather <u-s-t-š-n-a-m> for *ustacanam* (N.SG), which would solve the problem in the agreement. Whatever the explanation for this claim, it is clear that here <t-y> is not to be taken as the subordinate conjunction *taya*.

[26] REICHELT (1909: 370); SEILER (1960: 140-141); SKJÆRVØ (2009: 100-101, 2018b: 98).

[27] This claim is generally taken for granted (e.g. REICHELT 1909: 370; SOMMER 2016-17: 229-230; JÜGEL 2017: 558).

tive (25) and locative (26). However, *yaṯ* seems to be not restricted to oblique cases[28], such as in the following example[29]:

(27)   *puϑrəm*   **yaṯ**   *pourušaspahe*
       son(M).ACC.SG   **COMP**   Pourušaspa(M).GEN.SG
       'The son of Pourušaspa'   (Yt 5.18)

2.3. It should be said that in some instances it is hard to determine the head of this kind of formations[30]:

OAv.   (28)   *dax́iiə̄uš*   **yōi**   *sāstārō*
              land(F).GEN.SG   **REL.NOM.PL.M**   tyrant(M).NOM.SG
              drəguuaṇtō
              deceitful.NOM.PL.M
              'The deceitful tyrants of the land'   (Y. 46.1)

YAv.   (29)   **yō**   *yimō*   *xṣ̌aētō*
              REL.NOM.SG.M   Yima(M).NOM.SG   splendid.NOM.SG.M
              huuą̄ϑβō
              having_good_herds.M.NOM.SG
              'The splendid Yima with good herds'
                                                (Y 9.4, Yt 19.34, Vd 2.20)[31]

Here, it is not clear how *drəguuaṇtō* 'deceitful' and *xṣ̌aētəm* 'splendid' should be interpreted. Both (28) and (29) find relevant parallels in poetic formulas that do not imply the RP: (28) is quite similar to *sāsta daiŋ́hə̄uš* 'tyrant of the country' (Yt 13.18 *et passim*) and *druuā̊ sāsta* 'the deceitful tyrant' (Y 65.8, Humbach 1991: ii. 175), while (29) to *yimāi srīrāi huuą̄ϑβāi* (Vd 2.2, Seiler 1960: 87). Nonetheless, Seiler (1960: 125) claims that (29) is to be put in rela-

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[28] SEILER (1960: 140-141); HAJNAL (1997: 53).
[29] HAIDER & ZWANZIGER (1984) argue for the primacy of *yaṯ*. However, this hypothesis is not borne out by the data, as both in Old Avestan and Old Persian there is no invariable form behaving as *ezāfe* particle (fn. 17).
[30] SEILER (1960: 87-88).
[31] Note that the same formula is attested in the accusative at Yt 19.31: *yim yiməm xṣ̌aētəm huuą̄ϑβəm* 'id.' (SEILER 1960: 87-88).

tion to *yō daδuå ahurō mazdå* 'the creator Ahura Mazdā' (Vd 2.20) rendering (29) as 'der König (*xšaētō*) unter dem Aspekt des Zwillings (*yō yimō*) der Herdenreiche' ('the king into the shape of the twin'). So, following Seiler, *xšaētō* should be considered as the head, while *yimō* as the dependent.

The same problem arises for further examples in which the head seems to be elided[32]:

OAv. (30) *aṯ   frauuaxšiiā   aŋhāuš*
           then   proclaim.FUT.1SG   existence(M).GEN.SG
           mainiiū   pouruiiē   yaiiå̄
           spirit(M).ACC.DU   primordial.M.ACC.DU   REL.GEN.DU.M
           spaniiå̄   ūitī   mrauuaṯ
           more_prosperous.NOM.SG.M   PTC   say.SBJV.3SG
           yə̄m   *aŋrəm*
           REL.ACC.SG.M   harmful.M.ACC.SG
           'Then I shall proclaim the two primordial spirits of the existence
           of whom the more bountiful one shall address to the bad one'
                                                                      (Y 45.2)[33]

OPers.(31) **haya**   *tavīyā*   **tayam**
           REL.NOM.SG.M   stronger.NOM.SG.M   **REL.ACC.SG.M**
           skau̯ϑim   *nai̯   janti*
           weak.ACC.SG.M   NEG   strike.PRS.3SG
           'The stronger one does not strike the weak one'   (DSe 39-40)[34]

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[32] SEILER (1960: 86-103).

[33] BARTHOLOMAE (1905: 69) 'von denen der heiligere also sprach zu dem argen'; INSLER (1975: 75) 'of which the virtuous one would have thus spoken to the evil one'; HUMBACH (1991: 164) 'of whom the more prosperous one shall address to the harmful one'; HUMBACH & FAISS (2010: 128) 'the more beneficent one of whom shall address the harmful one as follows'; WEST (2011: 115) 'of whom the Bounteous one speaks thus to the Hostile one'. This analysis is not assumed in KELLENS & PIRART (1988: 155), who translate as follows: '[j]e vais proclamer les deux etats d'esprit fondamentaux de l'existence (rituelle), (proclamer) quel est celui des deux qu'on dira le plus bénéfique et quel est le mauvais que les pensées, les explications, les intelligences et les choix, que les mots et les actes, que les consciences et les êtres ne suivent en aucun cas'.

