

THE IZAFE AND NP STRUCTURE IN HAWRAMI

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Abstract

The paper presents an analysis of the noun phrase in Hawrami. Important evidence for the analysis comes from concord between the Izafe morpheme and other functional categories, including definiteness, number, possessive and demonstrative. The Izafe is an inflection, characteristic of the Iranian languages, which marks nouns and NPs modified by adjectives or DPs. It is argued that its role is that of breaking the symmetry between two merged categories neither of which selects the other, by making one of them the head. This property the Izafe shares with other ‘linking morphemes’, including English *of*. It is argued that there are two Izafe morphemes in Hawrami, one is a pure linking morpheme, the other is a determiner.

0. Introduction

Hawrami is a Kurdish (Northwestern Iranian) language (or dialect) spoken in a region stretching across the border of Northern Iraq and Iran.¹ The number of speakers is unknown, but is probably less than 100,000, possibly less than 50,000. We have investigated the language with the help of Koresh Rafie, a native speaker of Hawrami, coming from the Iranian town of Pawa but residing in Britain since about three years.²

Hawrami has fairly rich systems of inflection, verbal as well as nominal. The present paper is about the structure and the functional categories of the noun phrase in Hawrami, and particularly the inflection called Izafe, characteristic of the Iranian languages. We devote special attention to NP-internal agreement or concord, as we will call it, because the concord exhibited by the Izafe in Hawrami can be shown to provide crucial evidence of the structure of the noun phrase, particularly the hierarchic relations among the various functional categories of the noun phrase, including the definite article, number, demonstrative and possessive.

The Izafe (also spelled Ezafe, particularly in connection with Persian) is an inflection on modified categories in the noun phrase. In Hawrami it has several different realizations depending on factors such as the category of the modifier, number and definiteness.³ Consider the expressions under (1):

- (1) a. æsp-i zil
 horse-IZ big
 ’(a) big horse’

¹ Varieties of Kurdish are usually called dialects, even when they are far from being mutually intelligible.

² The only published more comprehensive work on the grammar of Hawrami to date is MacKenzie 1966. According to Leezenberg (undated), in the genetic tree the node Kurdish branches out into Hawrami and Zaza (spoken in Turkey) on one branch, with Kurmanci and Sorani, the two major Kurdish dialects, on the other branch. There are a number of contact-induced similarities, though, between Hawrami and Sorani. Our informant Koresh Rafie speaks Hawrami as well as Sorani. See Leezenberg (undated) on the controversial history of Kurdish dialects.

³ See MacKenzie (1961: 61-67, 157-163) for an overview of the Izafe in various Kurdish dialects (not including Hawrami).

- b. æsp-i zil -i sya:w
 horse-IZ big-IZ black
 ‘(a) big black horse
- c. æsp-i zil -i sya:w-i xas
 horse-IZ big-IZ black-IZ good
 ‘(a) good big black horse

Adjectives are postnominal. The head noun is affixed with the Izafe suffix *-i*. If the noun is modified by more than one adjective, each adjective except the last one is also affixed with the Izafe *-i*. In other words, taking the structure of the noun phrase consisting of a noun and attributive adjectives to be basically [[[N] A] A] ...A], each modified constituent is marked with the suffix *-i*.

The Izafe also occurs in construction with possessors, in PPs headed by locative prepositions, and in certain other nominal collocations. In Hawrami, the form of the Izafe in these cases is *-u*.

- (2) a. æsp-u Ahmað-i
 horse-IZ Ahmað-OBL
- b. ser-u mezækæ-i
 on-IZ table-DEF-OBL
 ‘on the table’
- c. ša:r-u pa:wæ-i
 town-IZ Pawa-OBL
 ‘town of Pawa’

In some previous works within generative grammar (Samiian 1983, 1994, Hashemipour 1989) the Izafe has been likened to Case. Thus Samiian 1994 argues that Izafe is a dummy Case-assigner similar to English *of*, assigning Case to the complements of the noun in the noun phrase. Ghomeshi 1999, the most detailed treatment of the Izafe (in Persian) argues against this hypothesis, mainly on the basis of the contention that modifiers such as adjectives are not structurally complements of the noun, and furthermore are not usually thought to require Case. Instead Ghomeshi argues that the Izafe is the morphological reflex of a particular structural relation, basically the relation between a lexical head and its sister in a nominal projection.

We believe that the Izafe indeed corresponds quite closely to English *of* in some of its uses. However, following Kayne 1994: 85-86, 2000: 314-326, we assume that *of* is not a Case-assigner or even a realization of Case, but has a more general role of a structural linking element, which in a sense is not so far from Ghomeshi’s notion of the role of the Izafe.

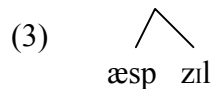
As mentioned, concord on the Izafe provides evidence of the structure of the noun phrase. Concord will also be shown to provide evidence that the Izafe spelled out as *-i* is categorically nonidentical with the Izafe spelled out *-u*. While the former is a pure linking element, in effect a nominal copula, the latter has features of a determiner, in addition to being a nominal copula.

