

RAISING TO SUBJECT AND OBJECT
IN KUNUZ NUBIAN

BY

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Kunuz Nubian Sounds

1. Vowels

	Front	Central	Back
High	i, i:		u, u:
Mid	e, e:		o, o:
Low		a, a:	

2. consonants

		bilabial	Labio-dental	dental alveolar	Palatal-alveolar	Palatal	Velar	Labio-velar	glottal
STOPS	Voiceless			t	ç		k		
	Voiced	b		d	ç		g		
FRICATIVES	Voiceless		f	s	ç				h
	Voiced			z					
NASALS		m		n					
LIQUIDS				l, r					
SEMI-VOWELS						y	w		

A List of Abbreviations

Acc:	accusative
Cho:	chomeur
Dir:	directional
Fut:	future
Indef:	indefinite
GR:	grammatical relation
Inf:	infinitive
Instr:	instrumental
KN:	Kunuz Nubian
Loc:	locative
Nom	nominative
Obj:	object
Obl:	oblique
Pas:	passive
pres:	present
pst:	past
RG:	Relational Grammar
RN:	Relational Networks
RSL:	Relational Succession Law
sbj:	Subject
sg:	singular
1, 2, 3:	first, second, third person

Introduction

In this work, I will show that Kunuz Nubian (KN), an Eastern Sudanic language spoken in southern Egypt, has both raising to subject and raising to object. First, in raising to subject constructions, a complement clause subject or direct object may optionally raise to the status of the main clause subject. Second, in raising to object constructions, a subject or a direct object in the complement clause may optionally raise to object in the main clause. Finally, in each type of raising, the raising nominal will take on the grammatical relation (GR) of the complement out of which it raises. That is, if the complement clause is, say, subject, the raising nominal will also be subject in the main clause.

In the discussion of KN raising, I will use the framework of Relational Grammar (RG) developed by Perlmutter and Postal (1977). This grammar, which takes grammatical relations as primitives of linguistic theory, posits universal laws that handle data from languages that are very different structurally. Therefore, I make

use of this framework in analyzing KN data.

The format of this paper is organized as follows:

In Chapter one, an outline of RG is given; also, the ascension construction is introduced. Chapter two deals with some basic facts of KN such as pronominals, word order, nominal case, verb agreement, passive, reflexive and finite vs. non-finite verbs. In Chapter three, I provide evidence for both raising to subject and raising to object. Finally, alternative analyses-the equi analysis and the two NP analysis-will be proposed and rejected.

Chapter 1

Introduction to RG

1.0 introduction

In this chapter, I discuss some basic facts of Relational Grammar (RG) that may facilitate reading this paper. In section 1.2, the ascension constructions will be introduced.

1.1 An Outline of Relational Grammar

RG claims that three things are necessary in syntactic representation:

- a. the specification of the elements that bear grammatical relations to each other.
- b. the specification of the grammatical relations that each element bears to the other.
- c. the levels at which each element bears GR to other elements.

Thus grammatical relations are emphasized in syntactic representation in RG.

1.1.1 Grammatical Relations (GR)

RG makes use of such primitive notions as predicate (P), subject (1), direct object (2), indirect object (3),

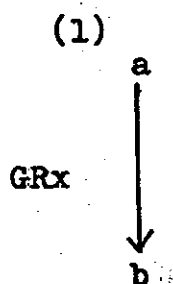
oblique (Obl) such as locative (Loc), instrumental (Instr), directional (Dir)...etc. and chomeurs (Cho) ¹.

1.1.2 Relational Network (RN)

RG presents three types of elements in syntactic representation:

- a. A set of nodes that represent linguistic elements.
- b. A set of R-signs which are the names of the grammatical relations that elements bear to other elements.
- c. A set of co-ordinates indicating the levels at which elements bear grammatical relations to other elements.

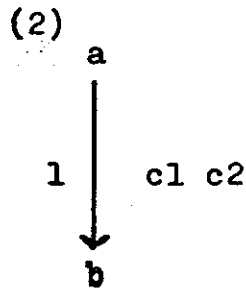
In RG, the relation between linguistic elements can be described in terms of nodes as can be seen in (1)



In (1) the linguistic element b bears the GRx relation to a. For example, if GRx is object (2), then b should be referred to as bearing the 2-relation to a. That is

b is the object of a.

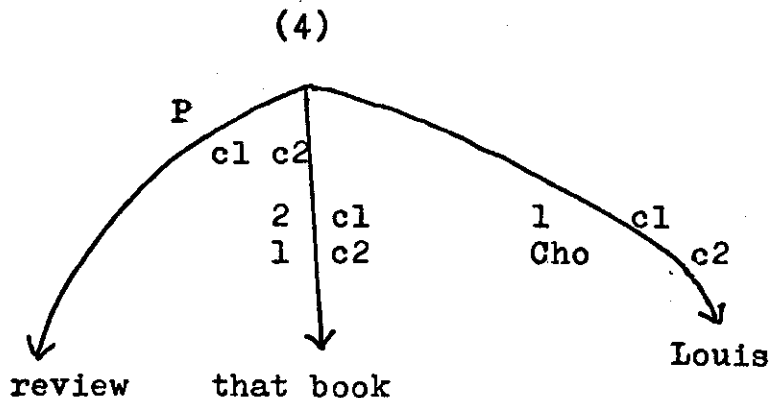
However, as can be observed in (1), the linguistic levels are not shown. (1) needs the arcs that would show at which level an element bears a relation to another element. This can be given as in (2)



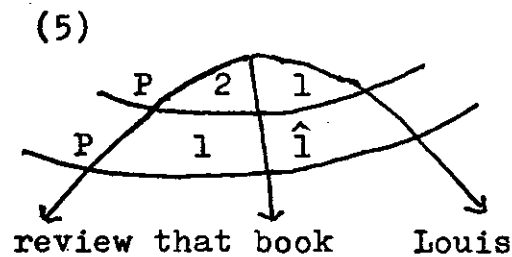
In (2) the linguistic element b bears the 1-relation to a at the first and the second levels.

Moreover, RG claims that a certain nominal may change its grammatical relation at the surface level. For example, a clause like (3) can be represented in a Relational Network as in (4)

(3) That book was reviewed by Louis.



As can be seen in (4), there are two levels: c1 and c2. The nominal that book heads a 2-arc in the first level and a 1-arc in the second or surface level; the nominal Louis heads a 1-arc in the first level and a Cho-arc in the second level. Clause (4) can be represented more clearly as in the stratal diagram (5)



In (5) a term which previously bore the 1-relation is placed en chomage.

Thus, the previous section dealt with an outline of RG. In the following section, ascension constructions will be discussed.

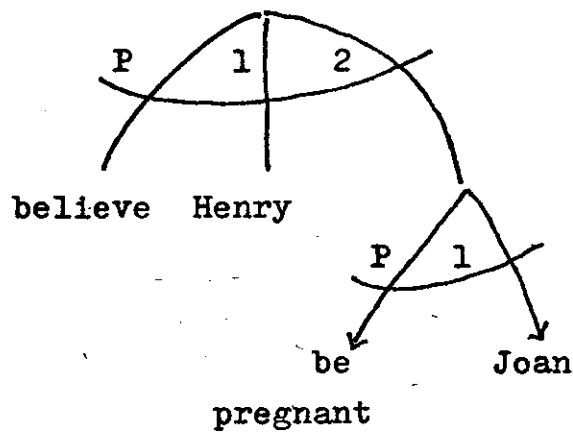
1.2 Ascension

In ascension constructions, a nominal may ascend to subject (i.e., raising to subject) or to direct object (i.e., raising to object). RG claims that the GR of the ascension nominal is determined by the GR of its complement clause in accordance with the Relational Succession Law (RSL) ². That is, if the complement clause is, say, object,

the ascendees will also be object in the main clause. For example, in English, raising to object relates (6a) to (7a) represented in the stratal diagrams (6b) and (7b) respectively

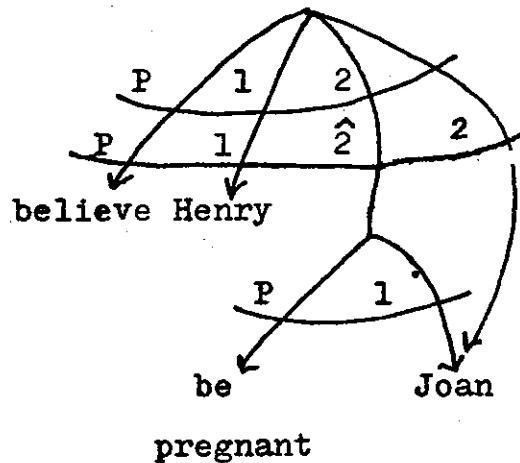
(6) a. Henry believes that Joan is pregnant.

b.



(7) a. Henry believes Joan to be pregnant.

b.



As can be seen in (7b), the nominal Joan, which heads a 1-arc in the complement or downstairs clause, ascends to 2(direct object) in the main or upstairs clause. As a consequence of ascension, the rest of the complement clause is placed en chomage.

Raising has also been attested in other languages. Seiter (1978) claims that in Niuean, a Polynesian language, raising operates on downstairs subject as well as direct object. This can be given as in (8b)-(8c), respectively

- (8) a. Kua kamata ke hala he tama e akau
 perf begin sbj cut Erg child Abs tree
 'The boy has begun to cut down the tree'
- b. Kua kamata e tama ke hala e akau
 perf begin Abs child sbj cut Abs tree
 'The child has begun to cut down the tree'
- c. Kua kamata e akau ke hala he tama
 Abs tree sbj cut Erg
 'The tree has begun to be cut down by
 the child.'

In (8b) the nominal tama, which heads a 1-arc in the downstairs clause, ascends to 1 (subject) in the upstairs clause. In (8c) the nominal akau, which heads a 2-arc in the downstairs clause, ascends to 1 in the upstairs clause.

According to Seiter (1978), the fact that Niuean's direct object can ascend violates Postal's (1974) claim that raising is universally restricted to subjects. Both Gerdts (1980) and Salih(1985) show that Ilokano and Arabic violate

Postal's (1974) claim. KN also violates Postal's claim and adds to the accumulating evidence for raising of both subject and object.

Gerdt's (1980) shows that both final 1s and final 2s can raise in Ilokano, a Philippine language. This is illustrated as in (9b)-(9c)

- (9) a. N-in-amnama ko (nga t-in-engpa ti
pst-expect I-Gen ink pst-slap Det
babai ti lalaki)
woman Det man
'I expected that the woman hit the man'
- b. N-in-amnama ko ti-lalaki (nga ti-in-
engpa ti babai)
'I expected the man to be hit by the woman'
- c. N-in-amnama ko ti babai (nga t-in-engpa
na ti lalaki)
3-Gen
'I expected the woman to hit the man'

According to Gerdt's, ascended ergatives leave copies; the pronoun na in (9c) is left behind by the ascension nominal tibabai.

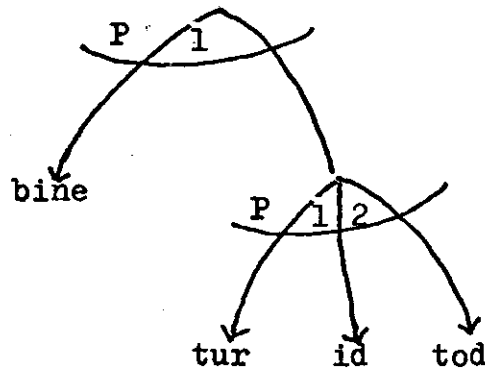
Moreover, Salih (1985) claims that in Standard Arabic, nominals that head final stratum term arcs, that is, 1s, 2s and, for some speakers, 3s, can raise to subject or direct object, as exemplified in (10)-(11)

- (10) a. danna ša:hir-un (?anna ḥana:n-an
thought Shahir-Nom that Hanaan-Acc
katabat-i r-risa:lat-a)
wrote-v the letter-Acc
'Shahir thought that Hanaan wrote the letter'

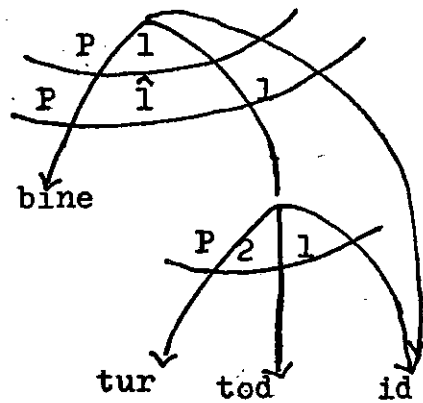
- b. \dot{d} anna ša:hir-un hana:n-an (?anna-ha
thought Shahir-Nom Hanaan-Acc that-she
katabat-i r-risa:lat-a)
wrote-v the letter-Acc
'Shahir thought Hanaan to have written the
letter'
- c. \dot{d} anna šahir-un r-risa:lat-a (?anna hana:n-an
thought Shahir the letter-Acc that Hanaan-Acc
katabat-ha:)
wrote-it
'Shahir thought the letter to have been
written by Hanaan'
- (11) a. \dot{d} anna ša:hir-un (?anna na:hid-an ?arsala
thought Shahir-Nom that Nahid-Acc sent
r-risa:lat-a li t-ṭabi:b-i)
the letter-Acc to the physician-Obl
'Shahir thought Nahid sent the letter to
the physician'
- b. \dot{d} anna ša:hir-un t-ṭabi:b-a (?anna
thought Shahir-Nom the physician-Acc that
na:hid-an ?arsala r-risa:lat-a la-hu)
Nahid-Acc sent the letter-Acc to him
Lit. 'Shahir thought the physician that Nahid
sent the letter to him'

I claim that in KN both the subject (cf.12) and object (cf.13) are eligible for raising (see chapter 3). The ascende, which heads an upstairs final 1 or final 2-arc, optionally leaves a copy in the downstairs clause, as can be seen in (12)-(13); and the verb in the downstairs clause is finite.