[34] KENT (1953²: 142) 'the stronger does not strike the weak one' (DSe 39-40); SCHMITT (2009: 126) 'der der stärkere (ist), den Schwachen nicht schlägt'.

In these cases, Seiler (1960: 91) assumes that the head is rather implicit in the text, so that it can be omitted[35]. Thus, in (30) the noun *mainiiūm* (ACC.) 'spirit' could be easily accommodated from the context (*contra* West 2011: 82). On the other hand, Haig (2011: 385) argues that in (31) the RP serves to turn the adjective into a noun behaving as a nominalizer, while Kent (1944: 7, 1953²: 85) states that the RP gives a 'generic meaning' to the adjective.

2.4. Although there is a high degree of syntactic variability both in the Avestan and Old Persian corpus, I have attempted so far to provide an overview of that kind of formations similar to the *ezāfe* of later times. The different schemata are given in Table 1 below. As I have argued, it is sometimes difficult however to tell whether or not there is a head, and even if present, it cannot be always determined. In the following I shall develop some of the major observations that can be drawn from the data.

Schema	Old Avestan	Young Avestan	Old Persian	Example(s)
$[[N_{1\,Case\,\alpha}(...)\,[RP\,[N_2]]_{Case\,\beta}]$	+	+	+	(1), (2), (3), (4), (5), (6), (7), (8), (9)
$[N_{1\,Case\,\alpha}(...)\,[RP\,[N_2]]_{Case\,\alpha}]$	+	+	+	(13), (18), (21)
$[[RP\,[N_2]]_{Case\,\alpha}(...)\,N_{1\,Case\,\alpha}]$	+	+	+	(11), (12), (14), (15), (16), (17), (20), (22)
$[N_{1\,Case\,\alpha}(...)\,[ya\underline{t}\,[N_2]]_{Case\,\alpha}]$	+	+	−	(23), (24), (25), (26), (27)
$[RP\,N_1\,N_2]_{Case\,\alpha}$	?	?	−	(28), (29)
$\emptyset\,[RP\,N]_{Case\,\alpha}$	+	+	+	(30), (31)

Table 1. The distributional contexts of the *ezāfe*-like construction(s).
RP = relative pronoun; N₁ = head; N₂ = (predicated) nominal.

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[35] See, also, DELBRÜCK (1900: 306) and REICHELT (1909: 371).

3. *The status of the* ezāfe-*like construction in Old Iranian*

In this section, I shall demonstrate that '*ezāfe*'-construction is not yet fully developed in Old Iranian times. As so often, the Avestan and Old Persian evidence proves elusive, showing no clear patterning that might allow the adjectival status of these formations. Based on the parallelism with finite RCs, I suggest that in synchronic terms the '*ezāfe*'-like construction should be considered as a reduced RC.

Before considering the evidence, it is worth emphasizing that copulaless RCs are widespread both in Avestan and Old Persian, as well as in several ancient Indo-European languages (§ 2.1). For Seiler (1960: 53-260, 118-119), copulaless RCs represent indeed the starting point of the '*ezāfe*'-like construction: the head can impose its case over the whole RC, and this is argued to be the most robust criterion for distinguishing the '*ezāfe*'-like construction from a copulaless RC. However, even this criterion is not straightforward.

First, it should be noticed that sometimes it is questionable whether there is case assignment through government or rather agreement between the head and the RP. For instance, this is particularly true for (11) and (15): the nominative case of the RP in (11) and (15) might be assigned either through government by a null copula or through agreement by the head, so both (11) and (15) could be translated as reduced RCs[36] (i.e. 'the demon who (is) Apaoša', 'Gaumāta who (is) magian')[37].

Second, and more importantly, it is still possible in Old Avestan to take the RP as being 'attracted' into the case of the head under cer

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[36] From a typological point of view, a reduced RC is less like a full clause, typically having reduced tense-mood marking and greater restrictions on the relativized Noun Phrase and generally occurring in a position shared with ordinary adjectival modifiers (ANDREWS 2007: 211-212).

[37] In this regard, BENVENUTO & POMPEO (2020: 23-27) note that some instances require agreement in case on the basis of some parallels in the same passage. This is clear at DB 2.40-41: *vašnā Auramazdāha kāra* (NOM.) *haya* (NOM.) *manā avam kāram* (ACC.) *tayam* (ACC.) *hamiçiyam aja vasaï* 'by the favour of Auramazdā my army totally defeated that rebellious army'. Here, the second sequence ensures that even the former is to be taken as agreeing in case, despite being formally ambiguous.

tain circumstances, regardless of whether the head is overt or implied (Skjærvø 2009: 157-158, 2018a: 163-164)[38]:

(32)   *vahištəm*   *ϑβā*   *vahištā*
       best.ACC.SG.M   you.ACC.SG   best.VOC.SG.M
       yə̄m   *ašā*   *vahištā*
       REL.ACC.SG.M   truth(N).INS.SG   best.INS.SG.N
       hazaošəm   *ahurəm*
       of_same_wish.ACC.SG.M   Ahura(M).ACC.SG
       yāsā
       ask.IND.PRS.1SG
       'I ask you Ahura, o best one, who (are) in harmony with the best truth
       for the best'   (Y 28.8)

In (32) the main clause verb *yāsā* follows the RC and may be taken as part of both clauses, with the result that the RP occurs in the same case as the head *ahurəm*.

