

# Precursor of the izafe construction in Germanic

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## 1 Introduction

The use of appositive adjectives in constructions such as [<sub>S</sub> ... the X (which is [<sub>Adj</sub> Y]) ...] employs different morphosyntactic strategies in different languages:

### 1.1 Morphological Strategies

A morphological strategy involves the derivation of determinatives from adjectives, meaning ‘the Y (one).’ Diachronically, Indo-European languages have employed the following derivational suffixes (cf. Nussbaum 2022 and Merritt 2023:131-44):

- $*-h_2$ :  $*\sqrt{me\hat{g}}$  ‘big, great’  $\rightarrow *mé\hat{g}-h_2-$  ‘the great’ (Gk. μέγα ‘great’).
- $*-t$ :  $*\sqrt{neg^w}$  (Hitt. *nekuzzi* ‘gets dark’)  $\rightarrow *nó/ég^w-t-$  ‘the dark’ (Hitt. *nekuz* ‘evening’, Gk. νύξ ‘night’).
- $*-i$ :  $*h_2er\hat{g}-ó$  ‘flashy’ (Gk. ἀργός ‘shining, swift’)  $\rightarrow *h_2ó/ér\hat{g}-i$  ‘the flashy’ (Hitt. *ḫarki-* ‘white, clear’).
- $*-n$ :  $*\sqrt{\hat{k}as}$  ‘grey’ ( $*\hat{k}as-no-$  > Lat. *cānus* ‘grey-haired’,  $*\hat{k}as-ko-$  > Lat. *cascus* ‘grey-haired, old’)  $\rightarrow *\sqrt{\hat{k}as-on-}/\hat{k}as-n-$  ‘the grey one’ (OE. *hara* ‘hare’).

The  $*-n$  suffix is associated with Germanic weak adjectives, but it is not productive in Indo-Iranian. In Germanic, the  $*-n$ -stem derivatives of adjectives became the preferred strategy eventually ending up as part of the weak adjective construction, while the counterpart in Indo-Iranian is the izafe construction and its predecessors (cf. section 2).

### 1.2 Syntactic Strategies

A straightforward way to form an appositive clause is an appositive relative clause.

- (1) ὥς ἄν Πηλεΐδην τιμήσομεν, ὅς μέγ’ ἄριστος  
so PT son.of.Peleus.ACC.SG honor.AOR.SUBJ.1PL REL.NOM.SG great best.NOM.SG  
(Π271)

“so that we may win honor for the son of Peleus, who is far the best...”

Appositive clauses can be realized differently, e.g. by parenthetical clauses, in other languages.

- (2) nǐ hái jì-de Xiǎo-Lǐ — jiù shì zuótiān chàng=gē=·de nà=·ge —  
you still remember DIM-L. just COP yesterday sing=song=SUB that=CL  
chàng=·de shén·me ·ma?  
sing=DE what Q

“Do you still remember what Li, who sang yesterday, sang?” Lit. “Do you still remember what Li—it is just the singing one last night—sang?”

Parenthetical clauses are not rare in old Indo-European languages, especially in Homer:

- (3) ἄλλ’ ἄγε δὴ τινα μάντιν ἐρείομεν ἦ ἱερῆα  
 but come.IMPV.2SG PT INDEF.ACC.SG seer.ACC.SG ask.SUBJ.1PL or priest.ACC.SG
- ἦ καὶ ὀνειροπόλον, καὶ γάρ τ’ ὄναρ ἐκ Διός  
 or and dream.reader.ACC.SG and for and dream.NOM.SG from Zeus.GEN.SG  
 ἐστίν,  
 COP.PRES.3SG
- ὅς κ’ εἴποι ὅ τι τόσσον ἐχώσατο Φοῖβος  
 REL.NOM.SG PT say.AOR.OPT.3SG why so be.angry.AOR.3SG Phoebus.NOM.SG  
 Ἀπόλλων, (A62-4)  
 Apollo.NOM.SG

“But come, let us ask some seer or priest, or some reader of dreams—for a dream too is from Zeus—who might say why Phoebus Apollo is so angry, ...”

If the appositive relative clause is attested in many branches, it suggests that the appositive relative clause was a strategy for appositive clauses in the proto language.

## 2 Izafe and its predecessors

Izafe is a construction typically found in Iranian languages, e.g. Old Avestan and Old Persian. Reichelt (1909:370, §749) discussed the development of these nominal relative clauses. Meyer (2015) divides the history of the Iranian izafe into the following stages:

Stage I: Verbless nominal relative clauses.