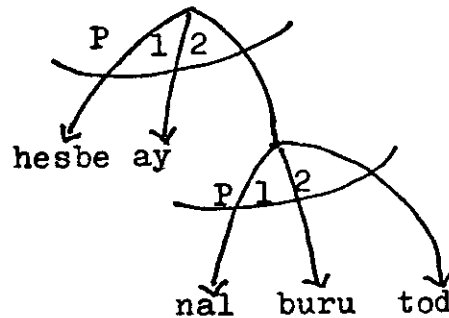
- (12) a. bine-s-u (id-i- \emptyset tod- \emptyset -ki
seem-pst-3sg man-pl-Nom boy-sg-Acc
tur- \emptyset -s-a)
dismiss-sgobj-pst-3pl
'It seemed the men dismissed the boy'



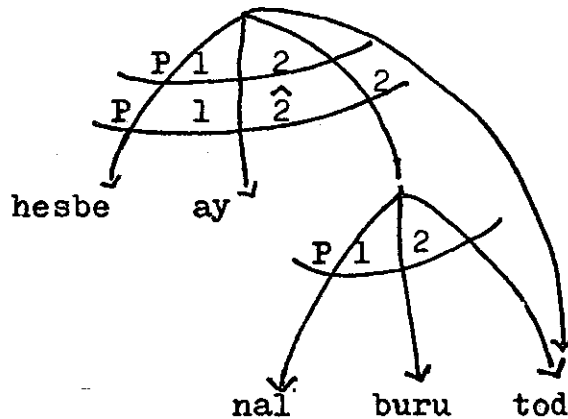
- b. id-i-∅ bine-s-a ((tir) tod-∅-ki
 man-pl-Nom seem-pst-3pl they boy-sg-Acc
 tur-∅-s-a)
 dismiss-sgobj-pst-3pl
 'The men seemed to have dismissed the boy'



- (13) a. ay hesbe-s-i (burw-i-∅
 1/sbj believe-pst-1sg girl-pl-Nom
 ton-i-gi nal-ir-s-a)
 boy-pl-Acc see-plobj-pst-3pl



- b. ay ton-i-gi hesbe-ir-s-i (burw-i- \emptyset)
 1/sbj boy-pl-Acc believe-plobj-pst-1sg boy-pl-N
 (tirgi) nal-ir-s-a)
 them see-plobj-pst-3pl
 'I believed the boys to have been seen by the
 girls'
 Lit. 'I believed the boys the girls saw them'



In (12b), the nominal id-i, which heads a downstairs 1-arc, ascends to 1 (subject) in the upstairs clause; in (13b), the nominal ton-i-gi, which heads a downstairs final 2-arc, ascends to object in the upstairs clause. In each case, the ascendeo, which places the initial 1 or 2 en chomage, optionally leaves behind a pronominal copy of itself in the downstairs clause.

Furthermore, it should be noted that there is difference in raising constructions between Arabic and KN: the word order constitutes a major difference. In Arabic, the ascension nominal is to the right of the upstairs predicate. The following chart might clarify the characteristics

of raising constructions in Niuean, Ilokano, Arabic and KN:

	Types of Raising	Word Order	Comp	Inf.	Copy
Niuean	S-S-R	SVO	yes	yes	no
Ilokano	S-S-R & S-O-R	VSO	no	no	Ergative obligatory
Arabic	S-S-R & S-O-R	VSO	yes	no	non-subject obligatory
KN	S-S-R	SOV	no	no	(optional)

Table (3)

In the preceding discussion, I have given an outline of RG and I have introduced the ascension constructions as treated in RG. In chapter 2, I discuss some basic facts of KN.

Chapter 2

Some Basic Facts of Kunuz Nubian

2.0 Introduction

To my knowledge, there has been no serious work on Kunuz Nubian (KN); nor is there a reference grammar for this language. Therefore, I discuss some basic facts of KN such as pronominals, word order, nominal case, passive, reflexive and finite vs. non-finite verbs.

2.1 Pronominals

KN has three forms of pronouns: subjective, objective, and possessive pronouns. The possessive has two forms: possessive adjectives³ and possessive pronouns. This can be illustrated as in the chart below where the pronouns are classified as to person, number and case.

		subjective	objective	possessive	
				adj	pron
1st person	sg	ay	aigi	an-	andima
	pl	ar	argi	an-	andima
2nd person	sg	er	eki	en-	endima
	pl	ir	irgi	in-	indima
3rd person	sg	ter	teki	ten-	tendima
	pl	tir	tirgi	tin-	tindima

Table (4)

The subject and object pronouns are independent forms as in (14-15). The possessive, however, has two forms: the the possessive pronouns, which are independent as in (16-17) and the possessive adjectives, which are bound as in (18-19)

- (14) ay tirgi jom-ir-s-i
 1/sbj them hit-plobj-pst-1sg
 'I hit them'
- (15) tir argi nal-ir-s-a
 they us see-plobj-pst-3pl
 'They saw us'
- (16) in kitab-∅ endima
 this book-sg yours
 'This book is yours'
- (17) man ka-∅-∅ tindima
 that house-sg-Nom theirs
 'That house is theirs'
- (18) am-buru-∅-∅ teki ed-∅-s-u
 my girl-sg-Nom him marry-sgobj-pst-3sg
 'My daughter married him'
- (19) ten-e:n id-i durw-i-gi
 his-mother man-pl old-pl-Acc
 sade-ir-s-u
 help-plobj-pst-3sg
 'His mother helped the old men'

In KN, the subject or object pronoun of a simple sentence can be omitted from the sentence if no emphasis is required⁴. Accordingly, the non-emphatic equivalents of (14-15) above are (20-21)

- (20) jom-ir-s-i
 'I hit them'

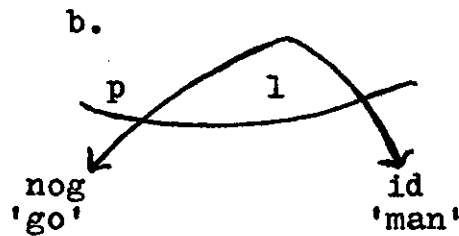
- (21) nal-ir-s-a
'They saw us'

It should be noted that the optionality of the pronoun follows from pro-drop.

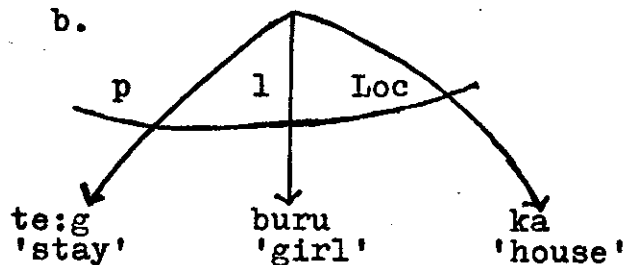
2.2 Word Order

KN is an SOV language; it has intransitive, transitive, and ditransitive clauses. First, in intransitive clauses, the subject (1) may be followed by an oblique nominal (if present) and a predicate. This can be seen as in (22)-(24)

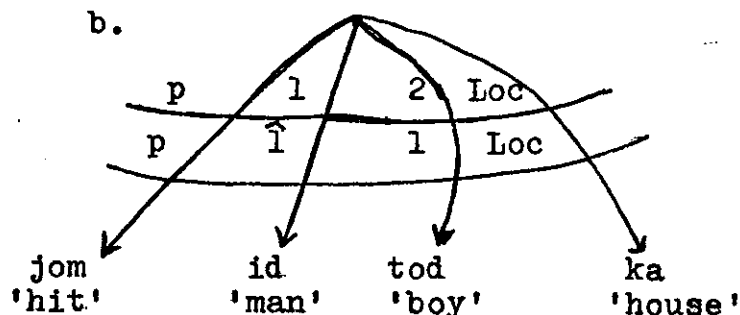
- (22) a. id-i- \emptyset nog-s-a
man-pl-Nom go-pst-3pl
'The men went away'



- (23) a. buru- \emptyset - \emptyset ka- \emptyset -r te:g-s-u
girl-sg-Nom house-sg-Loc stay-pst-3sg
'The girl stayed at the house'

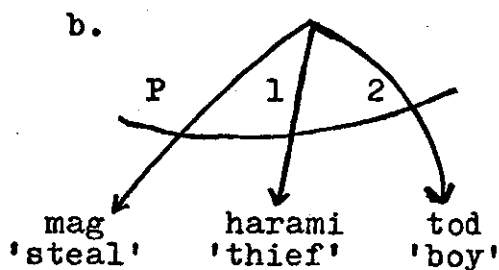


- (24) a. tod- \emptyset - \emptyset (id- \emptyset -ken) ka- \emptyset -r
 boy-sg-Nom man-sg-Instr house-sg-Loc
 'The boy was hit by the man at the house'

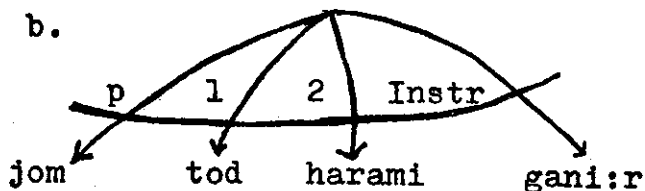


Second, in transitive clauses, the subject (1) immediately precedes the direct object (2) which may be followed by an oblique nominal (if present) as given in (25)-(26)

- (25) a. harami- \emptyset - \emptyset tod- \emptyset -ki mag- \emptyset -s-u
 thief-sg-Nom boy-sg-Acc steal-sgobj-pst-3sg
 'The thief stole the boy'

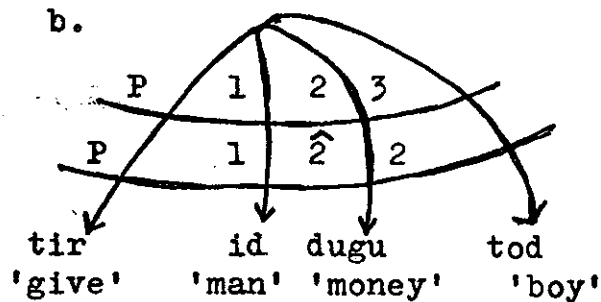


- (26) a. tod- \emptyset - \emptyset harami- \emptyset -gi gani:r- \emptyset -ken
 boy-sg-Nom thief-sg-Acc knife-sg-Instr
 jom- \emptyset -s-u
 'The boy hit the thief with the knife'

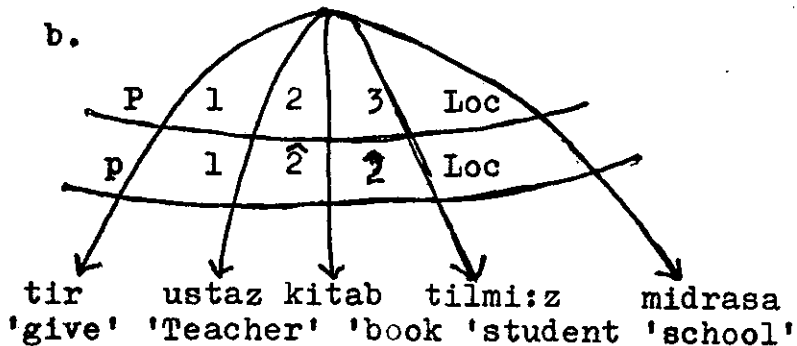


Finally, KN ditransitive clauses involve the obligatory advancement of the initial 3 'the recipient' to 2⁵. Consequently, the initial 2 is placed en chomage. In such a construction, the nominal heading a final 2-arc immediately precedes the $\hat{2}$ which may be followed by an oblique nominal (if present). This can be illustrated as in (27-28)

- (27) a. id- \emptyset - \emptyset tod- \emptyset -ki dugu-gi
 man-sg-Nom boy-sg-Acc money-Acc
 tir- \emptyset -s-u
 give-sgobj-pst-3sg
 'The man gave the boy the money'



- (28) a. ustaz-i- \emptyset tilmi:z-i-gi
 teacher-pl-Nom student-pl-Acc
 kitab-i-gi midrasa-r tij-ir-s-a
 book-pl-Acc school-Loc give-plobj-pst-3pl
 'The teachers gave the students the books
 at the school'



Thus, on the basis of the preceding examples, KN word order can be stated at the final level as in (29)

(29) The word order rule:

1 (2) ($\hat{2}$) ($\hat{1}$) (Obl) P

2.3 Nominal Case

KN exhibits three cases for nominals: nominative, accusative, and oblique. A nominal bearing a 1-relation is in the nominative case and is marked zero as shown in (30)-(31)

(30) ton-i- \emptyset bel-s-a
 boy-pl-Nom go out-pst-3pl
 'The boys went out'

(31) id- \emptyset - \emptyset buru- \emptyset -gi ed- \emptyset -s-u
 man-sg-Nom girl-sg-Acc marry-sgobj-pst-3sg
 'The man married the girl'

In (30)-(31), the nominals ton-i and id, which head final 1-arcs, are in the nominative case as evidenced by the case marker zero.

Nominals bearing the final 2 or $\hat{2}$ -relation are in the accusative case as is indicated by the case marker -gi or -ki depending on phonological factors ⁶ as is given in (32)-(33)

(32) doktor- \emptyset - \emptyset buru- \emptyset -gi nal- \emptyset -s-u
 doctor-sg-Nom girl-sg-Acc visit-sgobj-pst-3sg
 'The doctor visited the girl'

- (33) id-i- \emptyset tod- \emptyset -ki bundug- \emptyset -ki
 man-pl-Nom boy-sg-Acc gun-sg-Acc
 tir- \emptyset -s-a
 give-sgobj-pst-3pl
 'The men gave the boy the gun'

In (32)-(33), the nominals buru-gi, tod-ki and bundug-ki are in the accusative case as shown by the case marker -gi or -ki.