The same treatment affects the examples at Y 45.2, given in (30), and possibly DSe 39-40, given in (31). However, in (29)-(30) *attractio relativi* can be accounted for by omission of the verb, as is discussed by Skjærvø (2009: 158, 2018a: 163-164)[39]. For instance, Skjærvø considers the same example in (30) as a RC in which a *uerbum dicendi* – or even a *uerbum putandi* – must be supplied, translating 'of which two the life-giving one shall tell (him) (whom you know to be) the Evil one' (Skjærvø 2007: 42). Supporting evidence should come from examples such as (33) below, in which the *uerbum dicendi* is overt. But if the RP is taken to represent the object of the implied *uerbum dicendi*, it is plausible that *attractio relativi* is apparent in these instances.

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[38]   This phenomenon is best known as *attractio relativi*, or 'case attraction', and is not without parallel in ancient Indo-European languages (e.g. TOURATIER 1980: 213-238; LEHMANN 1984: 251; BIANCHI 1999: 94-96). In addition, there are some pieces of evidence that in Early Greek case attraction is restricted to verbless RCs (KÜHNER & GERTH 1904: 406-413; WACKERNAGEL 2009: 76-77; VITI 2006-07 [2009]), but is not attested in full-fledged RCs before the 5th c. BC (PROBERT 2015: 167-192).

[39]   This possibility is taken into account also in Latin (TOURATIER 1980: 214-225; POMPEI 2011: 473, fn. 68).

(33) *tə̄m*   *aduuānəm*   *ahurā*
      DEM.M.ACC.SG   road(M).ACC.SG   Ahura(M).VOC.SG
      yə̄m   *mōi*   *mraoš*   *vaŋhōuš*
      REL.ACC.SG.M me   say.INJ.2SG good.GEN.SG.N
      manaŋhō
      thought(N).GEN.SG
      '(Show us) that way, o Ahura, you tell me (to be that) of good thought'
                                                                    (Y 34.13)

It should be added that in some instances the formations involving agreement in case, or better *attractio relativi*, are unambiguously predicative, such as (34). Here, the RP is in the accusative as the head *nisāim*, but introduces a locational predicate in the same way as RCs, such as (35), where the overt copula *asti* is found.

(34) *nisāim*   **yim**   *aṇtarə*
      Nisāya(M).ACC.SG   REL.ACC.SG.M   between
      mōurum=ca   *bāxδīm=ca*
      Marghu(M).ACC.SG=and   Bāxδī(F).ACC.SG=and
      'Nisāya which (is) between Marghu (= Margiana) and Bāxδī (= Bactria)'
                                                                    (Vd 1.7)

(35) *auuaṱ*   *vərəϑraγnəm*   *yazamaide*
      DEM.ACC.SG.N   victory(N).ACC.SG   worship.PRS.1PL
      yaṱ   *asti*   *vohuxšaϑrąm*
      REL.NOM.SG.N   be.PRS.IND.3SG   Vohu.xšaϑrā(F).ACC.SG.
      vahištōištīm
      Vahištōištī(F).ACC.SG
      'We worship that victory who is between Vohu.xšaϑrā and Vahištōištī'
                                                                    (Vr 20.2)

As Delbrück (1900: 304-305) notes, all these formations are structurally parallel to finite RCs. This is the case with pre- or postposed RCs, such as in (13)-(18) and probably (20)-(22), but it also applies to other types of RCs. Crucially, in Avestan there are a number of RCs that are head-internal as well as headedless, even without a correlative pronoun[40]:

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[40] KELLENS-PIRART (1990: 60-61); SKJÆRVØ (2009: 156, 158, 2018a: 147-163, 2018b: 98).

(36) *kaϑā   mōi   **yə̄m***   *yaoš   daēnąm*
      how   me   **REL.ACC.SG.F**   religion(F).ACC.SG
      yaoždānē.   yə̄m   hudānaoš
      purify.SUBJ.1SG   REL(F).ACC.SG   generous.M/N.GEN.SG
      paitišə   sax́iiāt̰   xšaϑrahiiā
      master(M).NOM.SG   announce.OPT.3SG   power(N).GEN.SG
      'How might the master of power announce to me the religious view
      which I may purify for myself, that of a generous (person)?'