The structure of the paper is as follows: Section 1 sketches the derivation of NPs with attributive adjectives, including the Izafe. In section 2 this initial analysis is grounded in a theory of nominal modification based on minimalist assumptions and objectives. In section

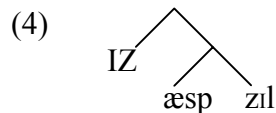
3, the theory is applied to the derivation of other parts of the noun phrase, including definiteness and number. Section 4 deals with possessive noun phrases and other noun phrases with the Izafe *-u*. Section 5 deals with demonstratives, and in section 6 we discuss the observation that attributive adjectives in Hawrami appear not to occur in a fixed order, relating this to the structure of the noun phrase in this language.

1. Adjectives and nouns: a first pass

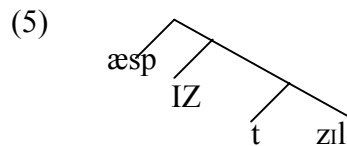
Assuming a Minimalist derivational theory along the lines of Chomsky 1995: ch. 4, the first step in the derivation of (1a), *æspi zil* 'big horse', is Merge of the N *æsp* 'horse' and the A *zil* 'big'.



Next, the Izafe morpheme is merged.

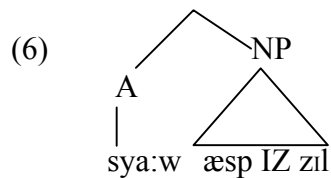


IZ is a nominal functional head which has the property of selecting a noun (or NP, as the case may be), and triggering movement and remerge of the N/NP to the root of the tree. In the spirit of Kayne 1994, we assume (for the moment without discussion) that all functional categories are merged on the left, deriving a right-branching tree, and that any movement triggered by such a head is leftwards, hence with remerge on the left.

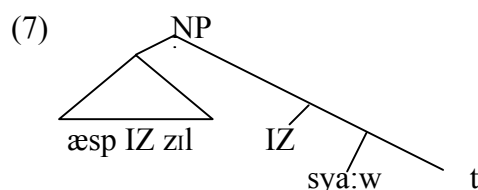


The category thus derived is a NP, headed by the nominal functional head IZ.

To derive (1b), *æspi zilī sya:w* 'big black horse', the adjective *sya:w* is merged with the NP.



Next, IZ is merged, on the left. It selects the closest N/NP, which in this case is the NP *æspi zil*, triggering (move and) re-merge of it, deriving a new, larger NP.



The spelled out form of (7) will be *æspi zili sya:w*. (1c), with three adjectives, is derived in the same way: Merge the next adjective, merge IZ, which selects the closest N/NP, and re-merge the closest NP to the root, deriving a still larger NP.⁴

The order of morphemes whereby the IZ ends up attached to the head noun and each adjective except the last one now follows as a result of the roll-up movement. In effect, every modified noun or NP has the Izafe-suffix.

3. Nominal modification: some theoretical assumptions

An obvious question at this point is what is universal and what is parametrized in this derivation. Ghomeshi 1999 proposes that nouns in Persian, the Izafe-language studied in her paper, have the parametrized property that they do not project to NP. The function of the Izafe is, then, to somehow license merge of a complement or a modifier with a non-projecting noun. This is, in fact, quite close to our view of the role of the Izafe, although the formal framework Ghomeshi assumes is rather different from ours. In view of Kayne's recent work on English *of* and other functional prepositions (Kayne 1994, 2000), and some other recent work on functional categories, for example Moro 2000 on small clauses, it seems that the derivation of NP depicted above may not be unique to Iranian languages, and possibly is a special case of a universal phenomenon which just happens to be more transparent in Hawrami, Persian, etc. than in many other languages.

We propose that the role of the functional head IZ is to establish a relation between two merged lexical categories neither of which selects the other. A relation is established by picking one of them out as the head, hence the provider of the label of the construct. The principle(s) behind headedness/labelling is a controversial issue within minimalist derivational syntactic theory. In a theory where syntactic structures are derived by merging lexical items and phrases made up of lexical items one by one, what principle(s) determine(s) which of the two items merged is the head, providing the label of the resulting category?

Chomsky 2000 describes two varieties of Merge: Set-merge (replacing the traditional substitution), forming a set $\{\alpha, \beta\}$ of two categories α and β , and pair-merge (replacing traditional adjunction), forming an ordered pair $\langle \alpha, \beta \rangle$. They differ in the following respects: Pair-merge is an asymmetrical operation in the sense that α is adjoined to β . By assumption, the target of adjunction projects, labelling $\langle \alpha, \beta \rangle$. There is no selection involved, so the operation is optional. Set-merge, on the other hand, is symmetrical as an operation (α and β merge with each other), but "typically has an inherent asymmetry" in that the operation is triggered by a selection feature of either α or β , (the selector). Chomsky proposes that the selector projects. Triggered by a selection feature, set-merge is obligatory. If set-merge and pair-merge, as characterized here, exhaust the forms that Merge can take, the label of the category formed by Merge is always predictable, therefore redundant.

There are, however, merge-relations which do not fit comfortably in either category. The attributive adjective-noun relation is a case in point. In early generative grammar attributive adjectives was the paradigm case of adjunction. Merge of adjective and noun is

⁴ An adjective in the Izafe construction may itself be modified by a premodifier such as *fra* 'very', as indeed we would predict: The premodifer and the adjective merge first before merging as a category with the noun, and the derivation then proceeds as in the text.