Oblique nominals such as locatives are marked with the suffix -r, as is given in (34)-(35)

- (34) e:n- \emptyset - \emptyset ka-r a:g-s-u
 woman-sg-Nom house-Loc stay-pst-3sg
 'The woman stayed at the house'
- (35) am-bes- \emptyset - \emptyset medi:ne-r a:g-s-u
 my brother-sg-Nom Cairo-Loc stay-pst-3sg
 'My brother stayed in Cairo'

Oblique nominals such as directionals are marked with the suffix -kir as in (36)-(37)

- (36) ali- \emptyset jama- \emptyset -kir ju:-s-u
 Ali-Nom mosque-sg-Dir go-pst-3sg
 'Ali went to the mosque'
- (37) fatma- \emptyset suwan-kir nog-s-u
 Fatma-Nom Aswan-Dir go-pst-3sg
 'Fatma went to Aswan'

Finally, instruments are marked with -ken or -gen depending on phonological factors ⁷. This is shown as in (38)-(40)

- (38) harami- \emptyset - \emptyset bab- \emptyset -ki muftah- \emptyset -ken
 thief-sg-Nom door-sg-Acc key-sg-Instr
 ku- \emptyset -s-u
 open-sgobj-pst-3sg
 'The thief opened the door with the key'

- (39) id-i- \emptyset harami- \emptyset -gi jeri:d-i-gen
 man-pl-Nom thief-sg-Acc stick-pl-Instr
 jom- \emptyset -s-a
 hit-sgobj-pst-3pl
 'The men hit the thief with the sticks'
- (40) harami- \emptyset - \emptyset (askar- \emptyset -ken)
 thief-sg-Nom soldier-sg-Instr
 uri-takki-s-u
 arrest-pas-pst-3sg
 'The thief was arrested by the soldier'

Thus the rule of KN nominal case can be given in terms of final stratum as in (41)

(41) the rule of nominal case:

Final 1s are in the nominative case

Final 2s and 2s are in the accusative case

Obliques are in the oblique case

[^]1 are in the oblique case (i.e., Instr)

2.4 Verb Agreement

In KN, the verb agrees with its subject and direct object. The agreement markers can be shown as in the charts below ⁸.

person		
sg	1st/2nd/3rd	i
pl	1st/2nd	u
	3rd	a

V-subj Agreement
 Table (5)

sg obj	∅
pl obj	ir

V-obj Agreement
Table (6)

In KN, nominals that head final 1-arcs (42)-(43) and final 2-arcs (44)-(45) can cue agreement on the verb:

- (42) ay e:n-∅-gi kade:-∅-gi
 1/sbj woman-sg-Acc dress-sg-Acc
 tir-∅-s-i (*tir-∅-s-u)
 give-sgobj-pst-lsg
 'I gave the woman the dress'
- (43) ton-i-∅ id-∅-ken jom-takki-s-a
 boy-pl-Nom man-sg-Instr hit-pas-pst-3pl
 (*jom-takki-s-i)
 'The boys were hit by the man'
- (44) ay tod-∅-ki nal-∅-s-i (*nal-ir-s-i)
 1/sbj boy-sg-Acc see-sgobj-pst-lsg
 'I saw the boy'
- (45) ustaz-i-∅ tilmi:z-i-gi dugu-gi
 teacher-pl-Nom student-pl-Acc money-Acc
 tij-ir-s-a (*tir-∅-s-a)
 give-plobj-pst-3pl
 'The teachers gave the students money'

In clauses (42)-(43), ay and ton-i, which head final 1-arcs, cue agreement on the predicates. In (44)-(45), the nominals tod-ki and tilmi:z-i-gi, which head final 2-arcs, cue agreement on the predicates; the agreement is marked zero in (44) since the final 2 (i.e., tod-ki) is singular. In (45), the

agreement is marked with the suffix -ir which indicates a plural object.

However, nominals bearing the chomeur or oblique relation can not cue agreement on the verb. This can be shown as in (46)-(49)

- (46) * tod- \emptyset - \emptyset id-i-gen nal-takki-s-a
 boy-sg-Nom man-pl-Instr see-pas-pst-3pl
 'The boy was seen by the men'
- (47) * samy- \emptyset tod- \emptyset -ki kitab-i-gi
 Samy-Nom boy-sg-Acc book-pl-Acc
 tij-ir-s-u
 give-plobj-pst-3sg
 'Samy gave the boy the books'
- (48) * e:n- \emptyset - \emptyset beled-i-kir ju:-s-a
 woman-sg-Nom village-pl-Dir go-pst-3pl
 'The woman went to the villages'
- (49) * id- \emptyset - \emptyset harami- \emptyset -gi gani:r-i-gen
 man-sg-Nom thief-sg-Acc knife-pl-Instr
 jom-ir-s-a
 hit-plobj-pst-3pl
 'The man hit the thief with knives'

(46)-(49) are ungrammatical since the verbs agree with nominals other than final 1s and final 2s. For example, in (46)-(47), the nominals id-i-gen and kitab-i-gi, which head final stratum Cho-arcs, cue agreement on the predicates whereas in (48)-(49), the agreement is cued by the nominals beled-i-kir and gani:r-i-gen, which head Oblique-arcs.

On the basis of the preceding examples, I propose the

following rule for verb agreement at the final level:

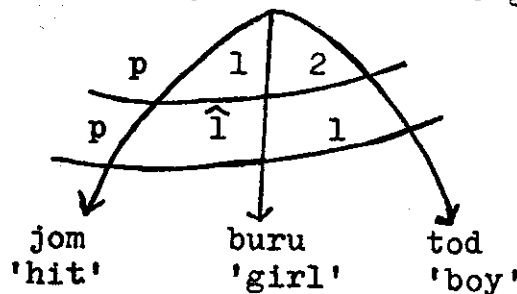
(50) The Verb Agreement Rule

Only final 1s and final 2s can
cue agreement on the verb.

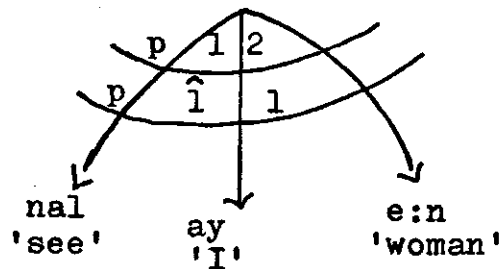
2.5 Passive

The passive construction is formed by attaching the suffix -takki- to the stem verb. In such a construction, a nominal heading a 2-arc (i.e., object) advances to 1 (subject), placing the initial 1 en chomage. This can be illustrated as in (51)-(52)

- (51) a. buru- \emptyset - \emptyset ton-i-gi jom-ir-s-u
girl-sg-Nom boy-pl-Acc hit-plobj-pst-3sg
'The girl hit the boys'
b. ton-i- \emptyset (buru- \emptyset -gen) jom-takki-s-a
boy-pl-Nom girl-sg-Instr hit-pas-pst-3pl
'The boys were hit the girl'



- (52) a. ay e:n- \emptyset -gi nal- \emptyset -s-i
lsbj woman-sg-Acc see-sgobj-pst-lsg
'I saw the woman'
b. e:n- \emptyset - \emptyset (ai-gen) nal-takki-s-u
woman-sg-Nom I-Instr see-pas-pst-3sg
'The woman was seen by me'



What makes the passive sentences (i.e., (51b)-(52b)) different from the corresponding active ones (i.e., (51a)-(52a)) is that the object of the active sentence is subject in the passive sentence. For example, in (51a) and (52a), the nominals ton-i-gi and e:n-gi, which are flogged by the accusative case marker -gi, head final 2-arcs whereas in the (b) sentences, these nominals are subjects (1s) and they are not flogged by case markers; that is, they are marked zero (i.e., for the nominative case). It should also be noted that in the (b) sentences, the suffix -takki- (the passive morpheme) is attached to the predicates, which is not the case in the (a) sentences. Thus there is difference between the active and the passive constructions in KN.

2.6 Reflexive

In KN, reflexives are realized by the reflexive morpheme newerti 'self' to which the possessive adjectives (section 2.1) are prefixed. The reflexive nominal has to

have an antecedent with which it agrees in number and person. Consider, for example, (53)-(55)

(53) ay an-newerti-gi (*ten-newerti-gi)
 1/sbj my-self-Acc him-self-Acc
 'nali- \emptyset -s-i
 injure-sgobj-pst-1sg
 'I injured myself'

(54) er en-newerti-gi (*tin-newerti-gi)
 you your-self-Acc them-self-Acc
 jom- \emptyset -s-u
 hit-sgobj-pst-2sg
 'You hit yourself'

(55) id-i- \emptyset tin-newerti-gi (*ten-newerti-gi)
 man-pl-Nom them-self-Acc him-self-Acc
 dol-ir-s-a
 love-plobj-pst-3pl
 'The men loved themselves'

In (53)-(55), the reflexive nominals agree with their antecedents. In (55), for example, the reflexive nominal tin-newerti-gi agrees in number and person with a third person plural subject (i.e., id-i). If, however, there is no agreement between the reflexive nominals and the antecedents, the clauses are ungrammatical.

The antecedent of a reflexive nominal can be a final 1 as in (53)-(55) above and in (56)-(57) below

(56) tilmi:z- \emptyset - \emptyset ustaz- \emptyset -ken
 student-sg-Nom teacher-sg-Instr
 ten-newerti-ndogor we:tir-takki-s-u
 him-self-about tell-pas-pst-3sg
 'The student was told about himself by
 the teacher'

- (57) ay tod- \emptyset -ki kitab-we- \emptyset -ki
 1/sbj boy-sg-Acc book-Indef-sg-Acc
 an-newerti-ndogor tir- \emptyset -s-i
 my-self-about give-sgobj-pst-lsg
 'I gave the boy a book about myself'

As can be observed in (56)-(57), the nominals that head final stratum 1-arcs antecede the reflexive nominals. For example, in (56) the nominal tilmi:z, which heads a final 1-arc, antecedes the reflexive nominal ten-newerti-ndogor.

Moreover, a nominal that heads a final stratum 2-arc can antecede a reflexive nominal, as shown in (58)-(59)

- (58) ay tod- \emptyset -ki ten-newerti-ndogor
 1/sbj boy-sg-Acc him-self-about
 we:tir- \emptyset -s-i
 tell-sgobj-pst-lsg
 'I told the boy about himself'

- (59) buru- \emptyset - \emptyset afij-i-gi kitab-we- \emptyset -ki
 girl-sg-Nom boy-pl-Acc book-Indef-sg-Acc
 tin-newerti-ndogor tij-ir-s-u
 them-self-about give-plobj-pst-3sg
 'The girl gave the boys a book about themselves'

In (58)-(59), the antecedent of the reflexive nominal is a final 2. In (59), for example, the nominal afij-i-gi, which heads a final stratum 2-arc, antecedes the reflexive nominal tin-newerti-ndogor.

However, nominals bearing the chomeur-or the oblique relation can not antecede reflexives, as seen in (60)-(61)

(60)*afij-i- \emptyset (id- \emptyset -ken) ten-newerti-ndogor
 boy-pl-Nom man-sg-Instr him-self-about
 we:tir-takki-s-a
 tell-pas-pst-3pl
 'The boys were told by the man about
 himself'

(61)*ay tod- \emptyset -najor jawab-we- \emptyset -ki
 1/sbj boy-sg-for letter-Indef-sg-Acc
 ten-newerti-ndogor baj- \emptyset -s-i
 him-self-about write-sgobj-pst-1sg
 'I wrote a letter for the boy about him-
 self'

Clauses (60)-(61) are ungrammatical because nominals heading non-term arcs (chomeurs and obliques) antecede the reflexive nominals. In (60), for example, the antecedent is the nominal id-ken, which heads a Cho-arc. In (61), the nominal tod-najor, which heads an oblique-arc, antecedes the reflexive nominal.

Thus the reflexive rule can be stated at the final level as follows:

(62) The reflexive rule
 Only final 1s and final 2s can
 antecede reflexive nominals.

2.7 Finite vs Non-finite Verbs

KN has both finite and non-finite verbs. A finite verb is a verb that has a subject expressed (63) or understood

(64)

(63) iškartij-i- \emptyset nog-s-a
 guest-pl-Nom leave-pst-3pl
 'The guests left'

(64) ta (er 'you' is understood)
 come
 'Come'

Non-finite verbs, however, are divided into two types: infinitives and present participles. Of interest here is the infinitive. In KN, the infinitive is the form of the verb that is not limited in number or person. It is expressed by the suffix -an on the verb root, as shown in (65)-(66)

(65) nog-an
 go-Inf
 'to go'
 e.g. e:n- \emptyset - \emptyset id- \emptyset -ki we:tir- \emptyset -s-u
 woman-sg-N man-sg-Acc tell-sgobj-pst-3sg
 nog-an
 go-Inf
 'The woman told the man to go'

(66) te:g-an
 stay-Inf
 'to stay'
 e.g. ay iškarti- \emptyset -gi bedi- \emptyset -s-i te:g-an
 I/sbj guest-sg-Acc beg-sgobj-pst-1sg
 'I begged the guest to stay'

In the previous chapter, I discussed some basic facts of KN. With this background, we can proceed to analyse KN raising constructions in chapter 3.

Chapter 3

Raising to Subject and Object

3.0 Introduction

In this chapter, I will discuss KN raising to subject and object, which are lexically governed by predicates such as bine 'seem' (i.e., raising to subject trigger) and hesbe 'believe' (i.e., raising to object trigger)⁹. This discussion will be followed by alternative analyses—the equi analysis and the two-NP analysis—that will be rejected.

3.1 Raising to Subject

The first type of raising that will be discussed here is raising to subject. In raising to subject, a nominal heading a downstairs final l-arc can raise to subject((1), as exemplified in (67)-(68)

- (67) a. imkin (ustaz-i- \emptyset midrasa- \emptyset -kir
probable teacher-pl-Nom school-sg-Dir
bi-ju:-r-a)
fut-go-pres-3pl
'It is probable that the teachers will
go to the school'

b. ustaz-i- \emptyset imkin ((tir) midrasa- \emptyset -kir
 teacher-pl-Nom probable they school-sg-Dir
 bi-ju:-r-a)
 Fut-go-pres-3pl
 Lit. 'The teachers are probable they will
 go to the school'

(68) a. bine-s-u (ogj-i- \emptyset ton-i-gi
 seem-pst-3sg man-pl-Nom boy-pl-Acc
 jom-ir-s-a)
 hit-plobj-pst-3pl
 'It seemed the men hit the boys'

b. ogj-i- \emptyset bine-s-a ((tir) ton-i-gi
 man-pl-Nom seem-pst-3pl they boy-pl-Acc
 jom-ir-s-a)
 hit-plobj-pst-3pl
 'The men seemed to have hit the boys'

In (67b) and (68), the nominals that head final stratum 1-arcs in the downstairs clause raise to subject in the upstairs clause. In (68), for example, the nominal ogj-i, which heads a final 1-arc in the downstairs clause, ascends to 1 (subject) in the upstairs clause.

Similarly, nominals heading final stratum 2-arcs, can ascend to subject, as shown in (69)-(70)

(69) a. aki:d (wel- \emptyset - \emptyset id- \emptyset -ki
 certain dog-sg-Nom man-sg-Acc
 aji- \emptyset -s-u)
 bite-sgobj-pst-3sg
 It is certain the dog bit the man'

b. id- \emptyset - \emptyset aki:d (wel- \emptyset - \emptyset (teki)
 man-sg-Nom certain dog-sg-Nom him
 aji- \emptyset -s-u
 bite-sgobj-pst-3sg
 Lit. 'The man is certain the dog bit him'

- (70) a. bine-s-u (id-i- \emptyset e:n- \emptyset -gi
 seem-pst-3sg man-pl-Nom woman-sg-Acc
 wel- \emptyset -gi tir- \emptyset -s-a)
 dog-sg-Acc give-sgobj-pst-3pl
 'It seemed the men gave the woman the
 dog'
- b. e:n- \emptyset - \emptyset bine-s-u (id-i- \emptyset (teki)
 woman-sg-Nom seem-pst-3sg man-pl-Nom (her)
 wel- \emptyset -gi tir- \emptyset -s-a
 dog-sg-Acc give-sgObj-pst-3pl
 'The woman seemed to have been given
 the dog by the men'
 Lit. The woman seemed the men gave her the
 the dog.

