Rule Conflation of Noun Markers in Kurdish

1.1 Introduction

This study investigates various exponents of noun markers, specifically definiteness, number, and person in various syntactic environments in two Kurdish dialects. Kurdish is one of the northwestern Iranian languages spoken by Kurd people in Western Asia. Its three main dialects are Kurmanji (Northern Kurdish), Sorani (Central Kurdish) and Kalhori (Southern Kurdish). In Kurdish, like lots of other languages, NPs that code definiteness, person and number are marked by affixation and demonstratives as morphological markers to express specificity and definiteness. The markers for definiteness, number and person are diverse and show different behaviors in terms of form and placement in various noun phrases. The position of the markers in the noun phrase is seen to be dependent not just on morphology, but on the morphology and the syntax of the sentence. For instance, in Southern Kurdish (Kalhori), the common markers that code definiteness are -ægæ and -ægan. They are undetachable cumulative suffixes that denote two morphosyntactic features (definiteness and number): -ægæ represents both singularity and definiteness and to represent the plural definite, the singular definite marker $-\alpha g\alpha$ is changed to $-\alpha gan$. Neither marker can be segmented to represent each morphosyntactic property separately. In Sorani, the definite state is represented by -ækæ and -ækan; these follow similar rules for number but go through some phonological changes when placed after vowels at the end of the words. In Kurmanji Kurdish, a noun in the absolute state represents both the generic sense of the noun and the definite sense. For example, a noun like *miróv* (man) depending on the context of the language can mean 'man' (in general) or 'the man'. In Kurmanji, nouns are inflected in four cases, nominative, oblique, construct and vocative.

To investigate and exemplify the behavior of markers, different noun phrases are categorized and glossed based on Abbott's (2004) classification of NP types. A list of NPs with markers and demonstratives will be provided to compare the distribution of definite markers in various morphotactic environments. The analysis of the definite articles is included in (1) nouns as NPs and nouns in coordination, (2) NPs with adjectival modifiers (3) some other adjuncts of an NP's head noun e.g. possessive constructions, relative clauses, object relative and subject relative clauses.

2. Lit review: Previous research on topic

Dryer (2013) defines a definite article as "a morpheme which accompanies nouns and which codes definiteness or specificity". Edmonds (1995), McKenzie (1961), and Yarmoradi (2005) state that $-\alpha g\alpha$ and -i are used as affixes to represent definiteness and indefiniteness in Southern Kurdish. While definiteness depends on the unambiguous identification of the participants of the discourse, specificity depends on the knowledge of the speaker. In a sentence like "We don't know who the president will be.", the participants have a background knowledge of the discourse, but the referent is not identified. Choubsaz and Rezai (2014) have investigated the definite marker and argue that the morpheme $-\alpha g\alpha$ represents specificity in Kermanshahi Kurdish (a dialect of Southern Kurdish), not definiteness. They focus on the difference between specificity and definiteness in Kermanshahi Kurdish. They draw upon the definition of specificity by Enç (1999) and Karimi (1999, 2003) to investigate $-\alpha g\alpha$ as a morpheme. Based on Lyon's classification, Kermanshahi Kurdish is placed among languages that only mark indefiniteness. The authors introduce the Kurdish morpheme $-\alpha g\alpha$ as the morphological marker of noun phrases in various syntactic positions. It is notable that $-\alpha g\alpha$ appears at the end of definite and some indefinite noun phrases, so it is considered as a clitic. Using collected samples and data, it is

indicated that the presence of this morpheme is obligatory not only in definite noun phrases also in indefinite noun phrases. The article concludes that unlike what has been claimed in describing this morpheme, it mainly indicates specificity and not definiteness and the morpheme $-\alpha g\alpha$ is not a mark of definiteness but a mark for specificity. Finally, based on lyons (1999) view, the authors conclude that Kermanshahi Kurdish only entails the indefinite morphemes.