(i) ma:r-i fra drež-i zil
 snake-IZ very long-IZ big
 'a big, very long snake'

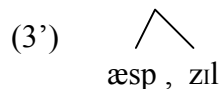
This shows that Ghomeshi's (1999) claim that the Izafe (in Persian) does not affix to phrasal categories does not hold for Hawrami. The premodifier itself is a functional head, and therefore merging it with the adjective does not require IZ.

optional in that the noun does not select the adjective, yet the noun (seemingly) projects, and the process is recursive. This indicates pair-merge, the adjective adjoining to the noun (or NP). However, the fact that an inflection can be crucially involved, as in Hawrami, indicates that this is not adjunction in the pair-merge sense. Certain other properties, too, of attributive adjectives, such as the fixed order exhibited by attributive adjectives at least in some languages (see section 6 below) are unexpected if adjectives are adjuncts; see Cinque 1994. Collins 2000 proposes to (re-)define ‘nonmaximal’ as ‘has an unsaturated probe/selection feature’. By that criterion a noun, whether merged with an adjective or not, is a nonmaximal category, i.e. a head, since it still needs a determiner to form a complete argument phrase, or, in the case of a predicative noun, it needs a subject. In the terms of Higginbotham 1985 the noun has a theta-role that needs to be either discharged to an argument or bound by a determiner. But so does the adjective: The attributive adjective must either be in the scope of a determiner (if it is attributive) or have a subject (if it is predicative), for the same reason as the noun: It, too, has a theta-role (in Higginbotham’s sense) that needs to be either discharged or theta-bound.

Assume that Chomsky and Collins are right, that the selector projects if there is a selector. But in the case of adjective merging with noun, neither selects the other, while both select a determiner, in that they need a determiner to saturate an otherwise unsaturated feature (construing Higginbotham’s theta-role as a feature).⁵ Neither category can project, so we are left with a set without a label, a construct which, we propose, is not visible for the computation except that it can be merged with. In terms inspired by Kayne 1994 and especially Moro 2000, the labelless set is too symmetrical to be legible at either interface, that is either at PF or at LF. Not only can it not be linearized, as argued by Moro (2000) for the symmetrical structures he discusses, and thus be legible at PF, but as a headless/labelless category it is not visible at LF either, nor is it visible for selection or movement in Narrow Syntax. Languages with adjectives obviously have to deal with this situation somehow.

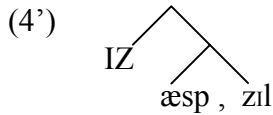
We propose that there are two ways: Either N is moved or A is moved, breaking up the symmetry. More precisely, a functional category is merged with the set {N,A} triggering movement of either N or A. Many languages have the option of merging a verbal copula BE, selecting and attracting N, deriving a verbal predicative construction. The Iranian languages, including Hawrami, also have the option of merging a nominal copula, that is the Izafe morpheme, with {A,N}, attracting the noun and deriving a nominal predicative construction.

Applying this theory to Hawrami, the first step in the derivation of (1a), *æspi zil* ‘big horse’, is Merge of the N *æsp* ‘horse’ and the A *zil* ‘big’, as shown in section 1, but deriving the headless/labelless set {A,N}, too symmetrical to be visible for any other operation than Merge. We represent it as a tree with a comma between the terminal nodes.

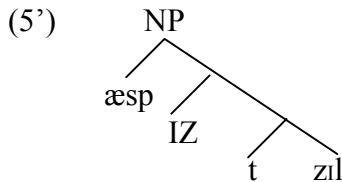


In order for a relation to be established between the two members of the set, a functional head has to be merged. For this purpose, Hawrami has the Izafe morpheme.

⁵ It may, in fact, be argued that the adjective selects the noun, in that while the noun is fine without an adjective, the adjective seemingly cannot occur without the noun: *a big black car* but **a big black* (starred in English; in many languages it is possible as an elliptical NP). As a selector the adjective should label the category made up of a noun and an adjective, but that does not seem to be the case, since a noun with an attributive adjective generally has exactly the same distribution as a noun without the adjective, which follows if the noun, not the adjective, labels the phrase (but see Delsing 1992 on adjectives in Scandinavian).



IZ is a nominal head, evidenced by the fact that it shows concord in number and definiteness, as will be seen below. It also selects a noun (or NP), and triggers movement of it to ‘spec,IZ’, that is, it triggers remerge of the N/NP to the root of the tree. In terms of Chomsky 2001,2002, IZ has an EPP-feature triggering remerge of the N/NP.



Being a selector, IZ projects its nominal feature(s) onto the tree, which therefore is a NP (as indicated in (5')). Since the specifier of IZ is also a noun (or NP), the net effect, we propose, is that the noun (here *æsp*) is interpreted by the computation as the head of the phrase.⁶ Correspondingly A, the other term of the relation, is interpreted as the nonhead.

In the spirit of Kayne 1994, we assume that functional heads are always merged on the left, deriving a right-branching tree, and that movement/remerge triggered by a functional head is also leftwards, remerging a category on the left. This means that head-final structures, including structures ending in a suffix, are always derived by movement of a complement leftwards. It is not crucial for the structural description of the noun phrase in Hawrami articulated here that all functional categories are merged on the left, though. An alternative is that ‘directionality’ is an inherent property specified for each functional head, some functional heads being merged on the left, others on the right.