In (69b) and (70b), the nominals that head final stratum 2-arcs in the downstairs clause, ascend to 1 (subject) in the upstairs clause. For example, in (70b) the nominal e:n, which heads a final stratum 2-arc in the downstairs clause, ascends to 1 in the upstairs clause.

However, nominals heading non-term arcs (chomeurs and obliques) can not ascend, as seen in (71b)-(71c)

- (71) a. bine-s-u (tajir- \emptyset - \emptyset e:j-i-gi
 seem-pst-3sg merchant-sg-Nom woman-pl-Acc
 kadej-i-gi ka-r tij-ir-s-u)
 dress-pl-Acc house-Loc give-plobj-pst-3sg
 'It seemed the merchant gave the women
 the dresses at the house'
- b. *kadej-i- \emptyset bine-s-a (tajir- \emptyset - \emptyset
 dress-pl-Nom seem-pst-3pl merchant-sg-N
 e:j-i-gi (tirgi) tij-ir-s-u
 woman-pl-Acc them give-plobj-pst-3sg
 'The dresses seemed to have been given
 the women at the house'
 Lit. The dresses seemed the merchant gave
 them to the women at the house.

- c. *ka- \emptyset - \emptyset bine-s-u (tajir- \emptyset - \emptyset
 house-sg-Nom seem-pst-3sg merchant-sg-N
 e:j-i-gi kadej-i-gi (tende-r)
 woman-pl-Acc dress-pl-Acc it-Loc
 tij-ir-s-u)
 give-plobj-pst-3sg
 Lit 'The house seemed the merchant gave the
 women the dresses at it'

Clauses (71b-c) are ungrammatical since nominals heading non-term arcs in the downstairs clauses ascend to subject. In (71b), the nominal kadej-i, which bears the chomeur-relation in the downstairs clause, ascends to 1 (subject) in the upstairs clause. By the same token, in (71c), the nominal ka, which bears the oblique relation in the downstairs clause, ascends to subject. Thus chomeurs and obliques can not ascend in KN.

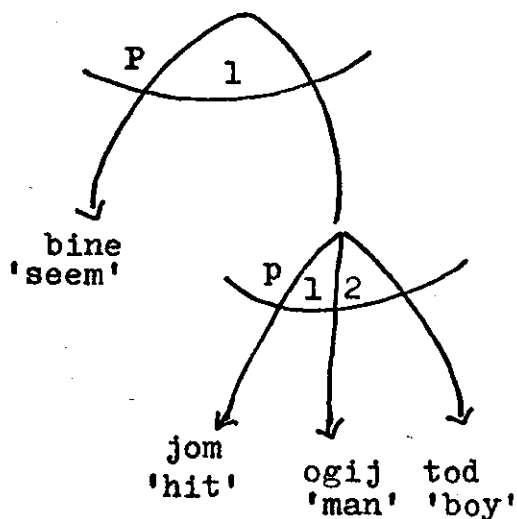
I claim that raising to subject relates clauses (67a) to (67b), (68a) to (68b), (69a) to (69b), and (70a) to (70b).

To account for these clauses, I propose that raising to subject in KN operates on a biclausal structure- an upstairs clause and a downstairs clause; it involves the ascension of a downstairs final 1 or final 2 to subject in the upstairs clause. Moreover, the ascension nominal, which may leave a pronominal copy of itself in the downstairs clause, assumes the GR of the host or complement clause out of which it ascends in accordance with the RSL¹⁰; the rest of the host or complement clause is placed en chomage.

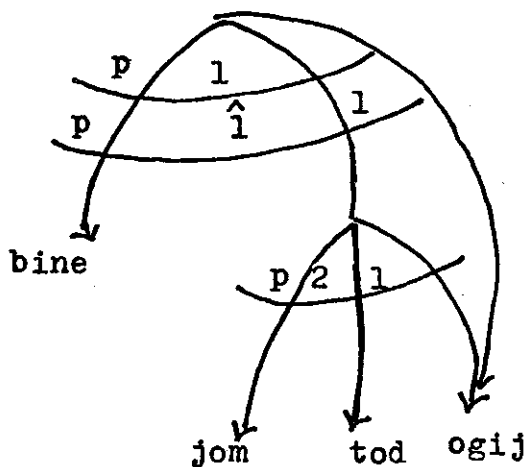
Thus the RN proposed for (68a-b) can be represented in the simplified stratal diagrams (72a-b) respectively.

(72)

a.



b.



In (72b), the nominal ogj-i, which heads a final l-arc in the downstairs clause, ascends to l (subject) in the upstairs clause, placing the initial l en chomage.

In the preceding section, it has been claimed that either a final 1 or a final 2 in the downstairs clause may ascend to 1 in the upstairs clause. In section (3.1.1), I argue for the final 1-hood or 2-hood of the ascendeo in the downstairs clause. Section 3.1.2 deals with arguments for the final 1-hood of the ascendeo in the upstairs clause.

3.1.1 Arguments for the Final 1-hood or 2-hood of the Ascendeo in the Downstairs Clause

a) Verb Agreement

As has been pointed out in section 2.4, the nominals heading final 1 and final 2-arcs can cue agreement on the verb. On this basis, if the ascendeo is a final 1 or a final 2 in the downstairs clause, then it is predicted to cue agreement on the downstairs predicate---this prediction is borne out in (73)-(74)

(73) id-i- \emptyset bine-s-a ((tir) ton-i-gi
man-pl-Nom seem-pst-3pl they boy-pl-Acc
jom-ir-s-a (*jom-ir-s-i)
hit-plobj-pst-3pl (hit-plobj-pst-lsg)
'The men seemed to have hit the boys'

(74) burw-i- \emptyset bine-s-a (tod- \emptyset - \emptyset
girl-pl-Nom seem-pst-3pl boy-sg-Nom
(tirgi) nal-ir-s-u (*nal- \emptyset -s-u)
them see-plobj-pst-3sg (see-sgobj-pst-)
'The girls seemed to have been seen'
Lit.The girls seemed the boy saw them

In (73)-(74), the upstairs final 1 cues agreement on the downstairs predicate. For example, in (73), the nominal id-i, which heads a 1-arc in the upstairs clause, cues agreement on the downstairs predicate jom-ir-s-a and the agreement marker is the suffix -a, which indicates a third person plural subject. In (74), the nominal burw-i, which heads a 1-arc in the upstairs clause, cues agreement on the downstairs predicate nal-ir-s-u, the agreement being marked with the suffix -ir, which refers to a plural object. If, however, there is no agreement between the ascension nominal and the downstairs predicate, the clauses will be ungrammatical.

The fact that the ascendeo can cue agreement on the predicate in the downstairs clause is one argument for its final 1-hood or 2-hood in the downstairs clause.

b) Reflexive

In 2.6, it has been shown that only a final or a final 2 can antecede reflexive nominals. Accordingly, if the ascendeo heads a final 1 or a final 2-arc in the downstairs clause, then it should be able to antecede a reflexive nominal. That this is the case can be seen as in (75)-(76)

(75) askar- \emptyset - \emptyset bine-s-u ((ter)
 soldier-sg-Nom seem-pst-3sg (he)
 ten-newerti-gi (*tin-newerti-gi)
 him-self-Acc (them-self-Acc
 nali- \emptyset -s-u
 injure-sgobj-pst-3sg
 'The soldier seemed to have injured him-
 self'

(76) ton-i- \emptyset bine-s-a (ustaz- \emptyset - \emptyset
 boy-pl-Nom seem-pst-3pl teacher-sg-Nom
 (tirgi) tin-newerti-ndogor (*an-neweri-
 them them-self-about my-self
 ndogor) we:tij-ir-s-u
 about tell-plobj-pst-3sg
 'The boys seemed to have been told about
 themselves by the teacher'
 Lit. The boys seemed the teacher told them
 about themselves.

As can be observed in (75)-(76), the nominals askar and ton-i, which bear the 1-relation in the upstairs clause, antecede the reflexive nominals. Moreover, the antecedent and the reflexive nominal agree in number and person; if there is no agreement, the clauses will be ungrammatical.

Thus the fact that the ascendeo can antecede a reflexive nominal supplies another argument for the final 1-hood or 2-hood of the ascendeo in the downstairs clause.

c) Pronominal Copy

It has been shown in section 3.1, that the ascendeo in raising to subject constructions optionally leaves behind a pronominal copy of itself in the downstairs clause.

This can be illustrated as in (77)-(78)

(77) haramij-i- \emptyset bine-s-a ((tir) (*ter)
 thief-pl-Nom seem-pst-3pl they he
 ka- \emptyset -gi mag- \emptyset -s-a)
 house-sg-Acc rob-sgobj-pst-3pl
 'The thieves seemed to have robbed the
 house'

(78) doktor- \emptyset - \emptyset bine-s-u (e:n- \emptyset - \emptyset
 doctor-sg-Nom seem-pst-3sg woman-sg-Nom
 ((teki) (*tirgi) uwe- \emptyset -s-u)
 him them call-sgobj-pst-3sg
 'The doctor seemed to have been called
 by the woman'

Lit. The doctor seemed the woman called him.

In (77)-(78), the pronominal copies tir and teki are co-referential with ascension nominals haramij-i and doktor respectively. If, however, the pronominal copies are not coreferential with the ascension nominals, the clauses will be ungrammatical. Therefore, in (77)-(78), the pronominal copies tir, which is in the subjective case, and teki, which is in the objective case, indicate that the coreferential ascension nominals are a downstairs final 1 and a final 2 respectively.

Thus the pronominal copy is a further argument for the final 1-hood and 2-hood of the ascendeo in the downstairs clause.

In brief, in section 3.1.1, I have supplied arguments that the ascendeo is a final 1 or a final 2 in the downstairs clause. In section 3.1.2, I provide arguments for

the final l-hood of the ascendeo in the upstairs clause.

3.1.2 Arguments For the Final l-hood of the Ascendeo in the Upstairs Clause

a) Word Order

The rule of KN word order has been stated in (29) and repeated as in (79)

(79) 1 (2) (2̂) (1̂) (Ob1) (P)

Given (79), if the ascendeo heads a final l-arc in the upstairs clause, it should be clause initial; that is, it should immediately precede the predicate of the upstairs clause--this prediction is borne out in (80)-(81)

(80) ton-i-∅ bine-s-a ((tir)
boy-pl-Nom seem-pst-3pl they
wi:-tur-ki o:-s-a)
yestarday-night-Acc sing-pst-3pl
'The boys seemed to have sung last night'

(81) haramij-i-∅ bine-s-a (askar-i-∅
thief-pl-Nom seem-pst-3pl soldier-pl-Nom
(tirgi) sijn-∅-kir isin-ir-s-a
them prison-sg-Dir send-plobj-pst-3pl
'The thieves seemed to have been sent to
the prison by the soldiers'
Lit. The thieves seemed the soldiers sent
them to the prison.

As can be seen in (80)-(81), the nominals ton-i and haramij-i, which head final l-arcs in the upstairs clause,

immediately precede the predicates of the upstairs clauses. Thus the word order in clauses like (80)-(81) conforms to (79).

Thus, the ascende in raising to subject constructions behaves like a final 1 with respect to word order in main or upstairs clauses, supporting the claim that it is a final 1.

b) Nominal Case

The basic facts of nominal case in KN have been given in section 2.3: nominals that head final 1-arcs are in the nominative case and are marked zero. Accordingly, if the ascende in raising to subject constructions is a final 1 in the upstairs clause, it should be in the nominative case. That this is the case can be seen in (80)-(81) where the ascension nominals ton-i and haramij-i, which head final 1-arcs in the upstairs clauses, are in the nominative case as shown by the case marker-zero.

The fact that the ascende is in the nominative case is an argument for its final 1-hood in the upstairs clause.

c) Verb Agreement

In section 2.4, it has been pointed out that a final l can cue agreement on the verb. Therefore, if the ascendeo heads a final stratum l-arc in the upstairs clause, it should cue agreement on the predicate of the main or upstairs clause. That this claim holds can be seen as in (82)-(83)

(82) ay bine-s-i ((ay) ka- \emptyset -gi
 l/sbj seem-pst-lsg I house-sg-Acc
 jano- \emptyset -s-i)
 sell-sgobj-pst-lsg
 'I seemed to have sold the house'

(83) id-i- \emptyset bine-s-a ((tir) medi:ne-kir
 man-pl-Nom seem-pst-3pl they Cairo-Dir
 Ju:-s-a)
 go-pst-3pl
 'The men seemed to have gone to Cairo'

In (82), the ascendeo ay, which heads a l-arc in the upstairs clause, cues agreement on the predicate bine-s-i and the agreement is marked with the suffix -i. In (83), the ascension nominal id-i, which is a final l in the upstairs clause, cues agreement on the predicate bine-s-a, the agreement being marked with the suffix -a.

The fact that the ascension nominal cues agreement on the upstairs predicate provides a further argument for its final l-hood in the upstairs clause.

d) Multiple Raising Constructions

A further argument for the final 1-hood of the ascendee can be given from sentences involving multiple raising constructions.

As it has been shown so far, final 1s and final 2s can raise to subject in the upstairs clause. Similarly, in raising to object (see section 3.2) final 1s and final 2s can raise to object in the upstairs clause. Accordingly, if the ascendee (in raising to subject constructions) is an upstairs final 1, then it should be able to ascend when embedded under another raising trigger--this prediction is borne out in (84)-(85)

- (84) a. ay hesbe-s-i (burw-i- \emptyset
 1/sbj believe-pst-lsg girl-pl-Nom
 bine-s-a ((tir) wi:l-gi bati-r
 seem-pst-3pl they yesterday wedding party-Loc
 wisi-s-a))
 dance-pst-3pl
 'I believed the girls seemed to have
 danced at the wedding party yesterday'
- b. ay burw-i-gi hesbe-ir-s-i ((tir)
 1/sbj girl-pl-Acc believe-plobj-pst-lsg they
 bine-s-a ((tir) wi:l-gi bati-r
 seem-pst-3pl they yesterday-Acc party-Loc
 wisi-s-a))
 . 'I believed the girls to have seemed to
 to have danced at the wedding yesterday'
 Lit. 'I believed the girls seemed they
 danced at the wedding party yesterday'

- (85) a. ay hesbe-s-i (tod- \emptyset - \emptyset
 1/sbj believe-pst-lsg boy-sg-Nom
 bine-s-u (burw-i- \emptyset ((teki)
 seem-pst-3sg girl-pl-Nom him
 jom- \emptyset -s-a))
 hit-sgobj-pst-3pl
 'I believed the boy seemed to have
 been hit by the girls'
 Lit. I believed the boy seemed the girls
 hit him'

- b. ay tod- \emptyset -ki hesbe-s-i ((ter)
 1/sbj boy-sg-Acc believe-pst-lsg he
 bine-s-u (burw-i- \emptyset (teki)
 seem-pst-3sg girl-pl-Nom him
 jom- \emptyset -s-a))
 hit-sgobj-pst-3pl
 'I believed the boy to have seemed to
 have been hit by the girls'
 Lit. I believed the boy (he) seemed the
 girls hit him.