- (4) mat vā padāiš yā frasrūtā īzaiiā  
 with 2PL.ACC footstep.INS.PL REL.NOM.PL famous.NOM.PL Iža.GEN  
 pairijasāi (Y. 50.8; OAv. Meyer 2015)  
 walk-around.SUBJ.1SG
- “with the footsteps, which (are) famous (as those) of Iža, I shall walk around you.”<sup>1</sup>
- (5) miθrəm ... yō nōiṭ kahmāi aiβi.draoxδō  
 Mithra.ACC REL.NOM.SG NEG INDEF.DAT.SG PV.to.be.deceived.NOM.SG  
 (Yt. 10.17; YAv. Meyer 2015)

“Mithra..., who (is) not to be deceived by anyone.”

Stage II: Verbless nominal relative clauses with Case Attraction.

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<sup>1</sup>The translations for example (4) and (5) are from Meyer (2015).

- (6) tāiš            šīiaoθanāiš    yāiš            vahištāiš    (Y.35.4; OAv, Meyer 2015)  
 DEM.INS.PL deed.INS.PL REL.INS.PL best.INS.PL  
 “Through these best actions...”

- (7) miθrəm            yim            vouro.gaoīiaotīm    (Yt. 10.1; YAv, Meyer 2015)  
 Mithra.ACC.SG REL.ACC.SG wide-pastured.ACC.SG  
 “Mithra who provides wide grazing grounds.”

Stage III: Narrow sense izafe. The narrow sense of izafe can be described as the linear structure of [NP pt Modifier] with pt as an uninflectable particle or clitic.

- (8) puθrəm    yaṭ    pourušaspahe  
 son.ACC.SG YAT Pourušaspa.GEN.SG  
 “the son of Pourušaspa” (Yt. 5.18; Young Avestan)

Previous works suggest that embedded relative clauses and correlatives in other Indo-European languages might be relevant for the origin of the izafe construction. Stage I is attested in branches other than Iranian:

Vedic (cf. Jamison 2022):

- (9) pári    dhāmāni<sub>i</sub>            [yāni            te]<sub>i</sub>  
 around domain.ACC.PL REL.NOM.PL 2SG.GEN.ENCL  
  
 tvám    soma            asi            viśvátah  
 2SG.NOM Soma.VOC.SG COP.PRES.2SG entirely  
  
 pávamāna            ṛtúbhiḥ            kave            (RV 9.66.3)  
 self-purifying.VOC.SG according.to.the.ritual poet.VOC.SG

“The domains that are yours, Soma, you surround entirely according to the ritual sequences, o self-purifying poet.”

Homeric Greek (cf. Qu 2023):

- (10) φίλτατος            ἔσχε            θεοῖσι            βροτῶν            [οἷ            ἐν  
 dear.SUPERL.NOM.SG COP.IMPF.3SG god.DAT.PL mortal.GEN.PL REL.NOM.PL in  
 Ἴλῳ            εἰσίν.]            (Ω67; restrictive, verbed)  
 Ilios.DAT.SG COP.PRES.3PL  
 “(but Hector too) was dearest to the gods of all mortals that are in Ilios.”

vs.

- (11) νέρθεν            ἅπας    πεπάλακτο            καὶ    ἄντυγες            αἱ            περὶ  
 from.below whole sprinkle.PLUPERF.3SG and rim.NOM.PL REL.NOM.PL around  
 δίφρον] (Λ535; appositive, verbless)  
 ACC.SG  
 “(and with blood was all the axle) sprinkled below, and the rims round about the chariot.”

### 3 Germanic weak adjectives

The Germanic weak adjective construction takes the form [Det Y-*n*] (Y-*n* represents the *n*-stem weak adjective), literally meaning “the Y (one)”, which is semantically equivalent to “the one which is Y”, parallels with verbless relative clauses.

Weak adjectives in Germanic functioned as determined derivations: substantivizations of adjectives. The determiners are not obligatory.

- (12) Heorot is gefælsod, beahsele | beorhta.  
H. is purge.PP treasure-hall bright.WK.NOM.SG  
“Heorot is purged, the treasure-hall, the bright one.” (Beowulf 1176-7; Old English)

Fischer (2001) made a thorough comparison between Old English prenominal and postnominal adjectives, as well as strong and weak adjectives.