To derive (1b), *æspi zili sya:w* ‘big black horse’, the adjective *sya:w* is merged with the NP (5)’, forming a set, symmetrical and unordered, consisting of A and NP. Next, IZ is merged, on the left. As depicted in section 1, it selects the closest N/NP, which in this case is the NP *æspi zil*, triggering (move and) remerge of it, deriving a new, larger NP. These operations can then be reapplied as long as there are adjectives in the numeration, where every NP selected by IZ, that is every NP modified by an adjective, will have the Izafe suffix.

3. Definiteness, Number, and Concord

A functional head DEF encoding definiteness can be merged with N/NP.

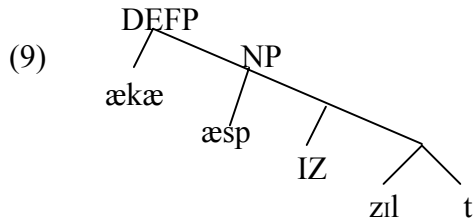
- (8)
- a. *æsp-ækæ*
 horse-DEF
 ‘the horse’
 - b. *æsp-æ zil -ækæ*
 horse-IZ big-DEF
 ‘the big horse’

⁶ This view of the relation between IZ and the N/NP is reminiscent of the analysis of certain specifier-head-relations as involving projection of the label of a specifier via agreement with the head, assumed in some works in the GB framework.

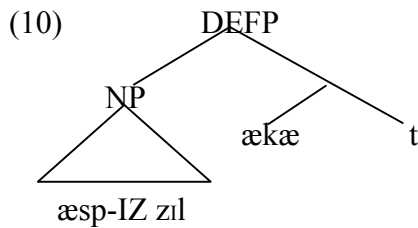
- c. æsp-æ zɪl -æ sya:w-ækæ
 horse-IZ big-IZ black-DEF
 ‘the big black horse’

In (8a) DEF is merged directly with N. In (8b) it is merged with the NP made up of a noun, an adjective, and IZ. In (8c) it is merged with the NP made up of a noun, two adjectives, and (hence) two instances of IZ. Note that IZ is now spelled out as /æ/, not as /i/.

Definiteness is morphologically realized as a suffix, so given the assumptions in the previous section, DEF merges on the left, but then triggers movement (leftwards) of its complement. The structure of (8b) when Merge of DEF has applied is then (9):



DEF has an EPP-feature triggering movement of its complement NP, which yields (10):



At some point a rule of concord applies, making IZ spell out as $-\text{æ}$. As shown by (8c) there can be several layers of modified NPs embedded as the spec of DEF, all of which get spelled out as $-\text{æ}$. The spell-out of IZ must therefore wait at least until DEF is merged. Since this seems like an arbitrary point of spell-out, we propose that the spell-out is delayed until the whole DP is constructed. At that point, the concord rule is best formulated in terms of domination, rather than, say, c-command, as DEF does not c-command any IZ at that point.

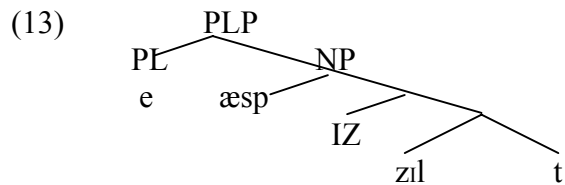
- (11) Spell out IZ as $-\text{æ}$ if dominated by DEFP.

A functional head PL(ural) can be merged with N/NP or DEFP. PL is spelled out as $-\text{e}$, $-\text{a}$., or $-\text{a:n}$.

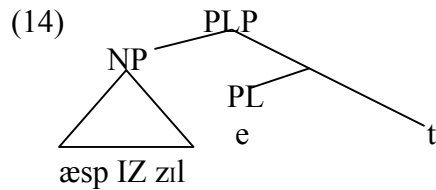
- (12) a. æsp-e
 horse-PL
- b. æsp-e zɪl -e
 horse-IZ big-PL
 ‘big horses’
- c. æsp-æk-e
 horse-DEF-PL
 ‘the horses’

- d. æsp-æ zıl -æk-e / *æspe zıl æke
 horse-IZ big-DEF-PL
 ‘the big horses’

In (12a) PL merges directly with N. In (12b) it merges with an NP consisting of a noun, an adjective and IZ. Note that the IZ now shows concord with PL. That it is IZ which agrees with PL affixed to the adjective, not the adjective which agrees with a PL affix on the noun, is shown quite clearly by (12c,d): (12c) indicates that the PL affix merges outside DEF. (12d) shows that when the noun phrase has both DEF and PL, then IZ shows concord with DEF, not with PL. The analysis of (12b) is as follows: PL merges with NP consisting of N, A, and IZ, projecting a phrase we label PL(ural)P:

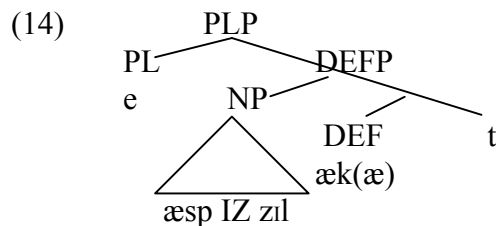


PL has an EPP-feature triggering movement of NP, which yields (14):

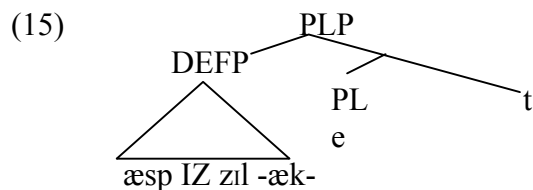


When the DP is complete, the concord rule which spells out IZ as *-e* when dominated by PLP applies. As shown by (12d), if the NP is also dominated by DEFP, then plural concord is blocked. This is a straightforward locality effect: IZ agrees with the more locally dominating category .