As can be seen in (84b) and (85b), the nominals burw-i and tod, which head 1-arcs in the intermediate clauses, ascend to 2 in the higher clause as is indicated by the accusative case marker ki or gi.

We can contrast such multiple raising constructions to examples where the intermediate clause does not have a raising trigger as in (86)-(87)

- (86) a. bine-s-u (ay we:-s-i
 seem-pst-3sg I say-pst-lsg
 (burw-i- \emptyset ton-i-gi jom-ir-s-a)
 girl-pl-Nom boy-pl-Acc hit-plobj-pst-3pl
 'It seems I said the girls hit the boys'
- b. *ton-i- \emptyset bine-s-a (ay we:-s-i
 boy-pl-Nom seem-pst-3pl I say-pst-lsg
 (burw-i- \emptyset ton-i-gi jom-ir-s-a
 girl-pl-Nom boy-pl-Acc hit-plobj-pst-3pl
 'The boys seemed I said the girls hit them'

(87) a, ay hesbe-s-i (id-i-Ø
 1/sbj believe-pst-lsg man-pl-Nom
 jod-s-a (askar-i-Ø harami-Ø-gi
 claim-pst-3pl soldier-pl-Nom thief-sg-Acc
 uri-Ø-s-a)
 arrest-sgobj-pst-3pl
 'I believed the men claimed the soldiers
 arrested the thief'

b, *ay harami-Ø-gi hesbe-Ø-s-i
 1/sbj thief-sg-Acc believe-sgobj-pst-lsg
 (id-i-Ø jod-s-a (askar-i-Ø
 man-pl-Nom claim-pst-3pl soldier-pl-Nom
 teki uri-Ø-s-a))
 him arrest-sgobj-pst-3pl
 'I believed the thief the men claimed
 the soldiers arrested him'

In these cases, a nominal from the lowest clause is unable to ascend in the highest clause, since it does not bear a grammatical relation (via raising) in the intermediate clause.

Thus multiple raising constructions give evidence for raising.

In the preceding section, I have provided evidence that the ascende in raising to subject constructions is a final 1 in the upstairs clause. In section 3.2, I discuss raising to object.

3.2 Raising to Object

In this section, I discuss raising to object in KN. In section 3.2.1, I give arguments for the final 1-hood of the ascende in the downstairs clause. Section 3.2.2 deals with arguments that the ascende is a final 2 in the downstairs clause. In section 3.2.3, arguments that the ascende is an upstairs final 2 will be provided.

In raising to object, a nominal heading a downstairs final 1-arc may ascend to object in the upstairs clause as in (88)-(90)

- (88) a. ay hesbe-s-i (tod- \emptyset - \emptyset
 1/sbj believe-pst-lsg boy-sg-Nom
 wari:-kir bod-s-u)
 distance-Dir run-pst-3sg
 'I believed the boy ran away'
- b. ay tod- \emptyset -ki hesbe- \emptyset -s-i
 1/sbj boy-sg-Acc believe-pst-lsg
 ((ter) wari:-kir bod-s-u)
 he distance-Dir run-pst-3sg
 'I believed the boy to have run away'
- (89) a. ay oir-s-i (buru- \emptyset - \emptyset
 1/sbj know-pst-lsg girl-sg-Nom
 wi:l-gi bati-r
 yesterday-Acc wedding party-Loc
 o:-s-u)
 sing-pst-3sg
 'I knew the girl sang at the wedding
 party yesterday'
- b. ay buru- \emptyset -gi oir-s-i ((ter)
 1/sbj girl-sg-Acc know-pst-lsg she
 wi:l-gi bati-r o:-s-a)
 yesterday-Acc party-Loc sing-pst-3pl
 'I knew the girl to have sung yesterday
 at the wedding party'

- (90) a. ay jile-s-i (id-i- \emptyset
 1/sbj remember-pst-lsg man-pl-Nom
 harami- \emptyset -gi jom- \emptyset -s-a)
 thief-sg-Acc hit-sgobj-pst-3pl
 'I remembered the men hit the thief'
- b. ay id-i-gi jile-ir-s-i
 1/sbj man-pl-Acc remember-plobj-pst-lsg
 ((tir) harami- \emptyset -gi jom- \emptyset -s-a)
 they thief-sg-Acc hit-sgobj-pst-3pl
 'I remembered the men to have hit the
 thief'

In (88)-(90), the nominals that head final 1-arcs in the downstairs clauses ascend to 2 (object) in the upstairs clauses. For example, in (90b) the nominal id-i-gi, which heads a final stratum 1-arc in the downstairs clause, ascends to 2 in the upstairs clause.

Moreover, a nominal that heads a final stratum 2-arc in the downstairs clause may ascend to 2 (object) in the upstairs clause. This is given as in (91)-(92)

- (91) a. ay hesbe-s-i (wel-i- \emptyset
 1/sbj believe-pst-lsg dog-pl-Nom
 afi- \emptyset -gi du:r- \emptyset -s-a)
 boy-sg-Acc guard-sgobj-pst-3pl
 'I believed the dogs guarded the boy'
- b. ay afi- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj boy-sg-Acc believe-sgobj-pst-lsg
 (wel-i- \emptyset (teki) du:r- \emptyset -s-a)
 dog-pl-Nom him guard-sgobj-pst-3pl
 'I believed the boy to have been
 guarded by the boy'
- Lit. I believed the boy the dogs guarded him.

(92) a. ay hesbe-s-i (tajir- \emptyset - \emptyset)

1/sbj believe-pst-lsg merchant-sg-Nom
 burw-i-gi kadej-i-gi
 girl-pl-Acc dress-pl-Acc
 tij-ir-s-u)
 give-plobj-pst-3sg
 'I believed the merchant gave the
 girls the dresses'

b. ay burw-i-gi hesbe-ir-s-i

1/sbj girl-pl-Acc believe-plobj-pst-lsg
 (tajir- \emptyset - \emptyset (tirgi) kadej-i-gi
 merchant-sg-Nom them dress-pl-Acc
 tij-ir-s-u)
 give-plobj-pst-3sg

'I believed the girls to have been given
 the dresses by the merchant'

Lit. I believed the girls the merchant gave
 them the dresses.

As can be observed in (91b) and (92b), the nominals that head final stratum 2-arcs in the downstairs clauses ascend to 2 (object) in the upstairs clauses. In (91b), the nominal afi-gi, which heads a final 2-arc in the downstairs clause, ascends to 2 in the upstairs clause. By the same token, in (92b) the nominal burw-i-gi, which heads a downstairs final 2-arc, ascends to 2 in the upstairs clause.

However, nominals bearing the chomeur or oblique relation can not ascend, as can be seen in the ungrammaticality of (93b)-(93c)

(93) a. ay hesbe-s-i (Ali- \emptyset tod- \emptyset -ki

1/sbj believe-pst-lsg Ali-Nom boy-sg-Acc
 dugu-gi jama- \emptyset -r tir- \emptyset -s-u)
 money-Acc mosque-sg-Loc give-sgobj-pst-3sg
 'I believed Ali gave the boy the money'
 at the mosque'

b. *ay dugu-gi hesbe-s-i (Ali- \emptyset
 1/sbj money-Acc believe-pst-lsg Ali-Nom
 tod- \emptyset -ki (teki) jama- \emptyset -r tir- \emptyset -s-u)
 boy-sg-Acc it mosque-sg-Loc give-sgobj-pst
 'I believed the money to have been given
 the boy at the mosque by Ali'
 Lit. I believed the money Ali gave the boy (it)
 at the mosque.

c. *ay jama- \emptyset -gi hesbe- \emptyset -s-i (Ali- \emptyset
 1/sbj mosque-sg-Acc believe-pst-lsg Ali-Nom
 tod- \emptyset -ki dugu-gi tir- \emptyset -s-u)
 boy-sg-Acc money-Acc give-sgobj-pst-3sg
 Lit. I thought the mosque Ali gave the boy the
 money at it.

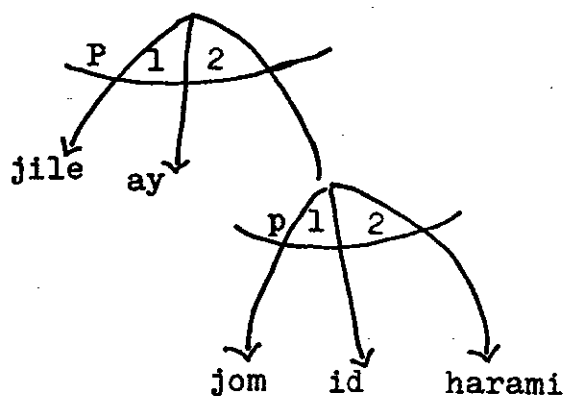
(93b)-(93c) are ungrammatical since nominals other than final 1s and final 2s ascend to object. In (93b), the nominal dugu-gi, which heads a Cho-arc in the downstairs clause, ascends to 2 in the upstairs clause; in (93c), the nominal jama-gi, which heads an oblique-arc in the downstairs clause, ascends to 2 in the upstairs clause. Consequently, the clauses are ungrammatical. Thus, chomeurs and obliques do not involve raising to object in KN.

I claim that raising to object relates clauses (88a) to (88b); (89a) to (89b); (90a) to (90b); (91a) to (91b); (92a) to (92b)

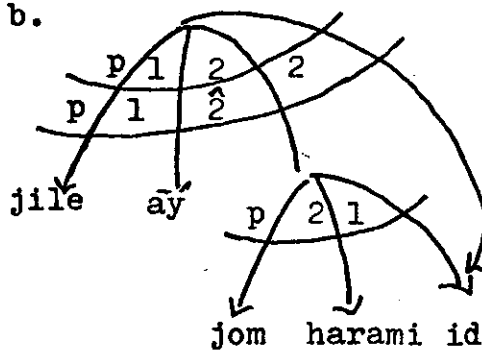
We can account for these clauses by positing that raising to object in KN-like raising to subject- contains an upstairs as well as a downstairs clause. I also claim

that in raising to object, a downstairs final 1 or final 2 ascends to 2 (object) in the upstairs clause, optionally leaving behind a pronominal copy of itself in the downstairs clause. Since the ascension nominal takes on the GR of its downstairs clause according to RSL, the rest of the downstairs clause is placed en chomage. Thus, the RN proposed for (90a)-(90b) can be given as in (94a)-(94b) respectively.

(94) a.



b.



As can be observed in (94b), the nominal id, which heads a 1-arc in the downstairs clause, ascends to 2 in the upstairs clause, placing the initial 2 (the remnant of the downstairs clause) en chomage.

In brief, KN raising to object involves a downstairs final 1 or final 2; the ascende, which places the initial 2 en chomage, may leave a pronominal copy of itself in the downstairs clause. Having discussed raising to object, I proceed to provide arguments for the final 1-hood or the final 2-hood of the ascende in the downstairs clause. In section 3.2.2, I supply arguments that the ascende is a final 2 in the upstairs clause.

3.2.1 Arguments for the Final 1-hood or Final 2-hood of the Ascende in the Downstairs clause

a) Verb Agreement

In section 2.4, it has been claimed that a final 1 or a final 2 cue agreement on the predicate. As such, if the ascende is a final 1 or 2 in the downstairs clause, it should cue agreement on the downstairs predicate. That this is the case can be seen as in (95)-(96)

(95) ay buru- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj girl-sg-Acc believe-sgobj-pst-1sg
 ((ter) ten-id- \emptyset -ki mug- \emptyset -s-u
 she her-man-sg-Acc leave-sgobj-pst-3sg
 (* mug-ir-s-u))
 -plobj
 'I believed the girl to have left her
 husband'

(96) ay afij-i-gi hesbe-ir-s-i
 1/sbj boy-pl-Acc believe-plobj-pst-1sg
 (doktor- \emptyset - \emptyset (tirgi) nal-ir-s-u
 doctor-sg-Nom them visit-plobj-pst-3sg
 (*nal- \emptyset -s-u))
 -sgobj
 'I believed the boys to have been visited
 by the doctor'

Lit. I believed the boys the doctor visited them.

In (95)-(96), the upstairs final 1 and final 2 cue agreement on the downstairs predicates. Thus in (95), the nominal buru-gi, which bears the 2-relation in the upstairs clause, cues agreement on the downstairs predicate mug-s-u, the agreement marker being the suffix -u; in (96), the nominal afij-i-gi, which heads a final 2-arc in the upstairs clause, cues agreement on the downstairs predicate nal-ir-s-u; the agreement is marked with the suffix -ir-, which refers to a plural object.

Thus the fact that the ascendeo can cue agreement on the downstairs predicate is one argument for its final 1-hood or 2-hood of the ascendeo in the downstairs clause.

b) Reflexive

It has been shown in section 2.6 that a final 1 or a final 2 can antecede reflexive nominals. Given this, if the ascende is a downstairs final 1 or final 2, then it should be able to antecede a reflexive nominal. That this is the case can be seen in (97)-(98) where the ascendees head upstairs 2-arcs.

(97) ay id- \emptyset -ki nal- \emptyset -s-i ((ter)
 1/sbj man-sg-Acc see-sgobj-pst-lsg (he)
 ten-newerti-gi (*tin-newerti-gi)
 him-self-Acc them-self-Acc
 be:- \emptyset -s-u)
 kill-sgobj-pst-pst-3sg
 'I saw the man kill himself'

(98) ay tilmi:z-i-gi hesbe-ir-s-i
 1/sbj student-pl-Acc believe-plobj-pst-lsg
 (ustaz- \emptyset - \emptyset tin-newerti-ndogor
 teacher-sg-Nom them-self-about
 (*in-newerti-ndogor) we:tij-ir-s-u)
 your-self-about tell-plobj-pst-3sg
 'I believed the students to have been
 told about themselves by the teacher'
 Lit. I believed the students the teacher
 told them about themselves.