                                                              (Y 44.9)[41]

(37) *rəṇjaiti   haomahe   maδōa*
      quicken.PRS.3SG   haoma(M).GEN.SG   intoxication(M).NOM.SG
      yō   *yaϑa   puϑrəm   taurunəm*
      REL.NOM.SG.M   like   son(M).ACC.SG   young.ACC.SG.M
      haomǝm   vaṇdaēta   mašiiō
      haoma(M).ACC.SG   praise.OPT.3SG   man(M).NOM.SG
      'The intoxication of haoma quickens the man who would honour
      haoma like a young son'   (Y 10.8)[42]

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[41] This stanza is quite difficult: BARTHOLOMAE (1905: 69) 'ob mir wohl für die Da-
ena, die ich vervollkommnen will, für die des Einsichtigen, der Herr des Reichs Verheis-
sungen auf die sicheren Reiche machen wird?'; INSLER (1975: 69) 'how shall I bring to life
that vision of mine, which the master of a blessed dominion ... would decree?'; KELLENS
& PIRART (1988: 150) 'comment dois-je préparer ma conscience (pour qu'elle soit) com-
me la definit celui qui dispose d'une emprise (rituelle) riche en dons?'; HUMBACH (1991:
89) 'how might the Master of Power announce to me the religious view which I may pu-
rify for myself, that of a generous person?'; HUMBACH & FAISS (2010: 123) 'how would
the Lord of Power announce to me which religious view/view-soul – that of a generous
(person) – I can purify for my welfare?'; WEST (2010: 107) 'the religion of mine that I am
to perfect, how might the master of a beneficent dominion proclaim it for me?'; SKJÆRVØ
(2018a: 155) 'how shall I make my *daēnā* ritually pure that is mine, which a master (in
possession) of command (such as that) of a *generous one may then announce?'. As is clear
from the translations, it is possible to interpret *yaoždānē* as either the verb of the RC –
following BARTHOLOMAE (1905: 69); HUMBACH (1991: 89) and WEST (2011: 66) – or
the main clause verb – following INSLER (1975: 69); KELLENS & PIRART (1988: 150)
and SKJÆRVØ (2018a: 155). In addition, *hudānaoš* is taken as dependent on *xšaϑrahiiā*
by INSLER (1975: 69) and KELLENS & PIRART (1988: 150). Finally, I have deliberately
chosen to follow HUMBACH (1991: 89) for the analysis of this stanza. However, this is not
relevant for the point at issue.

[42] The translation is given following SKJÆRVØ (2007: 14). In contrast, PIRART (2004:
95) translates 'l'ivresse de Haoma donne l'élan au mortel qui, comme s'il chérissait un ten-
dre fils ...'. Whatever the meaning of the line, this is not relevant for our purposes.

(38) *tə̄m*   *at̯*   *yasnanąm*
      DEM.ACC.SG.M   then   sacrifice(M).GEN.PL
      pauruuatātā   *yazamaidē*   **yōi**
      primacy(F).INS.SG   worship.PRS.1PL   **REL.NOM.PL.M**
      gə̄uš   *hacā*   *šiieiṇtī*
      cow.M/F.ABL.SG   from   dwell.PRS.3SG
      'Then, we worship him with the excellence of the sacrifices of those
      who dwell on the side of the cow'   (Y 37.2)

(39) *nmānəm*   *daδāhi*   ...   **yasə**   ...   *θβā*
      house(N).ACC.SG   give.PRS.2SG   **REL.NOM.SG.M**   you.ACC.SG
      yazaite   ...   *ašauua*
      worship.PRS.3SG   righteous.NOM.SG.M
      'You give the house (to him) who worship you as righteous'
                                                                   (Yt 10.30)

In (36)-(37) the head – *daēnąm* and *mašiiō*, respectively – ap-
pears inside the RC taking the case required by the verb of RC.
From a semantic point of view, these RCs refer to a unique entity
having something like the meaning of a definite article built in. On
the other hand, in (38)-(39) there is no head, while the RP is in the
nominative according to its function inside the RC. Traditionally,
RCs such as (38)-(39) are claimed to have a head that is implied[43].
But these RCs pick out a unique referent as well: in (38) people liv-
ing in accordance with the requirements of cattle-breeding, i.e. the
Mazdayasnians (Narten 1986: 176; Humbach 1991: ii. 124; Hintze
2007: 169); in (39) the orderly man[44]. In other words, this kind of
RCs are similar to definite noun phrases to the extent that can be in
coordination with nominals (Seiler 1960: 185-193), as can be seen in
(40), while still remaining RCs.

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[43] Note that in oblique cases demonstrative pronouns that could serve as heads are
often omitted (GERSHEVITCH 1959: 161). This seems to be the case here, but cf. also *haomō
aēibiš yōi auruuaṇtō hita taxšǝṇti arǝnāum zāuuarǝ.aojā̊sca baxṣ̌aiti* (Y 9.22) 'Haoma be-
stows vigour and strength upon those swift ones who run in pairs along the race'.
[44] It should be added that *ašauua* 'righteous' could be the head of the RC, as can
be understood in BARTHOLOMAE (*apud* WOLFF 1910: 203)'s and GERSHEVITCH
(1959: 89)'s translation, so that the example in (39) could also represent a head-internal
RC.

(40)   *narōi*   *fərašaoštrāi*   *maibiiā=cā*
       hero(M).DAT.SG   Frašaoštra(M).DAT.SG   me=and
       yaēibiias=cā   *īt*   *riā̊ŋhaŋhōi*
       REL.DAT.PL.M=and   it.ACC.SG   offer.SUBJ.2SG
       'For the hero Frašaoštra, and for me, and for (all those) to whom you
       may offer it'   (Y 28.8)

Given these assumptions, it is possible that examples in (28)-(31)
represent reduced RCs corresponding to both head-internal RCs and
headedless RCs – if one does not assume the ellipsis of the embedded
verb, as suggested above.