The analysis of (12d) is as follows: First PL merges with DEFP.



Next DEFP moves and remerges as the spec of PL.



The most locally dominating category with any nominal ϕ -features (number or definiteness, in this case) determines the concord of IZ. In (15) it will be spelled out as $-\text{æ}$. In the absence of either DEF or PL, IZ is spelled out as $-i$. We defer the precise formulation of the concord rule until the end of the paper.

The somewhat unexpected hierarchic order where Number (PL) scopes over Definiteness (DEF) is thus not only indicated by the linear order of the morphemes, in accordance with the Mirror Principle, but is also confirmed by the concord facts.

Matters are complicated by the existence of an indefinite article, a suffix $-\text{ewæ}$. We have not been able to pin down the precise use of $-\text{ewæ}$; it appears to be in more or less free variation with the base form of the noun as an expression of indefiniteness.⁷ It has complementary distribution with DEF (which is why we call it an indefinite article). However, as shown by (16b), it is positioned inside IZ (IND = indefinite), affixing strictly onto the head noun, unlike DEF, which affixes onto the NP made up of N and one or more adjectives.

- (16) a. æsp-ewæ
 horse-IND
 ‘a horse’
- b. æsp-ew-i zil / $*\text{æsp-i zil -ewæ}$
 horse-IND-IZ big horse-IZ big-IND

Possibly the indefiniteness marker is more properly analyzed as a ‘nominal aspect marker’, as investigated in Rijkhoff 2002. We leave this matter for future research.

4. Possessives, PPs and other noun phrases with Case

In construction with a possessor, IZ has the form $-u$ (OBL = oblique case).

- (17) a. æsp-u Ahmað-i
 horse-IZ Ahmað-OBL
 ‘Ahmað’s horse’
- b. $\text{qničk-ækæ-u biz-ækæ-i}$
 tail-DEF-IZ goat-DEF-OBL
 ‘the tail of the goat’

This form of IZ also shows up on certain prepositions:

- (18) a. čer-u mezækæ-i
 under-IZ table-DEF-OBL
 ‘under the table’

⁷ To be more precise, there are contexts where the indefinite article is excluded, as in (i), where the noun *ma:r* ‘snake’ is used in a kind-denoting sense.

(i) $\text{ma:r mak}^{\text{w}}\text{šo}$.
 snake kills
 ‘He kills snakes (as his job)/ He is a snake-killer.’

What we have not found, are contexts where the overtly indefinite form, as opposed to the bare form of the noun, must be used.

- b. ser-u qaffæsækæ-i
on-IZ chest-DEF-OBL
'on the chest'
- c. pæšt-u ya:næ-i
behind-IZ house-OBL
'behind a house'

Furthermore, it shows up in certain other nominal collocations:

- (19) a. ša:r-u pa:wæ-i
town-IZ Pawa-OBL
'town of Pawa'
- b. gird-u æspæka:n
all-IZ horse-DEF-PL-OBL
'all of the horses'

A generalization which seems to hold true is that *-u* always co-occurs with oblique Case, generally marked by *-i*, which, however, does not show overtly on most plural forms.⁸ Also, unlike the other forms of IZ, *-u* affixes outside DEF (see (17b)), and even outside PL, although for phonological reasons this does not show on the form of PL ending in *-e*, but does show on the form ending in *-a:n*.

- (20) ktewæka:n-u Žiwa:i
book-DEF-PL.OBL-IZ Žiwa:-OBL
'Žiwa:'s books'

A possible analysis is that *-u* actually assigns oblique Case to the possessor. Assume that Merge of the possessee, which as shown by (20), can be a PLP, and the possessor, which we assume is a DP, yields a symmetrical, labelless set. This forces Merge of *-u*, a form of IZ capable of assigning oblique Case to the DP as well as attracting the PLP. The derivation would be schematically as in (21):

- (21) [PLP, DP] → [IZ [PLP, DP]] → [PLP [IZ [t, DP_{OBL}]]]

Alternatively, there is a separate abstract functional head which merges with the set {PLP, DP} and assigns Case to the possessor. Then IZ is merged, attracting PLP to its spec. The derivation would be schematically as in (22), where K is the Case-assigning head.