In (97)-(98), the nominals id-ki and tilmi:z-i-gi, which head upstairs 2-arcs, antecede the reflexive nominals with which they agree in number and person.

The fact that the ascende can antecede a reflexive nominal is evidence that it is either a final 1 or a final 2 in the downstairs clause.

c) Pronominal Copy

In the discussion of raising to object (section 3.2) it has been claimed that when a downstairs final 1 or final 2 ascends to object, it may leave a copy of itself in the downstairs clause. This can be illustrated as in (99)-(100)

- (99) ay ari:s- \emptyset -ki hesbe- \emptyset -s-i
 1/sbj bridegroom-sg-Acc believe-sgobj-pst-lsg
 ((ter) (*ay) aru:sa- \emptyset -gi dog- \emptyset -s-u)
 he (I) bride-sg-Acc kiss-sgobj-pst-3sg
 'I believed the bridegroom to have kissed the bride'
- (100) ay haramij-i-gi hesbe-ir-s-i
 1/sbj thief-pl-Acc believe-plobj-pst-lsg
 (askar-i- \emptyset (tirgi) (*teki) uri-ir-s-a
 soldier-pl-Nom them him arrest-plobj-pst-3pl
 'I believed the thieves to have been arrested by the soldiers'
 Lit. I believed the thieves the soldiers arrested them.

In (99)-(100), the pronominal copies are coreferential with the nominals ari:s-ki and haramij-i-gi, which head upstairs 2-arcs-they agree in number and person. Since tir (the subject pronoun) and tirgi (the object pronoun) are coreferential with the upstairs final 2s, they thus indicate the GR of the ascendeo in the downstairs clause. That is, they show that the ascendeo is a downstairs final 1 in (99) and a downstairs final 2 in (100).

Thus pronominal copy is a further argument for

the final 1-hood or 2-hood of the ascende~~e~~ in the downstairs clause.

3.2.2 Arguments that the Ascende~~e~~ is a Final 2 in the Upstairs Clause

a) Word Order

Given the rule of KN word order in (29), a final 2 (if present) is to immediately follow the final 1. Therefore, if the ascension nominal (in raising to object constructions) is a final 2 in the upstairs clause, it should precede the predicate--this prediction is borne out by (101)-(102)

(101) ay nu:nu:- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj baby-sg-Acc believe-sgobj-pst-lsg
 (a-ne:r-s-u)
 prog-sleep-pst-3sg
 'I believed the baby to have been sleeping'

(102) ay burw-i-gi hesbe-ir-s-i
 1/sbj girl-pl-Acc believe-plobj-pst-lsg
 afij-i- \emptyset jom-ir-s-a)
 boy-pl-Nom hit-plobj-pst-3pl
 'I believed the girls to have been hit by
 the boys' (more Lit., I believed the girls
 the boys hit them.)

In (101)-(102), the nominals nu:nu;-gi and burw-i-gi, which head upstairs final 2-arcs, precede the upstairs predicates. Since the ascende~~e~~ immediately precedes the upstairs predicate in (101)-(102), it must head a final 2-arc in the

upstairs clause.

It should be noted that if we compare a sentence like (102) with a sentence involving a non-raising verb (i.e., we: 'say'), we find that there is no nominal bearing a 2-relation in the upstairs clause

(103)a. ay we:-s-i (wel- \emptyset - \emptyset tod- \emptyset -ki
 1/sbj say-pst-lsg dog-sg-Nom boy-sg-Acc
 aji- \emptyset -s-u)
 bite-sgobj-pst-3sg
 'I said the dog bit the boy'

b.* ay tod- \emptyset -ki we:-s-i
 1/sbj boy-sg-Acc say-pst-lsg
 (wel- \emptyset - \emptyset (teki) aji- \emptyset -s-u
 him

Lit. I said the boy the dog bit him.

In (103b), the nominal tod-ki, which heads a downstairs final 2-arc, can not ascend in the upstairs clause since the upstairs predicate does not involve raising. In contrast, sentences (101)-(102), which involve raising predicates allow the ascension of the downstairs nominals. Thus, this contrast shows that the nominals nu:nu:-gi and burw-i-gi in (101)-(102) are ascension nominals that head final 2-arcs in the upstairs clauses.

b) Nominal Case

As has been shown in section 2.3, nominals that head final stratum 2-arcs are in the accusative case, marked by the suffix -ki or -gi. Accordingly, if the ascende in raising to object constructions heads a final 2-arc in the upstairs clause, it must be in the accusative case. That this is the case can be seen as in (101)-(102) where the nominals nu:nu:-gi and burw-i-gi, which head final stratum 2-arcs in the upstairs clauses, are in the accusative case as shown by the case marker -gi. The fact that the ascende in raising to object constructions is in the accusative case argues that it must head a final stratum 2-arc in the upstairs clause.

c) Verb-Object Agreement

In section 2.4, it has been pointed out that a final 2 cues agreement on the predicate, the agreement being marked by zero for a singular object or by the suffix -ir for a plural object. Therefore, if the ascende is a final 2, then it should cue agreement on its predicate (the upstairs predicate). This is borne out by (104)-(105).

(104) ay wel- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj dog-sg-Acc believe-sgobj-pst-lsg
 (*hesbe-ir-s-i) (ton-i-gi
 believe-plobj-pst-lsg boy-pl-Acc
 aj-ir-s-u)
 bite-plobj-pst-3sg
 'I believed the dog to have bitten the
 boys'
 Lit. I believed the dog bit the boys.

(105) ay ustaz-i-gi hesbe-ir-s-i
 1/sbj teacher-pl-Acc believe-plobj-pst-lsg
 (*hesbe- \emptyset -s-i) (na:zir- \emptyset - \emptyset
 -sgobj- principal-sg-Nom
 su:g-ir-s-u)
 fire-plobj-pst-3sg
 'I believed the teachers to have been
 fired by the principal'
 Lit. I believed the teachers the principal
 fired them.

As can be observed in (104)-(105), the nominals wel-gi and ustaz-i-gi, which haed final 2-arcs in the upstairs clauses, cue agreement on the upstairs predicates; this agreement is marked zero if the object is singular (104) and with the suffix -ir if the object is plural (105). If, however, the ascension nominals do not cue agreement, the clauses will be ungrammatical. Thus the fact that the ascendees cue agreement on the upstairs predicate is a further argument for its final 2-hood in the upstairs clause.

d) Passive

In section 2.5, it has been claimed that a nominal bearing the 2-relation (i.e., object) advances to 1 (subject) in passive constructions. Given this, if the ascendeo heads a 2-arc in the upstairs clause, then it should be able to advance to 1 in passive constructions. That this is the case can be exemplified as in (106)-(107)

(106) a. ay tod- \emptyset -ki hesbe- \emptyset -s-i
 1/sbj boy-sg-Acc believe-sgobj-pst-lsg
 ((ter) buru- \emptyset -gi nal- \emptyset -s-u)
 he girl-sg-Acc see-sgobj-pst-lsg
 'I believed the boy to have seen the girl'

b. tod- \emptyset - \emptyset hesbe-takki-s-u ((ter)
 boy-sg-Nom believe-pas-pst-3sg he
 buru- \emptyset -gi nal- \emptyset -s-u)
 girl-sg-Acc see-sgobj-pst-3sg
 'The boy was believed to have seen the girl'

(107) a. ay haramij-i-gi hesbe-ir-s-i
 1/sbj thief-pl-Acc believe-plobj-pst-lsg
 (askar-i- \emptyset (tirgi) uri-ir-s-a
 soldier-pl-Nom them arrest-plobj-pst-3pl
 'I believed the thieves to have been arrested by the soldiers'

Lit. I believed the thieves the soldiers arrested them.

b. haramij-i- \emptyset hesbe-takki-s-a
 thief-pl-Nom believe-pas-pst-3pl
 (askar-i- \emptyset (tirgi) uri-ir-s-a
 soldier-pl-Nom them arrest-plobj-pst-3pl
 'The thieves were believed to have been arrested by the soldiers'

Lit. The thieves were believed the soldiers arrested them.

In (106b) and (107b), the nominals tod and haramij-i, which head final stratum 2-arcs, advance to 1 (subject)

Thus the fact that the ascendees in raising to object constructions can advance to 1 in a passive construction is evidence that it is a final 2 in the upstairs clause.

e) Multiple Raising Constructions

One argument that the ascendees heads an upstairs 2-arc is provided by multiple raising constructions.

It has been claimed above that only final 1s and final 2s can raise in KN. Accordingly, if the ascendees is a final 2 in raising to object constructions, then it should be able to ascend when embedded under another raising governor. That this is the case can be seen as in (108)-(109)

(108) a. bine-s-u (ton-i- \emptyset buru- \emptyset -gi
 seem-pst-3sg boy-pl-Nom girl-sg-Acc
 hesbe- \emptyset -s-a ((ter) e:n- \emptyset -gi
 believe-sgobj-pst-3pl (she) woman-sg-Acc
 nal- \emptyset -s-u)
 see-sgobj-pst-3sg
 'It seemed the boys believed the girl to
 have seen the woman'

b. buru- \emptyset - \emptyset bine-s-u (ton-i- \emptyset
 girl-sg-Nom seem-pst-3sg boy-pl-Nom
 (teki) hesbe- \emptyset -s-a ((ter) e:n- \emptyset -gi
 her believe-sgobj-pst-3pl he woman-sg-Acc
 nal- \emptyset -s-u)
 see-sgobj-pst-3sg

Lit. The girl seemed the boys believed her to have
 the woman

(109) a. bine-s-u (id- \emptyset - \emptyset ton-i-gi
 seem-pst-3sg man-sg-Nom boy-pl-Acc
 hesbe-ir-s-u ((tir) jawab-i-gi
 believe-plobj-pst-3sg they letter-pl-Acc
 baj-ir-s-a))
 write-plobj-pst-3pl
 'It seemed the man believed the boys
 to have written the letters'

b. ton-i- \emptyset bine-s-a (id- \emptyset - \emptyset (tirgi)
 boy-pl-Nom seem-pst-3pl man-sg-Nom them
 hesbe-ir-s-u ((tir) jawab-i-gi
 believe-plobj-pst-3sg they letter-pl-Acc
 baj-ir-s-a)
 write-plobj-pst-3pl

Lit. 'The boys seemed the man believed them to
 have written the letters'.

As can be observed in (108b) and (109b), the nominals buru and ton-i, which head 2-arcs in the intermediate clauses, ascend to subject in the higher clauses.

We may contrast clauses like (108)-(109) to examples where the intermediate clause does not involve a raising trigger as in (110)-(111)

(110) a. ay hesbe-s-i (buru- \emptyset - \emptyset
 1/sbj believe-pst-1sg girl-sg-Nom
 we:-s-u (doktor-i- \emptyset e:n- \emptyset -gi
 say-pst-3sg doc.-pl-Nom woman-sg-Acc
 nal- \emptyset -s-a))
 visit-sgobj-pst-3pl
 'I believed the girl said the doctors
 visited the woman'

b. *ay e:n- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj woman-sg-Acc believe-pst-1sg
 (buru- \emptyset - \emptyset we:-s-u doktor-i- \emptyset
 girl-sg-Nom say-pst-3sg doc.-pl-Nom
 (teki) nal- \emptyset -s-a))
 her see-sgobj-pst-3pl

Lit. I believed the woman the girl said the
 doctors visited her.

(111) a. ay hesbe-s-i (e:n- \emptyset - \emptyset
 1/sbj believe-pst-1sg woman-sg-Nom
 jod-s-u (haramij-i- \emptyset ka- \emptyset -gi
 claim-pst-3sg thief-pl-Nom house-sg-Acc
 mag- \emptyset -s-a))
 rob-sgobj-pst-3pl

'I believed the woman claimed that the
 thieves robbed the house'

b. * ay haramij-i-gi hesbe-ir-s-i
 1/sbj thief-pl-Acc believe-plobj-pst-1sg
 (e:n- \emptyset - \emptyset jod-s-u ((tir)
 woman-sg-Nom claim-pst-3sg (they)
 ka- \emptyset -gi mag- \emptyset -s-a))
 house-sg-Acc rob-sgObj-pst-3pl

Lit. I believed the thieves the woman claimed
 they robbed the house.

In (110b) and (111b), the nominals e:n and harami can not ascend in the highest clauses, since they do not bear any grammatical relation in the intermediate clauses.

Thus multiple raising constructions provides evidence for raising.

3.3 Alternative Analyses

In the previous discussion, I have provided arguments for the final 2-hood of the ascendees in the upstairs clause. In what follows, two analyses—the two NP analysis and the equi analysis—will be proposed as alternative analyses for KN raising constructions.

3.3.1 The Equi Analysis

KN equi is lexically governed by predicates such as

we:tir 'tell' or 'ask', bedi 'beg', talbe 'want' and uwe 'call'. KN equi deletes a downstairs final 1 under coreference with an upstairs Final 2-the equi controller, as exemplified in (112)-(114).

(112) ambab- \emptyset - id- \emptyset -ki we:tir- \emptyset -s-u
 my father-Nom man-sg-Acc ask-sgobj-pst-3sg
 ((*ter) tar-an)
 he come-Inf
 'My father asked the man to come'

(113) askar-i- \emptyset ton-i-gi we:tij-ir-s-a
 soldier-pl-Nom boy-pl-Acc tell-plobj-pst-3pl
 ((*tir) dab-an)
 they disappear-Inf
 'The soldiers told the boys to disappear'

(114) ay effendi- \emptyset -gi bedi- \emptyset -s-i
 1/sbj teacher-sg-Acc beg-sgobj-pst-1sg
 ((*ter) te:g-an)
 he stay-Inf
 'I begged the teacher to stay'

In (112)-(114), the downstairs final 1 is deleted under coreference with an upstairs equi controller, which is a final 2. Moreover, it should be noted that the downstairs final 1, when deleted, does not leave a pronominal copy; if a pronominal copy of the deleted nominal is left behind, the clauses will be ungrammatical.

It has been shown in (112)-(114) that the equi victim is a downstairs final 1. If, however, the downstairs final 2 is coreferential with an upstairs equi controller, it gets pronominalized-not deleted, as seen in (115)-(116).