This possibility might be invoked for the well-known Avestan
formula in (41) below, which Seiler (1960: 91-93) himself considers as
challenging:

(41)   **yā̊**   *āpō*   **yiā̊s=ca**
       REL.NOM.PL.F   water(F).NOM.PL   REL(F).NOM.PL=and
       uruuariā̊   **yā̊s=ca**   *ašaonąm*
       plant(F).NOM.PL   **REL.NOM.PL.F**=and   righteous.GEN.PL.M
       frauuašaiiō
       Fravaši(F).NOM.PL
       'The waters, the plants and the Fravašis of the righteous men'
                                                  (Yt 10.100 *et passim*)

The formula mentions followers of Miϑra, such as the waters and
the plants, as well as the Fravašis of the righteous men[45], so each of the
three *Relativgruppen* – in Seiler (1960)'s terms – selects a member of
a collective denoting the group as a whole. While this kind of RCs are
distributed in the same way as definite noun phrases, there is, however,
no strong reason not to take these formations as reduced RCs. Despite
being copulaless, these formations are perhaps to be identified with
headedless RCs serving to individualise a referent rather than being
definite noun phrases proper[46]. This assumption is proven valid when

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[45] GERSHEVITCH (1959: 249).
[46] *pace* BENVENISTE (1958); HETTRICH (1988: 5, 518).

the RP is in the nominative, as is expected for the subject of a copular predication[47].

A more problematic point seems to be that in Young Avestan the invariable form *yaṱ* is in some cases used instead of the RP[48]. But it is perhaps not surprising that an invariable form serve as relativizer in copulaless RCs, as Touratier (1990) points out. This strategy of relativization – in line with typological literature[49] – is preferred for roles that can be easily recovered in the RC, as is the case with the subject in copular clauses. In this sense, it is easier to recover the subject rather than obliques in a RC, even if the RP is missing. This claim is then entirely appropriate for RCs that are copular clauses, since in that case the RP is necessarily the subject of the RC.

Following Benveniste (1947-1948), it is interesting to note that *yaṱ* is sometimes used in finite RCs as well, though rarely:

(42) *aiŋ́hiā̊*   *zəmō*   ...   **yaṱ**   *ahmi*
      DEM.GEN.SG.F earth(F).GEN.SG **COMP** DEM.LOC.SG.N
      spānas=ca   *naras=ca*   *para.iriϑiṇti*
      dog(M).NOM.PL   man(M).NOM.PL   die.PRS.3PL
      'Of this earth on which dogs and men die'   (Vd 6.1)

(43) *arəzūrahe grīuuaiia*   ...   **yaṱ**   *ahmiia*
      Arzūra(M).GEN.SG   **neck(f).loc.sg**   COMPDEM.LOC.SG.F
      daēuua   *haṇduuarəṇti*
      demon(M).NOM.PL   run_together.PRS.3PL
      'On the neck of Arzūra on which the demons run together'
                                                              (Vd 3.7)

[47] For a similar discussion in relation to Early Greek and Vedic, see PROBERT (2015: 128-130) and KLEIN (1985: i. 105-122), respectively. However, it is important to note that the relativization is largely stylistic in this role (KLEIN 1985: i. 105-106), and this makes it possible to occur mainly in formulaic expressions.

[48] The same is true for Late Vedic explicative clauses (e.g. DELBRÜCK 1888: 566-567, 1900: 5, 309; WACKERNAGEL & DELBRUNNER 1930: 555-556; VERPOORTEN 1977: 332-347), but it is probably an independent phenomenon (JAMISON 2022). It is important to note that in early Vedic prose there are few instances in which the (predicated) nominal is in the nominative, while the head is in a different case, so these formations fail to pattern with Young Avestan (JAMISON 2022: 174).

[49] For instance, COMRIE (1981: 144-146).

In (42)-(43) *yat̰* probably introduces a RC instead of the RP **yah-miia*. However, in these circumstances a resumptive pronoun is required in order to mark the role of the relativized item inside the RC, otherwise missing[50].

To sum up, in Old Iranian the *ezāfe*-like construction implies the same patterns as RCs. Thus, for most if not all cases it is better to interpret these formations as reduced RCs. On the other hand, the distribution of *attractio relativi*, whether it is ascertainable, in connection with the omissability of the head, or even of the correlative, and with the use of the invariable form *yat̰*, account for an ongoing process of reanalysis. However, it cannot be taken for granted. It is necessary also to admit that this special kind of RCs is not consistent but rather stylistic.

In the following, I shall argue that Avestan *ya-* evolved into a definite article, as well as an *ezāfe* particle, in some Middle Eastern-Iranian languages surfacing the same configurations for reduced RCs observed throughout Section 2.

4. *The emergence of the definite article in Chorasmian and Bactrian*

If it has been widely held that *ezāfe* in Western Iranian languages has originated in copulaless RCs[51], it has not been equally observed, if rarely, that the same formations might explain the emergence of the definite article in Middle Eastern Iranian languages[52], such as Chorasmian and Bactrian[53]. In this section, I shall look at

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[50] It is likely that RPs have changed to subordinators in Indo-European languages due to the loss of the reference noun (LÜHR 2008: 148-155). The distribution of Avestan *yat̰* as subordinate conjunction, which derives from the *casus rectus* of the RP, should provide more evidence in support of this view (HINTZE 1997). See, also, JAMISON (2022: 177) for a similar suggestion in relation to (Late) Vedic *yád*.