⁸ The *-i* is dropped after the plural form ending in *-e*. It is also not realized after the plural form ending in *:an*, as in (19b), but is realized after the plural form ending in *-a:*, as shown by the following minimal triplet:

- (i) pos-u biz -æk -e
(ii) pos-u biz -æk -:an
(iii) pos-u biz -æk -a: -i
skin-IZ goat-DEF-PL-OBL
'the skin of the goats'

- (22) a. [ktewæka:n, Žiwa:] → Merge K, which assigns OBL to the possessor DP *Žiwa:* →
 b. [K [ktewæka:n Žiwa:_{OBL}]] → Merge IZ, and move the PLP *ktewæka:n* →
 c. [ktewæka:n IZ [K [t Žiwa:_{OBL}]]] → spell out →
 d. ktewæka:n-u Žiwa:-i

The analysis in (21) presupposes that there is a special possessive IZ with the dual function of probing for (i.e. selecting) two different categories: The DP in order to assign Case to it, and the PLP in order to attract it. From a formal minimalist perspective it is arguably more attractive to assume that the two functions are divided between two distinct categories, K and IZ.⁹

As for the prepositions which co-occur with IZ, all we need to do is postulate that these prepositions are nouns, lacking Case-assigning capacity. Therefore, when combining with a DP they undergo the same derivation as nouns combining with a DP. This is essentially what Ghomeshi (1999) proposes for the Persian counterpart of this class of prepositions. The other nominal collocations which exhibit the *-u* form of Izafe also consist of a noun merged with a DP, or more generally with a nominal category which requires Case.

(22) is essentially the analysis proposed by Kayne (1994: 85-86) for the English construction *a friend of John's*, which can be summarized as follows:

- (23) a. [friend John] → Merge K, i.e. the clitic *-s*, and move John to spec,K →
 b. John [-s [friend t]] → Merge *of*, and move [friend t] to spec,*of* →
 c. [_{DP} [friend t] [of [John[-s t]]]]

According to Kayne 1994 *of* in this construction is a form of D (hence we have labelled the construction 'DP'), required because for some reason the possessive *-s* is not, in this construction, sufficient as Case-assigner of the possessor *John*. In (22) we have not assumed movement of the possessor DP to spec,K, because we adhere to the methodological rule-of-thumb of not assuming movement unless there is overt evidence for it, but otherwise the analyses are similar, even identical.

In particular, there is good reason to think that the Hawrami IZ *-u* is a determiner as well, which is to say, it has some interpretable determiner feature, which sets it off from the IZ which occurs in construction with adjectives. The reason is that *-u* triggers concord, like DEF and PL, and as we shall see directly, the demonstrative, that is like other nominal functional heads with interpretable features; see (24b) where IZ on the head noun has the form *-u*, by concord with the *-u* introduced to link the possessor and the NP.

- (24) a. sæk-i zıl
 sack-IZ big
 'big sack'
- b. sæk-u zıl -u Ahmað-i
 sack-IZ big-IZ Ahmað-OBL
 'Ahmað's big sack'

⁹ Possession can also be expressed by a pronominal clitic, positioned outside DEF and PL:

ktew-æm, ktew-æk-æm, ktew-e-m, ktew-æk-e-m
 book-my, book-DEF-my, book-PL-my, book-DEF-PL-my
 'my book', 'my book', 'my books', 'my books'

5. The Demonstrative

The demonstrative in Hawrami consists of two discontinuous parts: A phrase-initial morpheme *i* encoding 'proximate' or *a:* encoding 'distal', and a phrase-final marker *-æ*, which presumably encodes the deictic/specific feature of the demonstrative (abbreviated DEIX, below). Thus *i...æ* 'this', *a:...æ* 'that' This yields a singular reading. A plural reading is obtained by combining *i/a:* with a plural NP, in which case there is no (audible) suffix *-æ*.

- (25) a. *i* *æsp-æ*
 PROX horse-DEIX
 'this horse'
- b. *i* *æsp-e*
 PROX horse-PL
 'these horses'
- c. *a:* *æsp-æ*
 DIST horse-DEIX
 'that horse'
- d. *a:* *æsp-e*
 DIST horse-PL
 'those horses'

Having demonstratives composed of two parts in this fashion is not uncommon. For example French and Swedish have a similar system; we exemplify with Swedish:

- (26) *den här boken,* *den där boken,* *de här böckerna*
 the here book-DEF, the there book-DEF, the.PL here book-PL-DEF
 'this book' 'that book' these books'

In the singular, the demonstrative triggers IZ-concord, the concord being the same as that triggered by the DEF suffix *-ækæ*.

- (26) *i* *æsp-æ* *zɪl -æ*
 PROX horse-IZ big-DEIX

The trigger of this 'definite concord' on the Izafe cannot be DEIX, since DEIX may be separated from IZ by the Izafe-determiner *-u*.

- (27) *a:* *čakuš-æ* *zɪl -u* *Žiwa:-i-æ*
 DIST hammer-IZ big-IZ Žiwa:-OBL-DEIX
 'that big hammer of Žiwa.'

Given the assumptions and the analysis articulated so far, *-u* must take narrower scope in (27) than DEIX. Since *-u* triggers concord, as we have just seen, it must prevent DEIX from triggering concord on the IZ sitting on the head noun. The source of the definite concord on that IZ must therefore be *-i/-a:*, the proximate/distal morpheme, which is to say, that

morpheme is lower in the structure than *-u*. The interplay between *-i/-a:* and the plural morpheme further shows that *-i/-a:* is lower even than PL.