Strong adjectives can:

- be modified by prepositional phrases,
- be modified by degree adverbs like *swiþe* ‘very’,
- incorporate negative elements

while weak adjectives cannot in general.

prenominal adjectives	postnominal adjectives
more often weak	more often strong
definite	indefinite
convey old information	convey new information

In type theory,

- strong adjectives:  $\langle e, t \rangle$ , like restrictive relative clauses
- weak adjectives:  $\langle e \rangle$ , like the appositive relative clause.

The only inconsistency between Fischer’s conclusion and my hypothesis is that the Old English weak adjectives were more often prenominal, but the prenominal position became the default position for West Germanic adjectives in general, and I will explain the change of position in section 4.

This paper argues that the determiners originally functioned as relativizers of verbless relative clauses. The development can be compared to the Iranian *izafe*, suggesting a syntactic reanalysis from CP (Complementizer Phrase) to DP (Determiner Phrase), based on the following observations:

- a. Germanic relative pronouns (e.g., Gothic *saei*, Old English *se*) and determiners (e.g., Gothic *sa*, Old English *se*) are both from the *\*so/to-* pronominal roots.
- b. The semantic equivalence of Germanic weak adjective construction and the *izafe* construction.

The following Gothic example demonstrates an intermediate stage of the process by which relative clauses developed into the weak adjective construction.

- (13) ... swaswe atta                      izwar                      [iz sa                      in himinam]  
          even.as father.NOM.SG 2.PL.POSS                      DEM.NOM.SG.M in heaven.DAT.PL  
          fullatojis                      ist.  
          perfect.NOM.SG.M COP.3.SG.PRS  
          “...even as your Father which is in heaven is perfect.” (Matthew 5:48; Gothic)

The izafe-like construction *sa in himinam*, “which is in Heaven” is not a relative clause with an overt copula introduced by the relative pronoun *saei*, namely \**saei in himinam ist*.

But it is not a weak adjective construction either, since it has a prepositional phrase.

This is not a Greek source text influence (ὁ ἐν τοῖς οὐρανοῖς, ‘the (one) in the heavens’)

Curme (1910) noted that the Gothic translation “preserves the spirit” of Gothic for the usage of determiners of nouns. In example (13) there is no determiner before *himinam* ‘heavens’ in Gothic but there is an article τοῖς before οὐρανοῖς ‘heaven’.

Other translations of the similar phrase such as *attan izwarana pana in himinam* for τὸν πατέρα ὑμῶν τὸν ἐν τοῖς οὐρανοῖς (Matthew 5:16), and *atta izwar sa ufar himinam* for ὁ πατὴρ ὑμῶν ὁ οὐράνιος (Matthew 6:14, 6:26, 6:32, with an adjective in Greek but a prepositional phrase in Gothic) exemplify the same izafe-like construction. When “your father” refers to God, the izafe-like construction “in heaven” functions as an apposition rather than a restrictive modifier distinguishing the “heavenly father” from the biological father.

This is consistent with the argument that the izafe construction’s original locus was the appositional relative clause.

Contrastively, when adjectives are used restrictively, they were not translated into weak adjective constructions, even when they were attributive.

- (14) apþan þiudana                      aiwe,                      unriurjamma,                      ungasaihvanamma,  
          then king.DAT.SG eternity.GEN.PL immortal.STR.DAT.SG invisible.STR.DAT.SG  
          ainamma,                      frodamma                      guda                      ...  
          one.DAT.SG wise.STR.DAT.SG god.DAT.SG

“Now unto the King eternal, immortal, invisible, the only wise God...” (Timothy I 1:17; Gothic)

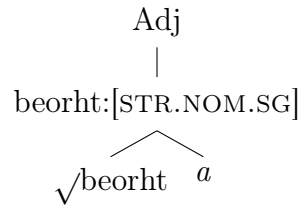
Example (14) has three strong adjectives *unriurjamma* ‘immortal’, *ungasaihvanamma* ‘invisible’, *frodamma* ‘wise’, all of which are restrictive when they modify “the king”, distinguishing Him from the mortal kings.

Example (12) to (14) show that the *n*-stem weak adjectives were originally used as apposition to NP, with or without a determiner, while the strong adjectives have the restrictive usage, and such distinction in Gothic cannot be simply attributed to the Greek source texts.