[51] TEDESCO (1921 [1924]); HAIDER & ZWANZIGER (1984); KARIMI (2007); HAIG (2011); KORN (2020: 470, 488-489).

[52] BAILEY (1945: 18); KORN (2020: 471); *contra* YAKUBOVICH (2020: 105-108).

[53] For a brief overview of Chorasmian and Bactrian grammar, see HUMBACH (1989) and DURKIN-MEISTERERNST (2009) for Chorasmian, and SIMS-WILLIAMS (1989a, 2007: 38-49) for Bactrian.

the data from Chorasmian and Bactrian in the light of the preceding discussion[54].

Beginning with Chorasmian, the proclitic definite articles m. *ʾy* [ī] fem. *yʾ* [yā] du. m. fem. *yʾ* [yā] pl. m. fem. *ʾy* [ī] is supposed to be connected to the RP stem **ya-* as attested in Avestan *ya-*[55], whereas the RP (*ʾ*)*k* [ki] results from **ka-* just as for Persian[56]. At a first glance, the definite article can appear in several syntactic positions[57], as represented in the following examples[58]:

(44) *ʾy*   *ʾsp*
      ART.SG.M   horse(M).NOM.SG
      'The horse'   (Muq 107.2 from Durkin-Meisterernst 2009: 346)

(45) *yʾ*   γwc
      ART.SG.F   cow(F).POSS.SG
      'Of the cow'   (Muq 51.2 from Durkin-Meisterernst 2009: 347)

(46) *f=ʾ*   δscy
      with=**ART.SG.F**[59]   hand(F).ABL.SG
      'With the hand'   (Muq 490.3 from Durkin-Meisterernst 2009: 342)

(47) *yʾ*   *ʾzr*   ywk
      ART.SG.F   old.NOM.SG.F   cow(F).NOM.SG
      'The old cow'   (Muq 94.8 from Durkin-Meisterernst 2009: 358)

(48) *f=y*   zβʾk   *f=y*
      in=**ART.SG.M** tongue(M).LOC.SG   in=**ART.SG.M**
      trkʾnk
      Turkish.LOC.SG.M
      'In the Turkish tongue'
                        (QR 123 from Durkin-Meisterernst 2009: 358)

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[54] Probably, Digoron Ossetic also attests the definite article from **ya-* (BAILEY 1945: 15-20; THORDARSON 2009: 110-111), while Sogdian definite articles derive from demonstrative stems (SIMS-WILLIAMS 1989b: 186, 1994; WENDTLAND 2011, *pace* BAILEY 1945: 17). For the sake of brevity, I shall not discuss the evidence for Digoron Ossetic in this paper.

[55] BAILEY (1945: 18); DURKIN-MEISTERERNST (2009: 343).

[56] ÖHL & KORN (2006 [2008]).

[57] HUMBACH (1989: 196); DURKIN-MEISTERERNST (2009: 358).

[58] Abbreviations used for the Chorasmian texts quoted are as follows: QR = Qunyat al-Munya and Risāla; Muq = Muqaddimat al-Adab.

[59] Note that the dual article *yʾ* has given rise to feminine singular forms, as is the case for m. δst 'hand' (HUMBACH 1989: 197).

(49)   *'y*   *xsr*   *'y*   *mrcy'n*
       ART.SG.M   father-in-law(M).NOM.SG   **ART.SG.M**   man(M).POSS.SG
       'The father-in-law of the man'
                                (Muq 2.1 from Durkin-Meisterernst 2009: 358)

(50)   *'y*   *b'r*   *y'*   *'wdry*
       ART.SG.M   load(M).NOM.SG   **ART.SG.F**   belly(F).POSS.SG
       'The foetus (lit. the load of the belly)'
                              (Muq 106.7 from Durkin-Meisterernst 2009: 358)

The definite article can appear preposed to the head, such as in (44)-(46), or, if the head is modified by an adjective, to the entire noun phrase, such as in (47). But if the adjective follows the head, the definite article is repeated, such as in (48). The last schema is also found in the case of possessives, such as in (49)-(50). The patterns involving the definite article in Chorasmian are summarised in Table 2:

PATTERN	EXAMPLE(S)
article + noun	(44), (45), (46)
article + adjective + noun	(47)
article + noun + article + adjective	(48)
article + noun + article + possessive	(49), (50)

Table 2. The distribution of the definite article in Chorasmian.

If one looks at the distribution of the definite article in Chorasmian, it becomes clear that the positioning of the Chorasmian definite article *'y* is consistent with that of the Avestan RP *ya-*. Also, the marking of *'y* is dependent on the head noun in the same way as *ya-*. However, in Chorasmian the definite article takes the same form as the possessor if the latter is feminine[60], as is the case for (50), whereas in Avestan the RP systematically agrees in gender with the possessed head noun:

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[60] DURKIN-MEISTERERNST (2009: 358).