3. Data Analysis (selected NPs for the sake of the length of the abstract)

3.1.1 Demonstratives

The demonstratives in Sorani Kurdish cover the noun on the edges like a circumfix. 'this' is represented by $am...(y)\dot{a}$, and 'that' is represented by $aw...(y)\dot{a}$. The nouns that these demonstratives surround are absolute singulars and the indefinite plurals.

am	pyâw á	am	ktâwî	á	am	dargâ yá	aw	nâma yá
this	man	this	book		this	door	that	letter
'this n	nan'	'this s	tudent'		'this d	oor'	'that l	etter'
am	pyâw-ân á		am	ktâwî á	am	dargâ-yân á	aw	nâm-ân á
this	man.PL		this	student	this	door.PL	that	letter.PL
'these	men'		'this st	tudent'	'these	doors'	'those	letters'

3.1.2 Demonstratives in the coordination of nouns in an NP

am	ktâw	0	dáftar á	am	kániſk	0	kor	á
this	book	and	notebook	this	girl	and	boy	
'this book & notebook'			k'	'this g	girl & bo	oy'		

3.1.3 Demonstratives in larger phrases with adjectives

am	ktâw	á	qoy	á	am	ktâw	á	qoy	á	rash á
	book oig book		big	-	this 'this	book big blac		, big	-	black -

amhotel \acute{a} gowraxas \acute{a} thishotel-biggood-

^{&#}x27;this big good hotel'

am kani∫k o kor **a** balabarz **a** boor **a** this girl and boy -- tall -- blond --

'this tall, blond girl & boy'

3.1.4 Adjectival modifiers

The attributive adjective is placed after the noun and is linked to the noun by the unstressed vowel i (the ezafe vowel).

hotel-ân i bash nâm-ân i drezh
hotel PL. EZF good letter PL. EZF long
'(some) good hotels' '(some) long letters'

gamal i fera zel

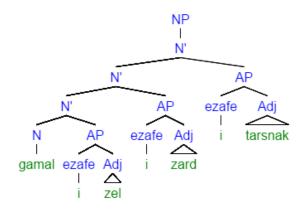
Dog a very big

'a very big dog'

gamal i zel i zard i tarsnak dog a big - yellow - fierce

'a big, fierce, yellow dog'

In this structure, the ezafe vowel precedes all the adjectives to modify them. The distribution of the ezafe vowel in a syntactic tree will be as follows.



The i vowel is indeed is the ezafe which appears in the indefinite NPs. It's a proclitic and it precedes the head in an NP. The ezafe i vowel seem to select attributive adjectival heads. On the other hand, a seems to be an enclitic appearing after the head and by default it selects a predicative adjective. In the phrase, 'this big, yellow dog', i is changed to a as an enclitic.

Am- gamal a zel a zard -a this dog EZF big yellow --

'this big, yellow dog'

The indefinite singular and plural markers $(-\grave{e}k, -\hat{a}n)$ are attached to the head noun in phrases with adjectival modifiers.

3.1.5 Adjectives with demonstratives and definites

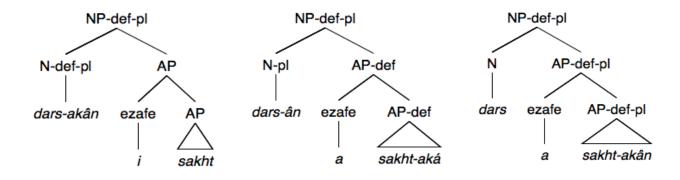
when both the adjective and the noun are covered by the demonstrative, the linking vowel between the two words changes to a. Since the distribution of the vowel is very similar to the ezafe vowel i, the a seems to be the same ezafe vowel i which is changed due to vowel harmony in the phrase.