- (28) a: æsp-æ pir-æ sya:w-e
 DIST horse-IZ old-IZ black-PL
 ‘those old black horses’

If *-i/-a:* were higher than PL, the expected form of IZ would be *-e*. We arrive at the following analysis of noun phrases with a demonstrative. Consider first the derivation of (28):

First construct the NP consisting of noun and attributive adjectives, with the requisite Izafe morphemes. Then merge DIST (or PROX), deriving (29), which we label DISTP.

- (29) a. [_{DISTP} a: [æsp-IZ pir-IZ sya:w]]

Next, merge PL, which is a suffix, thus triggering movement of DISTP.

- b. [_{PLP} [_{DISTP} a: æsp-IZ pir-IZ sya:w] [[_{PL} -e] t]]

Next, merge DEIX and move PLP to the spec of DEIX.

- c. [_{DEIXP} [_{PLP} [_{DISTP} a: æsp-IZ pir-IZ sya:w] [[_{PL} -e] t]]] [DEIX t]]

In this context, adjacent to PL *-e*, DEIX is not phonologically realized. On the assumption that PROX/DIST trigger *æ*-concord IZ will be spelled out as *-æ*. The whole construction is spelled out as (28).

The derivation of (27) will be as follows:

First, construct the NP made up of noun, adjective and Izafe, and merge DIST.

- (30) a. [_{DISTP} a: [NP čakuš-IZ zil]]

Next, merge DISTP and the DP *Žiwa:*. Merge K and assign OBL to *Žiwa:*. Merge the D-Izafe *-u* and move DISTP to spec of *-u*. We label the resulting phrase D-IZP

- b. [_{D-IZP} [_{DISTP} a: čakuš -IZ zil] [-u [K [t Žiwa:-i]]]]

Finally, merge DEIX and move D-IZP to spec, DEIXP (brackets and labels are omitted from D-IZP for ease of processing):

- c. [_{DEIXP} [_{D-IZP} a: čakuš -IZ zil -u Žiwa:-i] DEIX]

In this case DEIX is spelled out as *-æ*. PROX/DIST triggers *æ*-concord, so IZ will be spelled out as *-æ*. The result is (27), repeated here:

- (27) a: čakuš -æ zil -u Žiwa:-i-æ
 DIST hammer-IZ big-IZ Žiwa:-OBL-DEIX
 ‘that big hammer of Žiwa:’

The conclusion that, of the two parts of the demonstrative, DEIX takes scope over PROX/DIST rather than vice versa, accords with what we find in Swedish, where DEIX, in

the form of the free definite article, clearly scopes over the PROX/DIST morpheme glossed as ‘here/there’ in (26).

Interestingly, PROX/DIST in Hawrami is incompatible with DEF. Compare (31a) and (26).

- (31) a. *i æsp-æk-æ zil -æ
 PROX horse-DEF-IZ big-DEIX
- b. a: mašinæ-∅ sur-æ¹⁰
 DIST car-IZ red-DEIX
 ‘that red car’
- c. *a: mašinæ-k-æ sur-æ
 DIST car-DEF-IZ red-DEIX

This is not unexpected if they share the same hierarchic position, as indicated by the evidence from concord, namely, between adjectives and PL (number). Thus (31) offers some independent confirmation of the analysis of the structure of the noun phrase in general, and demonstratives in particular. It also provides confirmation of one of the tenets of generative syntactic theory: Linear order is irrelevant in syntax; what matters is hierarchic structure. PROX/DIST is a pronominal particle, while DEF is a suffix on the noun or, if there are adjectives, on the rightmost adjective, yet they occupy the same structural position, and therefore have complementary distribution.

We can now state the rules of IZ-concord as follows, where the rules are subject to locality such that the form is determined by the most locally dominating category (or feature).¹¹ ‘Dominated by DEF (or PL etc.)’ in (32) obviously means ‘dominated by the node labelled by DEF (or PL, etc.)’, i.e. DEFP (or PLP, etc.).

- (32) Spell out IZ as
- (a) -æ if it is dominated by DEF or PROX/DIST,
 - (b) -e: if it is dominated by PL,
 - (c) -u if it has an interpretable D-feature or is dominated by D-IZ ,
 - (c) -i elsewhere.

¹⁰ The form *-æ* of the Izafe is deleted when immediately preceded by *æ* of the noun stem.

¹¹ An alternative analysis, suggested to us by Annabel Cormack (p.c.), is to analyze the definite suffix *-ækæ* as a composite of *-æk-* and *-æ*, where *-æ* is the same category as found in construction with the demonstrative. This *-æ* would then conceivably be the one and only exponent of specificity in the language, analyzable as being the highest functional head in the DP (given appropriate morphophonological rules to account for why it doesn’t show up next to PL). However, attractive though it is, this is not the right analysis. Consider for example (i) and (ii):

- (i) Ahmað æsp-ækæ-i mæwino.
 Ahmað horse-DEF-ACC sees
- (ii) Ahmað a: æsp-i-æ mæwino
 Ahmað DIST horse-ACC-DEIX sees
 ‘Ahmað will see that horse.’

As shown in (i) , the *-æ* of the definite article occurs inside the ACC suffix *-i*. As shown in (ii) the deictic suffix *-æ* occurs outside of the ACC suffix.