(51) *upa*   *tąm*   *kəhrpəm*   *fraŋuharaiti*
      towards   DEM.ACC.SG.F   body(F).ACC.SG   eat.PRS.3SG
      yąm   *iristahe*   *mašiiehe*
      REL.ACC.SG.F   dead.M.GEN.SG   man(M).GEN.SG
      'He eats the dead body (lit. the body of the dead man)'   (Vd 5.1)

Most importantly, the doubling article, such as in (48)-(50), fit into a pattern that is common in both Avestan and Old Persian, in which a demonstrative is combined with the nominal group introduced by the RP[61]:

(52) *imąm*   *daēnąm*   ***yąm***
      DEM.ACC.SG.F   religion(F).ACC.SG   **REL.ACC.SG.F**
      āhūirīm   *zaraϑuštrīm*
      Ahuric.ACC.SG.F   Zoroastrian.ACC.SG.F
      'This Ahuric and Zoroastrian religion'   (Yt 8.59)
(53) *avam*   *kāram*   ***tayam***
      DEM.ACC.SG.M   army(M).ACC.SG   REL.ACC.SG.M
      hamiçiyam
      rebellious.M.ACC.SG
      'That rebellious army'   (DB 2.25-26)

In this way, a diachronic association between Avestan *ya-* and Chorasmian *'y* cannot be excluded[62]. Moreover, *'y* is not restricted to common nouns, but it is also found with proper names[63], such as in (54)-(55):

(54) *'y*   *zyd*
      ART.SG.M   Zayd(M).NOM.SG
      'Zayd'   (Muq 516.1 from Durkin-Meisterernst 2009: 343)
(55) *c=y*   *'llh'n*
      from=ART.SG.M   Allah(M).POSS.SG
      'Allah's'   (Muq 103.5 from Durkin-Meisterernst 2009: 343)

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[61] As FILIPPONE (2005: 387-388) notices, this formation is indeed consistent with (possessive) genitives in Old Persian.

[62] A similar hypothesis has been put forward by HENNING (1955: 425-426) without further arguments.

[63] DURKIN-MEISTERERNST (2009: 343).

Even in this case, it is not unreasonable that these peculiarities might be historically connected to copulaless RCs: (54)-(55) might derive from a reduced RC such as (56), repeated from (11) above, by means of the omission of the head.

(56) *daēuuō*   ***yō***   *apaoṣ̌ō*
      demon(M).NOM.SG   **REL.NOM.SG.M**   Apaoša(M).NOM.SG
      'The demon Apaoša'   (Yt 8.21)

Turning now to Bactrian, two forms are used as both articles and demonstratives, ι[64] and m. μο, fem. μα, pl. μι respectively[65]. While the latter is thought to derive from **ima-*[66], the first has been tentatively connected with **ya-*[67]. Just as for Chorasmian, Bactrian RPs κιδο, ακιδο, κιδ-, ακιδ-, ακιδα- result instead from **ka-*[68]. However, ι is used not only to mark the definiteness of a reference noun, but also to connect a modifier to its head, thus being labelled as *ezāfe* particle[69]:

(57) ναто   ι   χαραγανο
      Nat   EZ   Kharagan
      'Nat the Kharagan'   (xd6 from Sims-Williams 2007: 145)
(58) βαγο   ι   οαχαþο
      property   EZ   Wakhš'
      'The property of Wakhš'   (L2' from Sims-Williams 2012: 59)

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[64] The article ι has also a feminine counterpart ια, but it is sporadically attested (SIMS-WILLIAMS 2007: 41, 214; GHOLAMI 2011: 11).

[65] GHOLAMI (2011: 11).

[66] SIMS-WILLIAMS (2007: 234). This form is related to Sogdian *m-*, which also serves as definite article (SIMS-WILLIAMS 1989b: 186; WENDTLAND 2011: 273-303). However, I shall not deal with it in this paper.

[67] SIMS-WILLIAMS (2007: 214, 2009: 261); GHOLAMI (2011: 17)

[68] SIMS-WILLIAMS (2007: 222).

[69] GHOLAMI (2011, 2014: 76-84). The Bactrian texts are quoted following SIMS-WILLIAMS & CRIBB (1996) for Dasht-e Nāwūr inscription, SIMS-WILLIAMS (2004 [2008]) for Rabatak inscription, GERSHEVITCH (1979 [1980]) for the great Surkh Kotal inscription, and SIMS-WILLIAMS (2007, 2012) for Bactrian documents in cursive script. The abbreviation EZ = *ezafe*, which is not included in Leipzig Glossing Rules, is used indiscriminately for both *ezāfe* proper and article.