Phrases with definite markers:				Phrases with demonstratives:				
Hotel a	bash -aká		Am-	hotel	a	bash	-á	
hotel EZF	good SG.D	EF	this	hotel	EZF	good	-	
'the good ho	tel'		this g	good hot	el'			
Pyâw a	amarîkî	-aká	aw-	pyâw	a	amarî	kî	-á
man EZF	American	SG.DEF	that	man	EZF	Ameri	ican	-
'the America	n man'		'that American man'					
dars -ân	a âsân	-aká	am-	dars	-ân	a	âsân	-á
lesson PL.	EZF easy	SG.DEF	that	lesson	PL.	EZF	easy	-
'the easy less	sons'		'these	easy le	ssons'			
dars -ân	a sakht	-aká	aw-	dars	-ân	a	sakht	-á
lesson PL.	EZF hard	SG.DEF	that	lesson	PL.	EZF	hard	-

In singular forms, the definite marker is placed after the adjective while the plural marker is after the head noun in the phrase. With definite nouns in plural forms, the noun and the adjective are linked with the ezafe 'i' vowel again but the placement of the definite suffix, in both is flexible while all the phrases express the same meaning semantically. All the following phrases mean the same:

Dars	-akân	i sakh	t	
lesson	PL.DEF	EZF hard		
dars - ân	a sakhi	-aká		'the hard lessons'
lesson PL.	EZF hard	SG.DEF		
dars a	sakht -akâi	ı		
lesson EZF	hard PL.D	EF		

To visualize the distribution of the morphosyntactic data, there are three kinds of syntactic trees implied by the distribution of the plural and the definite marker here. All three phrases show three various patterns of distribution. In the first phrase, the NP's number and definiteness are expressed on the head noun; in the second, number is expressed on the head noun but definiteness is expressed at the right periphery; and in the third one, both number and definiteness are expressed at the right periphery.



Also, the data can be morphologically analyzed to see how the morphosyntactic properties that syntax associates with a word are realized in morphological rules.

Block 1. $\{def\}: X \rightarrow Xak\acute{a}$ Block 2. $\{pl\}: X \rightarrow X\^{a}n$

In the first expression, both blocks apply in succession to realize the inflection of the head noun. In the second, one block applies to the head noun but the other applies to the word at the NP's right periphery. And in the third, both blocks apply to the peripheral word.

Rule A Realizes definiteness {α} By means of	Rule B Realizes plurality {β} By means of	Rule [A \otimes B] Realizes $\{\alpha\} \cup \{\beta\}$ By means of		
-aká prefixation	-ân suffixation	=akân suffixation		

Rule [A © B] $\{\alpha\} \sqcup \{\beta\}$: suffix -a-b

In the first expression, both blocks apply in sequence to realize the inflection of the head noun for both definiteness and plurality; in the second, one block applies to the head noun as the plural marker but the other block applies to the word at the NP's right periphery to express definiteness. And in the third, both blocks apply to the peripheral word indicating both plurality and definiteness.

- **4. Nouns Southern Kurdish:** In southern and Sorani Kurdish, the definite marker is postnominal for singular and plural nouns.
- **4.1.1.** singular definite: Southern Kurdish marks definiteness with $-\alpha g \alpha$ which also represents singularity. The marker is attached postnominally to the end of the nouns.

ketaw -ægæ dæftær -ægæ -DEF.SG book notebook -DEF.SG

'the book' 'the notebook'

In Sorani, definiteness is marked by -ækæ which both represents singularity and definiteness.

4.1.2 Plural definite: The marker $-\alpha gan$ marks both definiteness and plurality for the nouns.

dæftær ketaw -ægan -ægan -DEF.PL -DEF.PL book notebook

'the books' 'the notebooks'

4.1.4 Noun phrases with adjectival modifiers

When there exists a modifier as an adjective in a noun phrase, the marker attaches to the adjective. Since the adjectives are the end of the phrase in SK, the markers again behave as edge clitics.