6. The order of adjectives

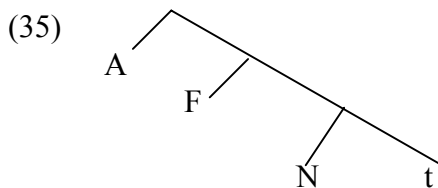
Unlike the situation in English and a variety of other languages, the order of attributive adjectives does not seem to make any difference in Hawrami Compare (33) and (34):

- (33) a. big black horse
b. *?black big horse

- (34) a. æspi sya:wi zıl
horse black big
b. æspi zıli sya:w
horse big black

Out of the blue, (33b) is distinctly odd, although it may be interpretable under a marked focus reading (a big horse which is black as opposed to a big horse which is grey). In Hawrami it seems that there is no discernible contrast between (34a,b). The same seems to be true of Persian (Simin Karimi, p.c.). It seems not implausible, therefore, that this has to do with how the noun-adjective constructions are derived.

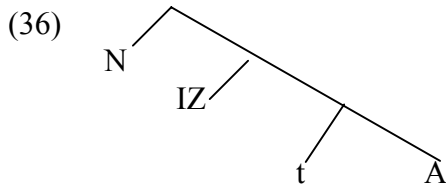
The following is a suggestion: In English and related languages attributive adjectives are not normally derived using the ‘IZ-strategy’, which in English would presumably mean employing *of*.¹² However, if we are right, NPs such as *big horse*, *blue sky*, etc. must involve a functional category breaking the symmetry of the initial merge of N and A. Let’s assume that this functional category, call it F, is merged with [N, A] and attracts the adjective.



Let’s assume, following Cinque 1994, that the ordering of adjectives found in English and many other languages is a matter of selection: For instance adjectives of size can select (a phrase with) an adjective of colour. An adjective of colour cannot select an adjective of size, but can select an adjective of nationality or race (*??black big horse*, OK*black Arabian horse*), and so on. Does this presuppose that the adjective in (35) is the head of the construct? This depends how this form of selection is formalized,¹³ but whether or not the adjective is actually the head, it seems plausible that it is accessible to selection from the outside, in a way which the adjective embedded in the Izafe-construction isn’t. Compare (35) and (36):

¹² It can be found in poetry, though, as in the following lines from Lennon & McCartney’s ‘Yellow Submarine’:
Sky of blue, and sea of green
In our yellow submarine

¹³ There is a finite number of classes of adjectives, distinguished by features such as size, age, colour, material, and so on. Cinque 1994 proposed that these are, in fact, syntactic features of functional heads taking adjectives as specifiers. For instance, F might be a Colour head, licensing the adjective *black* in its spec. These heads are then accessible for selection by higher F-heads.



We suggest, then, that the adjective in the Izafe-NP is too deeply embedded to be accessible for selection by the next adjective merged with the NP. Consequently, Narrow Syntax cannot dictate the order of Merge of attributive adjectives.

7. Conclusions

We have argued for a particular analysis of the noun phrase in Hawrami partly on the basis of the order of morphemes (D-IZ *-u* is outside PL, which is outside DEF, which is outside attributive adjectives), partly on the basis of complementary distribution (PROX/DIST has complementary distribution with DEF), and partly on the basis of concord (IZ agrees with DEF or PROX/DIST, if they are present, but with PL if they are absent, or with D-IZ if DEF, PROX/DIST and PL are all absent). When three independent criteria all support the same analysis we can be fairly confident that we have discovered essentially the right analysis.

At least one aspect of the hierarchic order of functional categories is somewhat surprising in view of what seems to be common across languages: the plural number marker scoping over the definite article we have labelled DEF. In all other languages that we are familiar with which exhibit number and definiteness marking, the opposite order seems to prevail. We leave it for future research to decide how the order found in Hawrami can be reconciled with a theory of the semantic composition of noun phrases.¹⁴

As for the notorious Izafe morpheme, we have argued that it comes in two varieties: One is a general linking morpheme whose only interpretable feature is a nominal categorial feature. This is the Izafe which appears on adjectives and nouns or NPs modified by adjectives. The other is a determiner, with an interpretable D-feature. This is the Izafe which appears on nouns, NPs, or nominal prepositions modified by a DP (typically a possessor). What they have in common is two (complementary) uninterpretable features: a selection feature targeting a nominal category (noun or NP) and an EPP-feature attracting the selected category. In addition they share the morphological property of being realized as a suffix on the fronted noun or NP.

The syntax of the Izafe has previously been studied particularly as it appears in Persian. In this language the Izafe (spelled Ezafe) has an invariant form (a suffix *-e*), and has been analyzed in recent works, including Ghomeshi 1999, as a unitary category. The impression we get from Ghomeshi's detailed study is that the Persian Ezafe and the Hawrami Izafe are very much the same phenomenon apart from its morphological realization. This suggests that the unitary form of the Persian Izafe/Ezafe may conceal a division corresponding to the one we have found in Hawrami.

¹⁴ Rijkhoff's (2002) study of NP-structure in a set of 52 languages, sampled so as to represent as wide a genetic diversity as possible, indicates that number marking of the kind we are familiar with from (most) European languages, to be distinguished from what he calls nominal aspect, is not very wide-spread, and not very well understood (see Rijkhoff 2002: 149-156). Thus it is unclear where it fits in the theory of the syntax and semantics of noun phrases articulated in that work.

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