- (115) a. tilmi:z- \emptyset - \emptyset efendij-i-gi
 teacher-sg-Nom teacher-pl-Acc
 we:tij-ir-s-u (teki sader-an)
 ask-plobj-pst-3sg him/obj help-Inf
 'The student asked the teachers to help him'
- b. *tilmi:z- \emptyset - \emptyset efendij-i-gi we:tij-ir-s-u
 (sader-an)

- (116) a. id-i- \emptyset doktor- \emptyset -ki uwe- \emptyset -s-a
 man-pl-Nom doctor-sg-Acc call-sgobj-pst-3pl
 (tirgi nal-an)
 them/obj see-Inf
 'The men called the doctor to see them'
- b. *id-i- \emptyset doktor- \emptyset -ki uwe- \emptyset -s-a (nal-an)

In (115)-(116), the downstairs final 1 gets deleted under coreference with an upstairs equi controller whereas the downstairs final 2 is pronominalized under coreference with an upstairs final 1. In the (b) sentences the downstairs final 2 is deleted; the sentences are ungrammatical.

I propose the statement in (117) as the condition on Equi in KN

- (117) Equi: Only nominals that head final stratum 1-arcs can be equi victims.

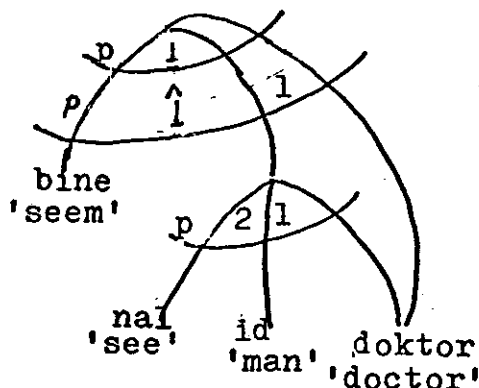
Having discussed the equi construction in KN, I will consider the possibility of analyzing KN raising in terms of equi, that is, the deletion of a downstairs nominal under coreference with an upstairs one.

3.3.1.1 Equi vs. Raising

As it has been noted in the discussion of the two types of raising in KN, a downstairs final 1 or final 2 may ascend to 1 (e.g., raising to subject) or to 2 (e.g., raising to object) in the upstairs clause. According to this analysis, clauses like (118a) and (119a) would be assigned the stratal diagrams (118b) and (119b) respectively.

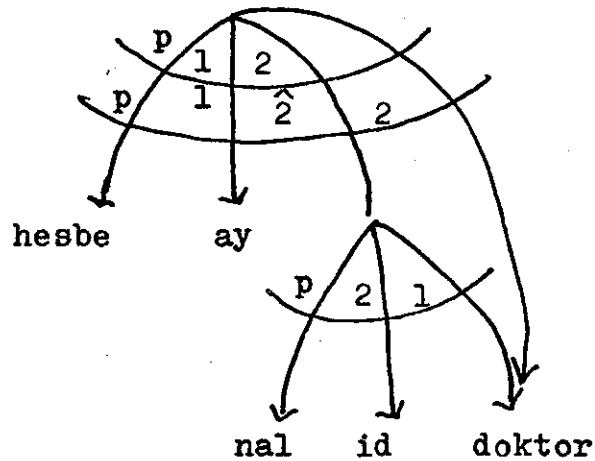
- (118) a. doktor- \emptyset - \emptyset bine-s-u ((ter)
 doctor-sg-Nom seem-pst-3sg he/sbj
 id- \emptyset -ki nal- \emptyset -s-u)
 man-sg-Acc see-sgobj-pst-3sg
 'The doctor seemed to have seen the man'

b.



- (119) a. ay doktor- \emptyset -ki hesbe- \emptyset -s-i
 1/sbj doctor-sg-Acc believe-sgobj-pst-1sg
 ((ter) id- \emptyset -ki nal- \emptyset -s-u)
 he/sbj man-sg-Acc see-sgobj-pst-3sg
 'I believed the doctor to have seen the
 man' (more lit. I believed the doctor
 saw the man)

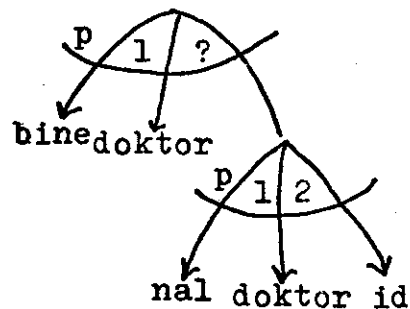
b.



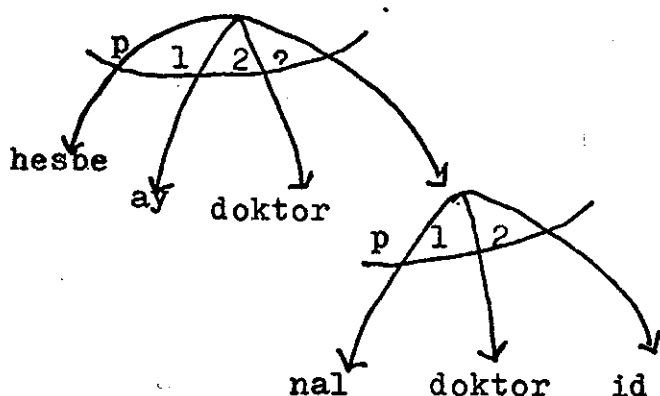
Clauses (118)-(119) involve the ascension of a downstairs final 1. In (118), the nominal doktor, which heads a 1-arc in the downstairs clause, ascends to 1, placing the initial 1 en chomage. In (119), the nominal doktor-ki, which heads a downstairs 1-arc, ascends to 2 in the upstairs clause. Consequently, the initial 2 is placed en chomage.

However, the equi analysis claims that there is no ascension in such clauses as (118)-(119). Instead the raised nominal is coreferential with a downstairs nominal. Accordingly, clauses like (118)-(119) would have the stratal diagrams (120)-(121) respectively.

(120)



(121)



As can be observed in (120)-(121), this analysis posits two occurrences of the raised nominal. Thus, under this analysis, a raising sentence is derived by the deletion of a downstairs nominal that is identical with an upstairs one (cf., doktor in (121)).

Having discussed equi, I will supply arguments that would prove that the equi analysis is inferior to the raising analysis. These arguments will be based on pronominal copy and finite vs non-finite verbs.

a) Pronominal Copy

It has been noted that in KN ascension constructions an ascendea may leave a copy of itself in the downstairs clause. In equi constructions, however, the downstairs final 1 (the equi victim) may not be replaced by a matching pronoun as shown by:

(122) ay ton-i-gi bedi-ir-s-i
 1/sbj boy-pl-Acc beg-plobj-pst-lsg
 ((*tir) tin-e:n-Ø-gi nal-an)
 they/sbj their-mother-sg-Acc see-Inf
 'I begged the boys to see their mother'

(122) shows that the downstairs final 1 is obligatorily deleted under coreference with an upstairs equi controller; if the deleted nominal is replaced by a matching pronoun, the clause will be rendered ungrammatical.

Therefore, under the equi analysis, clauses like (123)-(124) would be wrongly predicted to be ungrammatical since there is a pronominal copy in the downstairs clause.

(123) burw-i-Ø bine-s-a ((tir) id-Ø-ki
 girl-pl-Nom seem-pst-3pl they man-sg-Acc
 nal-Ø-s-a)
 see-sgobj-pst-3pl
 'The girls seemed to have seen the man'

(124) ay askar-i-gi hesbe-ir-s-i
 1/sbj soldier-pl-Acc believe-plobj-pst-lsg
 ((tir) harami-Ø-gi uri-Ø-s-a)
 they thief-sg-Acc arrest-sgobj-pst-3pl
 'I believed the soldiers to have arrested the thief'

In order to account for the grammaticality of (123)-(124), the equi analysis would claim that a pronominal copy of the downstairs final 1 may be left behind if the upstairs predicate is bine or hesbe. It has been shown in section 3.3.1 that equi obligatorily deletes a coreferential downstairs final 1 (the equi victim). But, as we see here, the obligatory rule has become optional. Thus this analysis complicates KN grammar by positing ad hoc statements or conditions.

In contrast, the raising analysis treats (123)-(124) as involving the ascension of a downstairs final *l*, which leaves a copy of itself behind in the downstairs clause. Thus, the raising analysis accounts for the grammaticality of (123)-(124) without resorting to ad hoc statements that would complicate KN grammar.

b) Finite Vs. Non-finite Verbs

In section 2.6, it has been noted that in KN a predicate may be either finite or non-finite. In ascension constructions, the downstairs predicate must be finite (125) whereas in equi constructions, it is infinitive (126).

(125) id- \emptyset - \emptyset bine-s-u (tod- \emptyset -ki
 man-sg-Nom seem-pst-3sg boy-sg-Acc
 tur- \emptyset -s-u) (*tur-an)
 dismiss-sgobj-pst-3sg
 'The man seemed to have dismissed the boy'

(126) id- \emptyset - \emptyset ustaz- \emptyset -ki we:tir- \emptyset -s-u
 man-sg-Nom teacher-sg-Acc ask-sgobj-pst-3sg
 (tod- \emptyset -ki tur-an) (*tur- \emptyset -s-u)
 boy-sg-Acc dismiss-Inf
 'The man asked the teacher to dismiss the boy'

In (125), the downstairs predicate is finite whereas in (126), it is infinitive as shown by the suffix -an, which marks infinitive predicates.

Under the equi analysis, clauses like (127) are predicted to be ungrammatical whereas clauses like (128) are predicted to be grammatical. However, the reverse is true.

(127) ay nazir- \emptyset -ki we- \emptyset -s-i
 I/sbj principal-sg-Acc think-sgobj-pst-1sg
 (ustaz- \emptyset -ki tur- \emptyset -s-u)
 teacher-sg-Acc dismiss-sgobj-pst-3sg
 'I thought the principal to have dismissed the teacher'

(128) * ay nazir- \emptyset -ki we- \emptyset -s-i
 1/sbj principal-sg-Acc think-sgobj-pst-lsg
 (ustaz- \emptyset -ki tur-an)
 teacher-sg-Acc dismiss-Inf

Lit. I thought the principal to dismiss the teacher.

(127) is predicted to be ungrammatical since its downstairs predicate tur-s-u is finite; (128) is predicted to be grammatical because the downstairs predicate tur-an is infinitive. However, neither prediction is borne out since (127) is grammatical whereas (128) is not. In order to account for clauses like (127)-(128), the equi analysis has to posit such an ad hoc condition as: the downstairs predicate is finite if the upstairs predicate is a raising governor like we, thus complicating KN grammar. Therefore the equi analysis is inadequate.

The raising analysis would account for clauses like (127)-(128) by claiming that in raising constructions the downstairs predicate is finite. Thus, the raising analysis accounts for clauses like (127)-(128) without resorting to ad hoc statements that would complicate KN grammar.

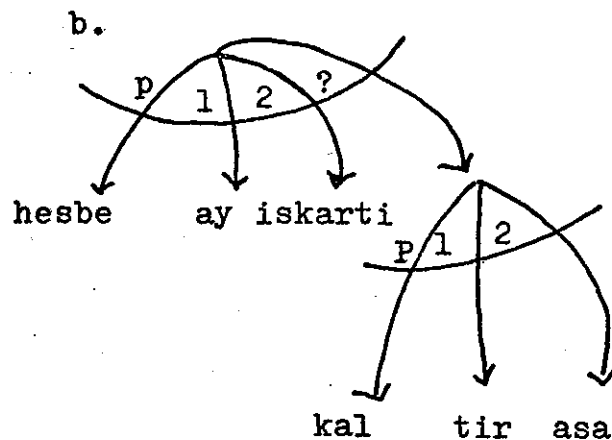
Thus, the equi analysis is not adequate to account for KN raising; it posits ad hoc conditions or statements that lead to the complication of KN grammar. On this basis, it must be rejected and considered inferior to the raising analysis.

In the preceding discussion, I proposed and argued against positing the equi analysis for the the derivation of raising sentences in KN.

3.3.2 The Two-NP Analysis

Another analysis—the two NP analysis—might claim that there is no ascension in clauses like (129a). Rather it posits that both the nominal and a pronoun referring to it exist in the initial structure. Thus clauses like (129a) would be represented in the stratal diagram (129b).

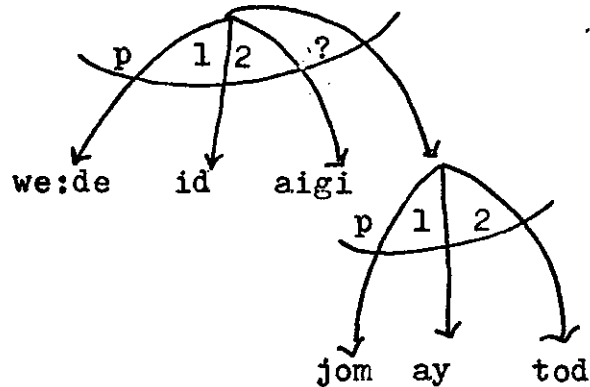
- (129) a. ay iskartij-i-gi hesbe-ir-s-i
 1/sbj guest-pl-Acc believe-plobj-pst-lsg
 ((tir) asa:-gi kal-s-a)
 they dinner-Acc eat-pst-3pl
 'I believed the guests to have eaten the
 the dinner'



Although this analysis seems very promising, I will give three arguments that a raising analysis is to be preferred. The first two arguments are based upon a comparison of sentences like (129a) (i.e., those with raising) to sentences like (130a) (i.e., those without raising) as represented in (130b).

- (130) a. id-i- \emptyset aigi we:de- \emptyset -s-a
 man-pl-Nom me tell-sgobj-pst-3pl
 (ay tod- \emptyset -ki jom- \emptyset -s-i)
 l/sbj boy-sg-Acc hit-sgobj-pst-1sg
 'The men told me that I hit the boy'

b.



a) Argument 1

First, in sentences like (129a), the pronoun in the downstairs clause must be coreferential with an upstairs nominal; if this is not the case, the sentence is ungrammatical

- (131) * ay iskartij-i-gi hesbe-ir-s-i
 l/sbj guest-pl-Acc believe-plobj-pst-1sg
 ((ter) nog-s-a)
 he leave-pst-3pl
 Lit. I believed the guests he left.

However, in sentences like (130a), the pronoun does not have to be coreferential with an upstairs nominal.