4.1.5. Singular noun as head: In noun phrases with adjectives as modifiers, the definite marker behaves as an edge clitic and attaches to the last adjective at the end of the NP.

kænisk hyl -ægæ kor juwan -ægæ girl blonde -DEF.SG boy -DEF.SG young 'the blonde girl' 'the young boy'

4.1.6. with a plural noun as head: both plurality and definiteness is represented by the marker -ægan. Behaving like an edge clitic, the marker is again attached to the edge of the phrase after the adjective.

kænisk hyl kor juwan -ægan -ægan -DEF.PL blonde -DEF.PL boy young girl 'the young boys' 'the blonde girls'

4.1.7. Possessive Constructions: Kurdish possessive markers are represented as inflections represented at the edge of the phrases. The possessive markers in Kurdish are -m, $-\omega t$, -ey, -eman, -etan, -ian. Behaving like an edge clitic, the possessive markers are placed at the end of the phrase. They behave like the "-'s" in English. This clitic in English appears at the end of the noun to mark the possessive case. In possessive constructions, the definite marker, whether singular or plural is placed on the thing possessed. In this case, the definite markers do not behave as edge clitics. They seem to be morphemes attached to the thing possessed. In the examples below, the definite marker is not placed NP finally. In this particular instance, it's placed before the possessive marker for person in the NP.

```
Bawg
        rafiq
                                               Bawg
                                                       rafiq
                                                               -ægan
                -ægæ
                         -m
                                                                         -em
Father friend -DEF.SG
                                               Father friend -DEF.PL
                         mv
                                                                          my
'The father of my friend'
                                               'The father of my friends'
                                               Saw
       mal
                -ægæ
                                                             mal
saw
                           -m
                                                                      -ægan
                                                                               -eman
owner house
                -DEF.SG
                           my
                                               owners
                                                            house
                                                                      -DEF.PL
                                                                                 our
'my landlord' (the owner of my house)
                                               'our landlords' (the owners of our houses)
rafiq
      bawg -em
                                               rafiq
                                                     -æg
                                                             -ei
                                                                    bawg -em
friend father my
                                               friend DEF ezafe father my
'a friend of my father'
                                               'The friend of my father'
```

4.1.8. Demonstratives: When definiteness is determined by demonstratives in a phrase, both the singular and plural definite markers exhibit an unpredictable behavior. In case of demonstratives, the definite markers can be segmented. The definite marker is attached to the head noun though there is an adjective in the predicate and the definite word is distinct from the demonstrative. Here, the definite marker for both plurals and singulars is -æ and plurality is marked by -æl.

```
i
       kæni sk
                            qafæng
                                                           kæni sk
                                                     i
                                                                     -æl
                                                                            -æ
                                                                                    qafæng
                -æ
                                       -æ
                                                                                                -en
this
       girl
                -DEF.SG
                            beautiful
                                                     this
                                                           girl
                                                                     -PL
                                                                            DEF
                                                                                    beautiful
                                       is
                                                                                                are
'This girl is beautiful.'
                                                     'These girls are beautiful.'
i
                                                     i
                                                            ketaw -æl
                                                                                 qoi
       ketaw -æ
                      qoi
                                  kow-æ.
                                                                          -æ
                                                                                             ow
                                                                                                     -en.
this book
             -DEF
                      big
                                  blue is
                                                     this book
                                                                   -PL
                                                                          DEF
                                                                                 big
                                                                                        and blue
                            and
                                                                                                       are
'This book is big and blue.'
                                                     'These books are big and blue.'
i
       kæniſk
                      qaſæng
                                                          i
                                                                  kæniſk
                                                                                qaſæng
                                                                                             -æl -æ
                                    -æ
                                                                 girl
this
       girl
                      beautiful
                                    DEF.SG
                                                                                beautiful
                                                                                             -PL-DEF
                                                          this
'this beautiful girl'
                                                           'These beautiful girls'
```

4.1.9. Object relative & subject relative phrases: A complex NP involving a relative clause does not license a definite marker at the edge of the NP. In this case, the definite marker goes with the head noun in the phrase.

kænisk -ægæ dyæso di:m qæsæng -æ Girl -DEF.SG last night see.PST beautiful is 'The girl I saw last night is beautiful.' (object related)

Kænisk -ægan dyæso haten qæsængen Girl -DEF.SG last night come.PST beautiful.are 'The girls who came last night are beautiful.' (subject related)

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