(59) κοþανο   ι   ραþτογο   ι   λαδειγο
      Kušan   EZ   righteous   EZ   just
      'The Kušan the righteous, the just'
              (Dasht-e Nāwūr 4 from Sims-Williams & Cribb 1996: 95)

(60) ασο   ι   νοþαλμο
      from   EZ   seat
      'From the seat' (Surkh Kotal 3 from Gershevitch 1979 [1980]: 64)

As is evident from (57)-(61), the *ezāfe* particle is found across different syntactic contexts: in (57) the *ezāfe* particle serves to connect the patronymic χαραγανο to the proper name νατο; in (58) the apposition οαχαþο to the common noun βαγο; in (59) the epithets ραþτογο and λαδειγο to the proper name of the king κοþανο; in (60)-(61) the *ezāfe* particle is used as an article[70] in combination with common nouns (60) and proper names (61). Finally, in contrast to Chorasmian ʾy, ι is apparently never used for the expression of possession in Bactrian[71]. These patterns are summarised in Table 3:

Pattern	Example(s)
noun + *ezāfe* + noun	(57), (58)
noun + *ezāfe* + adjective	(59)
ezāfe + noun	(60), (61)

Table 3. The distribution of the *ezāfe* particle in Bactrian.

Once again, it is possible to draw a parallel between the Bactrian *ezāfe* and Avestan reduced RCs. For instance, (57)-(59) are quite similar to the following examples taken from the Avestan corpus:

[70] It is true that in these uses the form ι might also derive from *ayam* (Sims-Williams 2007: 214; Gholami 2011: 11). Yakubovich (2020: 106) further proposes that *ayam* also represents the basis of the *ezāfe* proper. But, as Yakubovich (2020: 107) admits, the rare feminine form ια (fn. 39) is rather problematic: the feminine counterpart of Old Iranian *ayam* 'this' is indeed *iyam*, but the latter could not yield ια in Bactrian, unless it is analogically influenced by *yā*. Similarly, the contamination between demonstrative *iyam* and the RP *ya-* might be invoked to explain the Chorasmian article (Edel'man 2008: 30-31). However, it seems more natural to suppose that given the correlations established both Chorasmian and Bactrian article derive from *ya-* without analogical levelling.

[71] Gholami (2011: 17).

(62) *vistauruš*   ***yō***   *naotairiiąnō*
Vistauru(M).NOM.SG   **REL.NOM.SG.M**   Naotaryan.NOM.SG.M
'Vistauru the Naotaryan'   (Yt 5.76)

(63) *aoi*   *āpəm*   ***yąm***   *raŋhąm*
towards   river(F).ACC.SG   **REL.ACC.SG.F**   Rahā(F).ACC.SG
'Towards the river Rahā'   (Yt 5.63)

(64) *xarəm=cā*   ***yim***   *ašauuanəm*
Xara(M).ACC.SG=and   **REL.ACC.SG.M**   righteous.ACC.SG.M
'Xara the righteous' (Y 42.4)

It should be noticed that, just as for Avestan, the use of the *ezāfe* proper is not consistent, since the same formations are also found without the *ezāfe* particle ι[72], such as in the following examples:

(65) ναοαζο   χαυρογανο
Nawaz   Khahrugan
'Nawaz Khahrugan'   (cd1 from Sims-Williams 2007: 75)

(66) **þαο**   κανηþκι
king   Kaniška.OBL
'King Kaniška'   (Surkh Khotal 1 from Gershevitch 1979 [1980]: 64)

Having considered Chorasmian and Bactrian evidence, it seems reasonable to assume that the definite article in Eastern Middle Iranian has arisen from the reanalysis of former reduced RCs involving no copula as attested in Avestan and Old Persian. As a result, Chorasmian and Bactrian forms, both etymologically deriving from the RP stem **ya-*, syntactically parallel the same patterns established above for the so-called '*ezāfe*'-like construction, but Chorasmian has further developed than Bactrian. The Chorasmian definite article, which is inflected for number and gender, is consistently found in several contexts, including possessive. In particular, the innovative doubling of the definite article overlaps the former structure of demonstrative plus RP in Old Iranian, despite some differences. Instead, the Bactrian *ezāfe* particle is mainly used to connect an adjectival modifier to its head noun rather than being a definite ar-

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[72] GHOLAMI (2011: 17).

ticle proper, except in some cases. At the same time, the semantics of head-internal and headless RCs might have contributed to the emergence of the definite article in Chorasmian as well as in Bactrian. This kind of RCs typically select a unique referent behaving as definite noun phrases, as discussed in Section 3. Thus, it seems not unlikely that Old Iranian **ya-* could have developed into a definite article in these languages.

5. *Summary*

This paper has addressed the issue of the beginning of the (proto-) *ezāfe* in Old Iranian. The traditional analysis of the *ezāfe*-like construction of Avestan and Old Persian treats it as an adjectival formation at least from the Young Avestan period onwards. In contrast, it is preferable to consider these formations as RCs omitting a copula, as the close parallel with full-fledged RCs proves. It has also been shown that the prime criterion of agreement in case is not unambiguous, while some pieces of evidence point to the phenomenon traditionally called *attractio relativi*, which is widespread among several Indo-European languages. Therefore, there is no hint yet at this stage of the development of RCs in the (proto-)*ezāfe*, as argued in the previous literature. On the other hand, under certain circumstances this kind of RCs expresses definiteness. For this reason, it seems plausible that these formations not only developed into *ezāfe*, but also into definiteness strategies in Eastern Middle Iranian. Finally, the result of this research supports the idea that RCs are the starting point of the *ezāfe*, and – in my view – the diachronic source for definite articles in (at least) some Middle Eastern Iranian languages, but outside this period such formations are merely reduced RCs, that is RCs with a non-overt copula.

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