- (132) John- \emptyset aigi we:de- \emptyset -s-u
 John-Nom me tell-sgobj-pst-3sg
 ((tir) nog-s-a)
 they leave-pst-3pl
 'John told me they left'

Thus, the two NP analysis would need an extra device to ensure coreference in cases like (129a). In contrast, the raising analysis handles this automatically since the pronoun is a copy and this is a necessary coreferent.

b) Argument 2

As pointed out in chapter 2 above, subject and object pronominals in KN may be dropped in simple clauses

- (133) a. ay tirgi nal-ir-s-i
 1/sbj them see-plobj-pst-lsg
 'I saw them'
- b. nal-ir-s-i

However, pronominals in the downstairs clause of a complex may not be dropped as exemplified in (134)-(136).

- (134) a. ay we:-s-i (ter nog-s-u)
 1/sbj say-pst-lsg he leave-pst-3sg
 'I said he left'
- b.*ay we:-s-i (nog-s-u)
- (135) a. ay we:-s-i (ay nog-s-i)
 1/sbj say-pst-lsg 1/sbj leave-pst-lsg
 'I said I left'
- b.*ay we:-s-i (nog-s-i)
- (136) a. tir jod-s-a (ir buru- \emptyset -gi
 they claim-pst-3pl you girl-sg-Acc
 nal- \emptyset -s-u)
 see-sgobj-pst-3sg
 'They claimed you saw the girl'
- b. *tir jod-s-a (buru- \emptyset -gi nal- \emptyset -s-u)

As seen by contrasting (134) and (135), the downstairs pronominal must be present whether or not it has an antecedent in the upstairs clause.

This generalization holds for sentences like (130a) (the non-raising sentences, repeated as in (137))

(137) a. id-i- \emptyset aigi we:de- \emptyset -s-a
 man-pl-N me tell-sgobj-pst-3pl
 (ay tod- \emptyset -ki jom- \emptyset -s-i)
 1/sbj boy-sg-Acc hit-sgObj-pst-1sg
 'The men told me I hit the boy'

b. *id-i- \emptyset aigi we:de- \emptyset -s-a (tod- \emptyset -ki
 jom- \emptyset -s-i)

However, in sentences like (129a), the downstairs pronoun is optional, as seen in (138-140)

(138) ay buru- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj girl-sg-Acc believe-sgobj-pst-1sg
 ((ter) tod- \emptyset -ki jom- \emptyset -s-u)
 she boy-sg-Acc hit-sgobj-pst-3sg
 'I believed the girl to have hit the boy'

(139) ay tod- \emptyset -ki hesbe- \emptyset -s-i
 1/sbj boy-sg-Acc believe-sgobj-pst-1sg
 (buru- \emptyset - \emptyset (teki) jom- \emptyset -s-u)
 girl-sg-Nom him hit-sgobj-pst-3sg
 'I believed the boy to have been hit by
 the girl'

Lit. I believed the boy the girl hit him.

(140) afij-i- \emptyset bine-s-a ((tir)
 boy-pl-Nom seem-pst-3pl they
 id- \emptyset duru:-gi sade- \emptyset -s-a)
 man-sg old-Acc help-sgobj-pst-3pl
 'The boys seemed to have helped the old man'

Under the two NP analysis, there is no explanation for the optionality of these pronouns since elsewhere the

downstairs pronouns are required in complex clauses. In contrast, under the raising analysis, these pronouns are copies; it can be claimed that leaving a copy is an optional process in KN. Thus, it is not unexpected that copy pronouns and pronouns which exist in initial structure should have different properties.

c) Argument 3 (Idiom Chunks)

Another argument against the two NP analysis can be stated in terms of idioms.

KN has such idiomatic expressions as:

(141) *sab-∅-∅ kusu:-gi a-harse*
cat-sg-Nom meat-Acc prog-guard
 'The cat guards the meat'
 (i.e., the fox guards the geese)

(142) *iji:n-∅-∅ kake:n-gi*
scorpion-sg-Nom baby scorpion-Acc
a-usk-i
prog-give birth-lsg
 'The scorpion gives birth to a scorpion'
 (i.e., like father, like son)

In their idiomatic use, the nominals sab and iji:n are restricted to the subject position of these idiomatic expressions. However, when embedded in a raising sentence, these nominals (i.e., sab and iji:n) can occur as the object or subject of the main clause:

- (143) a. ay hesbe-s-i (sab- \emptyset - \emptyset
 1/sbj believe-pst-lsg cat-sg-Nom
 kusu:-gi a-harse
 meat-Acc prog-guard
 'I believed the cat guards the meat'
- b. ay sab- \emptyset -ki hesbe- \emptyset -s-i ((ter)
 1/sbj cat-sg-Acc it
 kusu:-gi a-harse)
 'I believed the cat to guard the meat'
- c. ay kusu:-gi hesbe- \emptyset -s-i
 (sab a-harse)
 'I believed the meat to be guarded by
 the cat'
- (144) a. bine-s-u (sab- \emptyset - \emptyset kusu:-gi a-harse)
 seem-pst-3sg
 'It seemed the cat guards the meat'
- b. sab- \emptyset - \emptyset bine-s-u ((ter) kusu:-gi
 it
 a-harse)
 'The cat seemed to guard the meat'
- c. kusu:- \emptyset bine-s-u (sab- \emptyset - \emptyset a-harse)
 -Nom
 'The meat seemed to be guarded by the
 cat'
- Lit. The meat seemed the cat guards it.
- (145) a. ay hesbe-s-i (iji:n- \emptyset - \emptyset
 1/sbj believe-pst-lsg scorpion-sg-Nom
 kake:n- \emptyset -gi a-usk-i)
 baby scorpion-sg-Acc prog-give birth-3sg
 'I believed the scorpion gives birth to
 a scorpion'
- b. ay iji:n- \emptyset -gi hesbe- \emptyset -s-i ((ter)
 -sg-Acc it
 kake:n- \emptyset -gi a-usk-i)
 'I believed the scorpion to give birth
 to a scorpion'

c. ay kake:n- \emptyset -gi hesbe- \emptyset -s-i
 1/sbj baby scorpion-sg-Acc believe-sgobj-pst
 (iji:n- \emptyset - \emptyset (teki) a-usk-i)
 scorpion-sg-Nom it prog-give birth-3sg
 'I believed the scorpion to be given birth
 to by a scorpion'
 Lit. I believed the baby scorpion the scorpion
 gives birth to it.

(146) a. bine-s-u (iji:n- \emptyset - \emptyset kake:n- \emptyset -gi a-usk-i
 seem-pst-3sg
 'It seemed the scorpion gives birth to
 a scorpion'

b. iji:n- \emptyset - \emptyset bine-s-u (ter) kake:n- \emptyset -gi
 it
 a-usk-i)
 'The scorpion seemed to be given birth to
 the scorpion'

c. kake:n- \emptyset - \emptyset bine-s-u (iji:n- \emptyset - \emptyset (teki)
 baby scorp-sg-N it
 a-usk-i)
 'The baby scorpion seemed to be given
 birth to by the scorpion'

Under the two NP analysis, the nominals sab and iji:n originate in the upstairs clauses in the (b) sentences of (143)-(146). Since these nominals are , in general, restricted to occurring as the subjects of the idiomatic expressions, the two NP analysis would account for (143)-(146) by claiming that the nominals sab and iji:n may occur as the object or subject of a higher predicate such as hesbe or bine, thus contradicting the assumption that idioms are unitary and leading to a complication in KN grammar.

Under the raising analysis, the ascension nomials

in (143)-(146) originate in the downstairs clauses, then ascend to subject or object in the upstairs clauses. Thus this analysis satisfies a chunk analysis of idioms and does not posit ad hoc statements that would complicate KN grammar.

In light of the preceding discussion, it can be stated that the raising analysis is more appropriate and adequate than the two NP analysis which posits ad hoc statements that complicate KN grammar. Therefore, the two NP analysis should be rejected as a possible alternative to the raising analysis.

Chapter 4

Conclusion

In this paper, I discussed KN raising constructions (raising to subject and raising to object). It has been shown that a final 1 (subject) or a final 2 (object) in the downstairs clause can optionally raise to 1 (cf.(i)) (i.e., raising to subject) or to 2 (cf..(ii)) (i.e., raising to object) in the upstairs clause:

- (i) a. bine-s-u (ton-i- \emptyset id-i durw-i-gi
seem-pst-3sg boy-pl-Nom man-pl old-pl-Acc
sade-ir-s-a)
help-plobj-pst-3pl
'It seemed the boys helped the old men'
- b. ton-i- \emptyset bine-s-a ((tir) id-i durw-i-gi
-3pl they
sade-ir-s-a)
'The boys seemed to have helped the old men'
- (ii) a. ay hesbe-s-i (burw-i- \emptyset
1/sbj believed-pst-lsg girl-pl-Nom
ton-i-gi jom-ir-s-a)
boy-pl-Acc hit-plobj-pst-3pl
'I believed the girls hit the boys'
- b. ay ton-i-gi hesbe-ir-s-i
boy-pl-Acc believe-plobj-pst-lsg
(burw-i- \emptyset (tirgi) jom-ir-s-a
girl-pl-Nom them hit-plobj-pst-3pl
'I believed the boys to have been hit
by the girls'
- Lit. I believed the boys the girls hit them.

In (ib), the nominal ton-i, which heads a downstairs 1-arc, ascends to 1 in the upstairs clause; in (iib), the nominal ton-i-gi, which heads a final 2-arc in the downstairs clause, ascends to 2 in the upstairs clause. Moreover, it should be noted that the ascende, which may leave a copy of itself in the downstairs clause, assumes the GR of the complement clause out of which it ascends in accordance with RSL. For example, if the complement clause is subject (cf. (i) above), the ascende will be subject in the upstairs clause. As a result of ascension, the rest of the complement clause is placed en chomage.

In sections 3.1.1 and 3.2.1, I provided arguments for the final 1-hood and final 2-hood of the ascende in the downstairs clause; the arguments used are: verb agreement, reflexive and pronominal copy.

Moreover, I supplied evidence that the ascende is an upstairs final 1 (3.1.2) or final 2 (3.2.2): word order, nominal case, verb agreement and multiple raising constructions.

In section 3.3, I argued against analyzing KN raising as an equi or two NP construction. These alternative analyses were proved inadequate in handling KN raising constructions.

Finally, the fact that final ls and final 2s can raise in KN argues that raising should not be universally restricted to complement subject as Postal (1974) claims.

Footnotes

¹ A nominal bears the Cho-relation if its GR is taken on by another nominal. For discussion, see Perlmutter(1980).

² The Relational Succession Law (RSL) makes two claims: first, it claims that nominals heading non-term arcs will not involve raising in any language

- (i) No rule can ascend NPs out of constituents that are not subject, direct object or less likely indirect objects. (Perlmutter and Postal 1983)

It should be noted that this version of RSL was later separated and was stated as a separate law-the Host Limitation Law (HLL):

- (ii) Only a term of grammatical relation can be the host of an ascension. (Perlmutter and Postal 1983b)

Second, RSL claims that the ascende in raising constructions will inherit the GR of the host or complement out of which it ascends:

(iii) An ascende_e assumes within the clause into which it ascends the grammatical relation of its host NP out of which it ascends (Perlmutter and Postal 1983b)

³ N assimilates to the place of articulation of the following consonant:

n ----> (place) / ----> (place)

⁴ See section 3.3.2 for discussion of pronouns in complete sentences.

⁵ Evidence for the 3--2 advancement can be based upon ascension and verb agreement. In section 3.2, it has been claimed that only final 1s and final 2s can ascend. Accordingly, nominals heading Cho-arcs can not ascend. That this is the case can be shown by the ungrammaticality of (vib)

(vi) a. ay hesbe-s-i (id- \emptyset - \emptyset e:n- \emptyset -gi
 1/sbj believe-pst-lsg man-sg-N woman-sg-Acc
 kade- \emptyset -gi tir- \emptyset -s-u)
 dress-sg-Acc give-sgobj-pst-3sg
 ' I believed the man gave the woman the dress'

b.* ay kade- \emptyset -gi hesbe-s-i (id- \emptyset - \emptyset
 e:n- \emptyset -gi tir- \emptyset -s-u)
 Lit. I believed the dress the man gave the woman.

In (vib), the nominal kade-gi, which heads a Cho-arc in the downstairs clause, ascends to 2 in the upstairs

clause, thus rendering the clause ungrammatical.

It has been claimed in section 2.4 that only final 1s and final 2s can cue agreement on the verb. Accordingly, a nominal bearing the chomeur-relation should not cue agreement on the verb--this prediction is borne out in (v).

(v) * ay tod-∅-ki kitab-i-gi
 1/sbj boy-sg-Acc book-pl-Acc
 tij-ir-s-i
 give-plobj-pst-lsg
 'I gave the boy the books'

(v) is ungrammatical since the nominal kitab-i-gi, which heads a final stratum Cho-arc cues agreement on the verb.

⁶ The environment for the change of -ki into -gi is as follows:

After all vowels k > g (e.g., id-ki, id-i-gi)

n, l k > g (e.g., e:n-gi, wel-gi)

It should, however, be noted that in the formation of object pronouns, accusative markers -gi or -ki is suffixed to subject pronouns depending upon person and number: -ki is suffixed to the second and third person subject pronouns of which r is deleted. The suffix -gi is used with the other persons.

Examples:

er 'you' > erki > eki

ay 'I' > aigi

⁷ See footnote 6.

⁸ The present tense marker -r is deleted if the subject is second or third person singular. e.g.:

(iv) er tod- \emptyset -ki a-jom- \emptyset -i
 you boy-sg-Ac prog-hit-prs-1sg

Also, the agreement marker -i is deleted when preceded by a vowel (in the 2nd and 3rd person singular. e.g.:

(iiv)er id- \emptyset -ki a-sade
 man-sg-ACC prg-help

⁹ It should be noted that the predicates that are given in (iiv) trigger raising to subject whereas those in (xi) trigger raising to object

(iiv) Raising to Subject

imkin 'probable'

aki:d 'certain'

bine' 'seem'

labud 'bound'

(xi) Raising to Object

hesbe 'believe'

nal 'see'

oir 'know'

jile 'remember'

i:w 'forget'

gijir 'hear'

erje 'expect'

However, verbs like we: 'say' , jod 'claim', wese 'demand' do not trigger raising in KN as can be seen in (x), which is ungrammatical

(X) * e:n- \emptyset - \emptyset tod- \emptyset -ki jod-s-u
 woman-sg-Nom boy-sg-Acc claim-pst-3sg
 buru- \emptyset -gi nal- \emptyset -s-a)
 girl-sg-Acc see-sgobj-pst-3pl
 Lit. 'The woman claimed the boy to have seen
 the girl.'

¹⁰ See footnote 2.

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