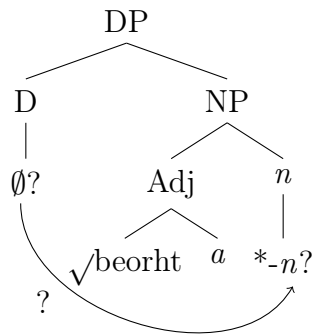
The construction in example (13) is parallel to structures found in Homeric Greek, which also descend from the same construction that gave rise to Iranian izafe, compare example (11)

## 4 Determiner-hood in *\*-n*

Strong adjectives can be analyzed as derived from the root and adjectivized by the a-head:

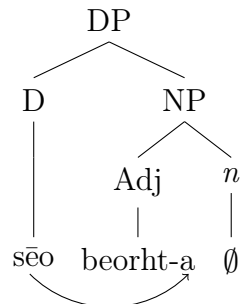


But the weak adjective is not only an adjective, but a DP. The exact morphosemantic function of the *\*-n* morpheme is difficult to analyze for the speakers. (Only for the Germanic speakers where the *\*-n* stem determinative is highly productive!)



But in the verbless nominal relative clause (the Germanic *izafe* equivalent), the relative pronoun can be easily reanalyzed as a determiner, since they are

- demonstratives, which are semantically close to determiners,
- in the appropriate position to be reanalyzed as determiners.



## 5 Old Norse double definiteness

Many previous works have pointed out the relationship between the postnominal definite marker *-inn* and the weak adjective construction (e.g. Skrzypek 2009, Harries 2014, Pfaff 2019). One theory which goes back to Grimm (1837) and Delbrück (1916) argued that the postnominal definite marker was a result of cliticization of *(h)inn* in a postnominal weak adjective construction, for example:

- (15) maðr inn gamli (Skrzypek 2009, ex. 9)  
 man DEM old.DEF  
 “the old man.”

Harries (2014) and Pfaff (2019) also pointed out that the marker *-inn* should be attributed not to the noun, but the postnominal structure, with the epithetic structure:

- (16) bali hi- rauði (Vs 15; Pfaff 2019, ex. 54a)  
 Balli ART red.WK  
 “Balli the Red.”

This epithetic function is exactly the same as in the old Persian *Gaumātam tayam magum* ‘Gaumāta the Magian’ and Homeric Greek ὅς τις ἄριστος ‘(whoever is) the best.’

The etymology of *hinn* and *inn* is a complicated topic beyond the scope of this paper, but I will follow de Vries’s (1977) analysis: *inn* is from *\*e* and *\*no*, the *\*e* is related to the relative pronoun *es* (later *er*), cf. Vedic *ayám*, *idám*, and Latin *is*, *id*.

Pfaff (2019) had a thorough categorization of adjectivally modified noun phrase patterns in Old Norse double definiteness:

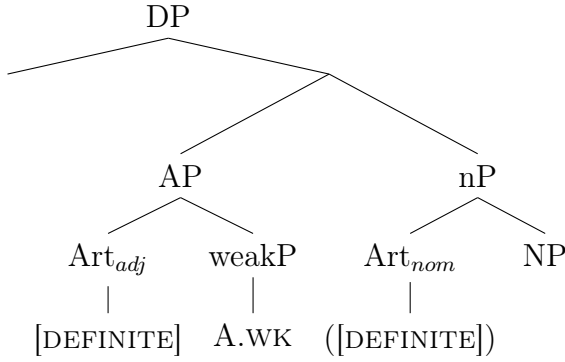
weak adjective	(I)	A.WK N-DEF
	(II)	ART A.WK N
	(III)	N-DEF A.WK
strong adjective	(IV)	A.STR N-DEF
double definiteness	DD-a	ART (hinn) A.WK N-DEF
	DD-b	ART (sá) A.WK N-DEF
“Danish pattern”	DAN	ART (sá) A.WK N

Pfaff pointed out that pattern DD-a, unlike DD-b, was very old (attested in 12th century) and productive (at least more frequent than pattern I up to 16th century, 105:11):

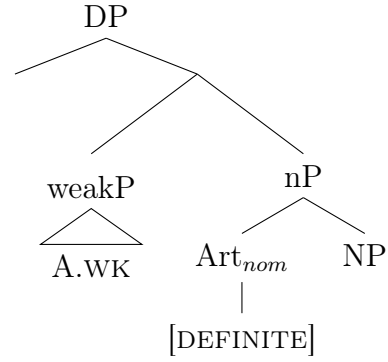
- (17) [Hið þriða vatsfall-ið] heitir Híðekel (Pfaff 2019, ex. 37a; DD-a)  
 ART third stream-DEF is.called H.  
 ‘the third stream...’

Pfaff proposed that the weak inflection is licensed by an adjectival article/complementizer.

Pattern DD-a (II): (Pfaff 2019, 64a)



Pattern (I): (Pfaff 2019, 64b)

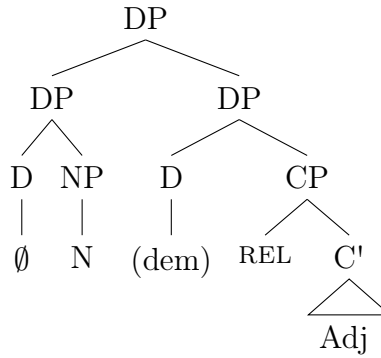


I argue the source for the adjectival article/complementizer is the relativizer of the nominal relative clause (denoted as REL).

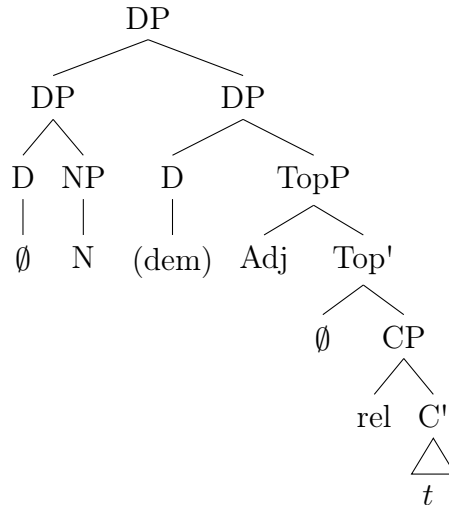
The postnominal determiner is not attested in West Germanic or Gothic, nor any other old Indo-European languages, so it should be a North Germanic innovation.

Left-headed DP is attested in all three Germanic branches, Old Norse included. The postnominal determiner can be derived from a relic of a postnominal relative clause.

Starting from an adjectival appositive relative clause in Pre-Old Norse:



The adjective can be topicalized to the left periphery of the CP:





Such fronting is common across Indo-European languages:

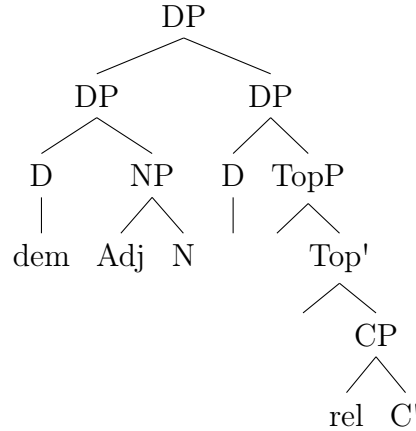
- (18) jahí                      śátrum              antiké              [<sub>TopP</sub> dūraké<sub>i</sub>              ca  
smite:IMP;2SG rival:ACC;SG nearby:LOC;SG              distance:LOC;SG and  
  
[<sub>CP</sub> yáḥ                      t<sub>i</sub> ]] (Vedic; RV 9.78.5c)  
REL:NOM;SG

‘Smash the rival nearby and the one who is in the distance.’<sup>2</sup>

- (19) **trebegies**                      **titúí**                      [<sub>RC</sub> **praistakla=sa**  
Trebecius.GEN.SG.M Titus.DAT.SG.M              monument.NOM.SG=DEM.NOM.SG(?)  
**posmúí**]              (South Picene;TE.5; Drigo & Qu)  
REL.DAT.SG.M

“...for Titus (son) of Trebecius, for whom the (?) stele (is)”.<sup>3</sup>

Once the demonstrative is reanalyzed as the determiner, and \*-*n* morpheme, as an agreement marker, they should natural occur by the left hand side of the noun:



Now that the only remainder of the previous relative clause is the relative pronoun, and it can easily become a clitic to the noun, i.e., the postnominal determiner, just like the fate of the Iranian izafe marker. The declension is an agreement to the \*-*n* stem morpheme.

<sup>2</sup>Translation from Jamison and Brereton (2014).

<sup>3</sup>Translation by Zamponi (2021: 41-2).

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